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INTRODUCTION TO BUSINESS

Introduction to Business

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INTRODUCTION TO BUSINESS

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PREFACE

The primary aim of this book is to provide a realistic exposition of American industry, its organization, operation, and management. Emphasis is placed on terminology, methods followed, problems encountered, and ways in which they are handled by businessmen.

In preparing the present work the authors have endeavored to provide a one-volume text from which the student might learn the general characteristics of business enterprise, including the problems of production, marketing, labor, and finance in selected industries. Since the publication of the earlier editions, the authors have discovered, as a result of their own teaching experience and from comments and criticisms offered by their friends and colleagues, that several important changes were desirable.

The new edition embodies a complete revision of both content and organization. Without sacrifice of treatment or coverage, but by eliminating duplication and through the consolidation of topics, the book was reduced from 40 to 29 chapters. This enables the instructor to make shorter, but meatier, chapter assignments. It has also made possible the addition of new topics and subject matter that help to widen the scope and usefulness of the volume. These include a new section on the operation of the stock exchanges in connection with the sale of securities, a short treatment of office management, and an expanded discussion of industrial management problems. The order of topics continues to follow a logical sequence from the formation of a new enterprise, through various managerial functions, to the final considerations of dissolution, reorganization, and bankruptcy.

A very important reason for periodic revision in a book of this type is the constant change in the economic and legal structure. New laws are passed, decisions are handed down by the courts, and revised plans and developments go forward in private business. Every effort has been made to revise the book in the light of the rapidly shifting scene. However, primary emphasis continues to be placed on factors that are of lasting importance rather than on events that will lose their significance in a relatively short time. Where necessary or desirable, historical backgrounds are included to develop a better understanding of the current situation.

Illustrative material has been brought up to date and has been carefully scrutinized for its usefulness in the text. New tables, charts, and case

histories taken from actual business experience supply realistic data. Over 150 illustrations that are fresh and modern have been chosen for their pedagogic value. In no case have the authors introduced such material unless it has a story to tell or unless it definitely helps the reader to grasp the ideas discussed in the text.

The book is designed as an introduction to advanced courses in statistics, accounting, management, finance, and other offerings in economics. It may be used as a first- or second-year college text in elementary business courses, either in the liberal arts curriculum or in a school of business. The book is also appropriate for use in introductory work in business organization and management where no preliminary course in business economics is offered. In scope of subject matter the authors have conscientiously sought to attain as broad a coverage as possible in order to meet the needs of institutions offering a comprehensive one-year course. Where the time allotted to such work is insufficient to cover all chapters in full detail, it is suggested that the instructor treat lightly or eliminate entirely those chapters that do not meet the particular requirements or needs of the student group.

Complementary instructional material that may be used to advantage consists largely of United States government publications, financial and business manuals, corporation reports, and numerous business periodicals and trade journals. A number of the standard case books on industrial and business problems are also recommended.

Questions and problems at the end of each chapter have been prepared to help the instructor both in giving assignments and in motivating the lesson. Carefully selected bibliographies and lists of visual teaching aids have also been included at the end of the volume.

EDWIN H. SPENGLER
JACOB KLEIN

BROOKLYN, N. Y.
April, 1948

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This work has been widely used for a period of more than 12 years, during which time many valuable suggestions and useful illustrative data were received from teachers, students, businessmen, and government employees. The authors acknowledge with pleasure the generous assistance of many friends and colleagues in the preparation and later revisions of this text.

The authors are especially grateful to Prof. William H. Steiner for his painstaking efforts in reading the original manuscript and for his later guidance in improving many of the chapters, particularly those in the field of finance; also to Profs. Rose Zunder and Theresa Wolfson, to Charles H. Hession, Sidney Nanes, and Harold Stein, particularly for their help during the preparation of the first edition. Other friends and associates in business and in the academic world to whom thanks are due include Peter G. Evans and Profs. Carl Shoup and Robert A. Love, who criticized the discussion of public finance; Prof. Daniel Lipsky, Frank Feigenbaum, Murray H. Gershon, and Richard Littlefield, who examined the book from the legal and accounting viewpoints; Drs. Murray Ross and Michael Wermel, who offered advice in labor and marketing respectively; and Prof. Findlay MacKenzie, who made suggestions in the field of economic planning. In addition, hundreds of useful comments were received in the mail from instructors using the book.

For aid in all phases of the preparation of the manuscript, in proofreading, and in the construction of the index, the authors are indebted to Beatrice Hacker, Mrs. Rose G. Klein, Mrs. Rosalind W. Schwager, Elsie C. Spengler, Mrs. Helen L. Spengler, and Celia Sperling.

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Part I

BUSINESS ORGANIZATION

CHAPTER I

ORGANIZING A BUSINESS

Diversification in Industry. Industrial activities are generally described in terms of such broad categories as agricultural, extractive, construction, manufacturing, public utility, and commercial. This is a rough classification and somewhat arbitrary in the sense that it is difficult to bring all industries strictly within the limits of these classes. However, in units of physical goods, property involved, or numbers of people employed, these groups include the major elements in production.

Specialization has tended to break up industrial operations into distinct occupational and functional groups. Hundreds of separate tasks now occupy the attentions of men, in contrast to the few dozen occupations that existed at an earlier stage in history. As industry is managed today, a product must often pass through an elaborate series of steps before it reaches the final buyer. Specialists in buying, in processing, in shipping, in marketing, and in financing supervise the many details of handling the product. Each concentrates upon his own particular branch of work and in turn employs others at still more detailed jobs. The result is that business has become highly diversified into pursuits so heterogeneous in character that they almost defy classification.

Business Economy. A casual inspection of this great industrial structure will, however, quickly reveal one striking similarity in these activities. This feature is the pecuniary motive—the individual pursuits for monetary returns. In such an institutional setting, which is ordinarily referred to as a *business economy*, the levels of consumption of most of the people are closely linked with the direction and volume of the flow of money incomes and expenditures. With money or its equivalent in terms of credit generally accepted as a convenient exchange medium, a desire exists among men to acquire wealth in this form. To be sure, such monetary gain seldom is sought as a final goal; the command exerted by this income over goods and services is what attracts. Nevertheless, the immediate primary cause that motivates millions of people engaged in industrial activities throughout the world is the desire for money.

Where private property, individual economic initiative, and the use of money are still widely accepted rights and privileges, industry therefore

tends to be "carried on for the sake of business, and not conversely." [1] The businessmen are not those who carry on the physical processes of production but, rather, that group of individuals who, through the skillful organization of properties and men, are capable of controlling and directing these physical processes. The advice and guidance of technical and legal experts are sought, and great reliance placed upon the abilities of skilled manual workers. Control is vested, however, in those men whose interests lie in terms of margins between costs and selling prices.

Business procedure is thus the *modus operandi* by which men strive to obtain monetary gains. The paths leading to this end are many; the routes are devious; and the results varied. Many types of business conduct are directly beneficial to the social group; some are of questionable value; others are distinctly harmful. Men of vision in the ranks of business and commerce have begun to realize their important social responsibilities and the far-reaching social effects that their policies or acts provoke. Other executives are still too much absorbed in the selfish pursuit for private gain to recognize that their affairs are being run not only in a fashion detrimental to large numbers of people but in a way that might ultimately cause their own destruction. The management of the affairs of business has a vital bearing upon the lives and fortunes of millions of people. The failure on the part of private groups properly to guide and to control the industrial process justifies governmental control in the social interest. Some business leaders have therefore awakened to the realization that they must have a much broader viewpoint. True, under the present organization of society, they must produce at a profit, but this should also be at a level that will enable them to pay decent wages to their employees and to give satisfactory values to the purchasers of their goods. Service instead of selfishness, cooperation instead of ruthless competition, self-government rather than strict social control—these are some of the characteristics found in the new business procedure. Individualistic concepts are gradually being abandoned, and in their place are being introduced the motives of planning, cooperation, and the advancement of the general welfare. It is to be desired that the self-seeking individualist be replaced by the businessman with higher social standards.

However, the underlying institutional structure of the business economy remains the same, and consequently, despite the tendency toward these broad changes in viewpoint, the operation of business must still be considered in pecuniary terms. Executives and managers who direct the affairs of their firms give careful attention to purchases and sales, costs and prices. They assume responsibility for the satisfactory organization and control of the business. They are confronted with problems relating to

[1] VEBLEN, T., "The Theory of Business Enterprise," p. 26, Scribner's, 1904.

risks, production costs, taxes, labor relations, financing, marketing, and price policies. In some ventures, these matters are of little importance; in others, they are major questions, requiring careful thought and expert handling to arrive at satisfactory solutions. The emphasis that must be placed upon these subjects relating to business practices naturally varies with the size of the enterprise, the nature of the product, and many other factors arising out of the continual readjustments which characterize the modern regime.

The Business Enterprise and Its Problems. The young man or woman who works for a comparatively small establishment has at close hand the opportunity to observe many aspects of business practice. Such an individual may assist in the buying of goods or in dealing with customers; he sees the firm in its relations with the bank; and he probably prepares the financial statements on the basis of which credit is obtained.

There is little formality between the worker and the employer, and the latter personally instructs his assistant in various phases of merchandising, teaching him many "tricks of the trade" resulting from years of experience. The employee has an opportunity to become acquainted with the customers and to get his employer's opinion of them; he learns why some are given credit whereas others have to pay cash. In this manner, the employee of a small business gains wide experience if he is alert. He may have to do everything from sweeping the floor to arranging the stock, but he learns which items move quickly, what they are worth, and from whom they can be purchased. In a limited sense, then, he is office boy, stock clerk, shipping clerk, salesman, and general assistant.

The novice who starts in business for himself is in much the same position, except that he is more exposed to the hard knocks of experience. He does not have the advice of an older, trained leader who might show him the way. In 1861, John Wanamaker and Nathan Brown pooled their savings of $4,000 and went into the men's clothing business. Almost $400 was spent for fixtures and another $700 for stock. An outlay for rent had to be made in advance. A good location, in the heart of the retail section of Philadelphia, on the corner of Sixth and Market Streets, was selected. A cutter was engaged at a salary of $1,300 a year—more than the two partners themselves had ever earned. On their opening day, one customer entered the shop. He ordered a pair of trousers. This was the only sale they made. After many weeks of discouragement, with business at a low ebb, the partners succeeded in obtaining, on credit, several lots of ready-made clothing from a manufacturer who was seeking to dispose of goods left on his hands because of canceled orders. They advertised these suits at the low price of $3 in the *Public Ledger*. Their advertisement cost them $24, but it brought results. Scores of people came to see these suits that

could be bought so cheaply; and for the first time, money really began to flow into the store.

The partners went aggressively in search of new business. They obtained an order for uniforms from the Philadelphia Customhouse. John Wanamaker himself delivered the suits in a wheelbarrow and was paid cash on their arrival. The partners did all the work except cutting and sewing. They brought in the goods, broke up the packing boxes for firewood, looked after the stove, kept the books, and delivered the orders. They did all the purchasing and selling and wrote their own advertisements. Despite the strictest economy, there was little left as either wages or profits —lunch money sometimes being used to pay for an advertisement.

As the business expanded, space was rented on the floor above and tailors were employed. Within a few months an organization for clothing manufacturing had been built up—with increased business equipment and strengthened credit. Sales for the first year amounted to approximately $25,000. Profits were insignificant, but a foundation had been laid for a business that gradually developed into a nationally known enterprise.[1]

Here was a business in its entirety—conceived, owned, managed, and operated by two young men. They personally took charge of all business matters and grappled with problems as they arose. There were merchandising policies to decide upon, credit and financing problems to be solved, advertising matter to be prepared. With larger numbers of workmen employed in the manufacturing end of the business, the question of wages and of hours had to be settled. As time went on, new production problems developed. More efficient organization, better arrangement of fixtures, and more careful planning were found to be necessary. The increasing value of the investment required a serious regard for the necessity of insurance. Dozens of other new questions presented themselves day after day.

Hundreds of large, well-known companies of the present day had humble origins of this variety. The founder of the great meat-packing firm of Swift & Company started his career as a retail butcher in a small Massachusetts town. The famous Smith Brothers cough drops were first made on the kitchen stove in a family restaurant business established at Poughkeepsie, N. Y. Johns Manville Corporation had its beginnings in a New York City basement where a man poured hot asphalt from a tea kettle onto a sheet of felt and passed the product through a clothes wringer. The names of Eastman, Ford, and Edison are well known throughout the world. These men were all pioneers, each starting in his own simple

[1] Data here presented based upon Herbert Adams Gibbons, "John Wanamaker," Harper, 1926.

workshop the nucleus of what ultimately developed into a concern of international repute.

Opportunities in Business. With the advent of the age of plastics, microwaves, nuclear power plants, and supersonic speeds, the impression might be given that all opportunities for new expansion now lie wholly in the realm of large-scale industry. Enterprises built upon these technological bases require numerous patents, specialized machinery, and expensive plants—far beyond the reach of the average person desiring to establish a business of his own. Basic industries such as oil, steel, automobiles, railroads, and shipping have all assumed the proportions of "big business," so that only large aggregations of capital would dare to challenge their entrenched positions. Even food processing, textile manufacturing, and the amusement industries have become highly organized and offer competition that would discourage most newcomers in these fields. As a result, the proportion of individuals who endeavor to set themselves up as owner-operators is smaller today that it was in the early history of the United States. Although it is true that agriculture and some branches of retailing still attract hundreds of thousands of persons desiring to start in business for themselves, the great majority of men and women have come to accept employment under someone else's direction as the usual means of earning a livelihood. From top executives and plant managers down through the ranks to the unskilled factory hands and yard workers, millions of employees are on the payrolls of organized companies. In fact, at least four out of five persons engaged in gainful pursuits growing out of American industrial activities are paid employees, and more than half of them work for a few thousand concerns employing one hundred people or more.

What, then, are the possibilities for the hard-hitting and hard-working men of today who, like their predecessors, wish to start small, independent, competitive business enterprises of their own? Is the business frontier closed, or do other opportunities beckon? The answer is that new fields are constantly opening. All over the world men and women are finding simpler, cheaper, or better ways of making things or are developing improved methods for their financing or distribution. Some have succeeded in creating original products or in devising different parts or pieces of equipment. Others are discovering novel uses for commodities that will cater more closely to people's needs or are introducing changes in style or design that will add a touch of modernity to their product. Still others are exploring hidden opportunities in supplying services that are needed in a community.

During the last few decades, new enterprises have been established in the United States at the average rate of better than 1,000 per day. Most

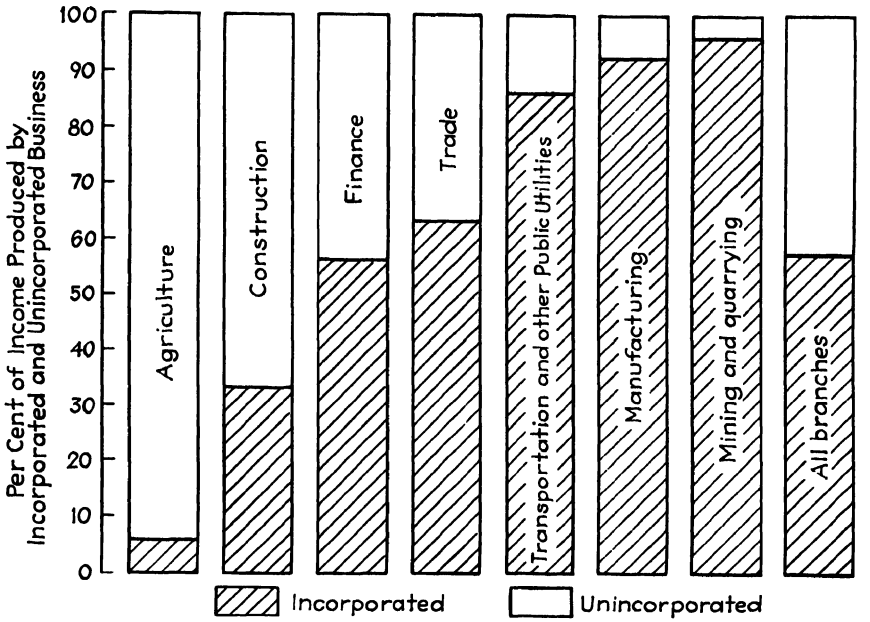
of these firms had their inception as small units with little initial capital and with few workmen. Many of them have prospered and expanded so rapidly that they have assumed the role of large-scale leaders in their fields. Birds Eye frozen foods, the Piper Cub airplane, and Fruehauf trailers are familiar products bearing the names of founders who all started in moderate circumstances in the interval between the First and Second World Wars. Following the Second World War hundreds of thousands of new ventures were begun by ex-servicemen and -women in such fields as farming, breeding, soil conservation, building blocks, quick freezing, dehydrating, airport operation, and mechanical repair services. The list of other possibilities for the new business of tomorrow is a long one, ranging from air conditioning and electronics to plywood and synthetic fibers.

Furthermore, opportunities for leadership in business are not limited to individuals who personally undertake to organize and conduct new ventures. Because of retirement, poor health, or death, executives of well-established firms are constantly being replaced by younger men and women. It is the policy of most companies to draw upon their own staffs of capable employees in order to fill some of these vacancies. Thousands of today's business leaders are people whose personal qualities together with their training and experience as employees of a firm have led to their appointment to important executive posts. In these positions, they have authority and responsibility for the direction of units of industry vastly larger than what they themselves might have succeeded in organizing. The roster of presidents and general managers of the largest corporations in the United States includes familiar names of men who have risen from the ranks.

Classes of Business Enterprise. Some lines of industry lend themselves naturally to small-scale operation; others cannot be operated on a small scale. Some involve little risk; others much. Some cater to local needs; others necessitate international outlets. No single ideal can be set up for all cases, nor can the existing types of business organization be taken as models. Through ignorance, legal difficulties, personal jealousies, or mere inertia, many concerns continue to exist in forms that have long since outlived their usefulness. It is therefore necessary to study the fundamental characteristics of each type of organization and to appraise them in terms of significant classes of industry to which they may be made to apply. The individual proprietorship, or one-man business; the partnership, or joint venture of two or more individuals; and the corporation are the most familiar classes of contemporary business enterprise. In addition, other types such as joint-stock companies and simple business trusts exist to a limited extent. Cooperative undertakings, which have been

spreading into some industries—particularly agriculture—are usually organized as special types of corporations.

From a numerical standpoint, the individual enterprise is the dominant form of organization. In agriculture, for example, there are fewer than 10,000 corporations in a total of more than 6,000,000 farms. Among the other industries, out of approximately 4,000,000 establishments, roughly half a million are in corporate form. In manufacturing, corporations con-



Proportion of income produced by incorporated and unincorporated business units in major industries in the United States. (*Data from "Big Business, Its Growth and Its Place," Twentieth Century Fund, Inc., New York.*)

stitute approximately one-half of the number of establishments. In wholesale and retail trading, especially the latter, individual enterprises and partnerships predominate. The extractive industries are generally organized on a corporate basis. This also appears to be the case among railroad, steamship, and air transport lines and in the electrical transmission and communication industries.

The predominance of the corporation is seen in terms of control rather than numbers. Corporate business in industries other than agriculture accounts for the bulk of the production and income and employs the majority of the working population in these industries. The chart above illustrates the relative position of corporate organizations in several major industries, on the basis of percentage of income produced.

Although the average corporation usually represents a larger investment than does the average single proprietorship, this does not always hold true in individual cases. There are a good many large proprietorships, and there are also thousands of small corporate units.[1] Very often proprietors or partners in relatively small enterprises decide to incorporate in order to gain certain advantages—particularly that of limited liability. In such instances, the combined investments of the original owners usually make up the requisite capital, and no new funds are solicited. In most respects, the general technique of business operation under the corporate form of organization is similar to that found in individual enterprises and partnerships of like size. The fact that Mr. Smith is no longer the senior partner but becomes the president of a corporation known as Smith & Jones, Inc., does not seriously affect the character of the business of the firm of Smith & Jones. The work proceeds as before; there are the same employers and employees; identical types and quantities of goods are probably handled. Only when a firm incorporates in order to enable it to expand through the sale of shares of ownership to the public is the shift likely to result in significant alterations in general administrative organization or managerial policies. It should therefore be recognized that a corporation may be a very small business, no different in its physical aspects from the individual enterprise or the small partnership. The distinction in legal structure does not necessarily imply a significant difference in size and scope of operations.

Individual Enterprise. The individual enterprise or sole proprietorship is the simplest type of business organization. There is relatively little trouble involved in starting a business in this form. It is usually necessary to establish proof of one's abilities as a pharmacist in order to secure the privilege of operating a drugstore. So also, in professions such as law and medicine, an individual may not open an office and begin to practice until he has passed certain qualifying examinations. A few states impose fees for permits or licenses in specified lines of business. Many states strictly regulate or entirely prohibit the operation of such enterprises as liquor stores, gambling establishments, and arenas for the exhibition of boxing bouts. Some states require the filing of a certificate of doing business if a special trade name (other than that of the proprietor) is used. Aside from exceptions such as these, however, a person is usually free to set himself up in business without legal formality and excessive cost.

The proprietor invests his own money, purchases equipment or furniture, buys materials, hires employees, makes contracts with people with whom

[1] In 1947, the Committee for Economic Development reported that there were only 122,000 businesses (corporate and noncorporate) in the United States employing more than 20 persons each.

he does business, and in all ways conducts himself as he sees fit within the limits of his financial resources. If he pays his bills promptly when due, carries out the terms of all contracts, and does nothing illegal in the operation of his business, no one can legitimately interfere with his affairs. As sole proprietor, he is the only legal representative of the enterprise. Nobody is there to question his policies. He may change his mind whenever he wishes, push ahead certain schemes in perfect secrecy, and take any needed action without delay. He is accountable to no partners, stockholders, or board of directors. He is entitled to all profits of the enterprise and assumes all losses. The debts of a proprietor are regarded as liens against his entire property, and his liability for them is not limited by the amount of capital employed in the business. This unlimited liability exposes the owner to the possible loss of his home or other personal possessions, if necessary, to satisfy claims against the business. Because of this feature, however, he is usually able to obtain more favorable credit than would otherwise be made available to him. This is important because unless a proprietor has large resources of his own, he frequently has difficulty in securing necessary funds for emergency needs or expansion requirements of his business.

The freedom of the individual proprietor, described above, conforms in the main to constitutional or socially sanctioned rights. These, however, are variables and are frequently modified. A proprietor's relations with his employees, his sales methods, the prices he may charge, all are subject, in greater or less degree, to certain forms of control. State and federal statutes, labor union regulations, industrial trade rules or codes, commercial customs, and local traditions are some of the limiting elements that restrict the rights of the owner-manager.

Contractual obligations introduce further limitations upon the entrepreneur. Although contracts are voluntary agreements, they become enforceable by legal process. The more contracts that are entered into by a proprietor the more involved become his relationships with others and the less independent is his own status. The farm tenant who must accept the decisions of his landlord in such matters as the variety of crop to be grown or the amount of fertilizer to be used, the proprietor who is constantly subservient to the wishes of his creditors, and the agent whose prices and business policies are controlled by a large corporation that supplies his products are examples of this loss of independence on the part of the individual owner. As the number and variety of such contractual arrangements in a business increase, the venture gradually departs from the character of a simple, independent proprietorship and assumes the characteristics of the more complex types of enterprise, such as partnerships, cooperatives, and the various corporate forms.

Success vs. Failure. The successful operation of the individual enterprise depends upon many variables. The nature of the business, its location, adequacy of capital, accuracy of records, and the degree of severity of the competition that it faces, are but a few of the factors that must be considered. Personal qualifications of the proprietor, such as initiative, training and experience, honesty, dependability, energy, perseverance, and general managerial ability, are, of course, vital elements in the picture. His judgment on major subjects, unchallenged and untempered by the decisions of others, must be sufficiently sound to enable him to overcome many obstacles. In other words, he assumes the risks—alone.

This is at once the greatest advantage and the greatest drawback of the individual enterprise. The virtue lies in the fact that the owner-manager is able to go ahead toward the realization of his own plans or ideas with a minimum of hindrance and, through such action, pioneer with resolute purpose into untried fields. The disadvantage is that because of this undivided responsibility and the limited resources, the experiment may end in quick ruin. It is relatively easy for an individual to go into business; it is somewhat more difficult for him to stay in business; and it is a real accomplishment if he achieves enduring success. There are many trials, difficult situations, and problems with which the average entrepreneur finds it almost impossible to cope. Some proprietors lack the personal qualities or the technical training required for the venture; many are confronted with the problem of insufficient funds; still others find the competition too keen.

Not all the successful enterprises of the present day started out with good fortune. Frank Woolworth's first stores failed with astonishing rapidity. It was only with the greatest sacrifice and pluck that he finally wiped out his losses and made good on his "five-and-ten" idea. The public seldom hears of these bad starts, for most ventures never recover from them. Compared with the number of new businesses organized each year in the United States, there are almost as many enterprises that, for one reason or another, are forced to close their doors. Among these there are owners who voluntarily sell out or retire because of age, health, or other reasons, but the majority of them quit because they cannot make a go of it.

Almost one-third of all newly established retail firms discontinue business within their first year, and not more than half survive longer than three years. By the end of ten years not more than one-fifth of the original group remains. Although a few successful projects continue in business for a long time, thousands of others draw down the average by falling by the wayside soon after the start.

Business failures are not confined to the one-man firm. However statistical data reveal that of the companies going out of business each

year the highest mortality is among the small independent units. Furthermore, even if successful, a sole proprietorship is usually limited in duration to the life of the proprietor. Rarely does the property pass to a single heir who is well suited to the task of running the business. The death of the founder therefore results, all too frequently, in the dissolution of the enterprise or in its reorganization into the partnership or corporate form.

Partnership Organization. Partnerships frequently arise as a result of the growth or expansion of an individual enterprise or because of the desire on the part of a proprietor to bring his son or some other relative into the business. Men unite to form partnerships for many other reasons, such as the attempt to combine certain types of skill or talent or because of the need for more funds, or, again, because of a desire to reduce competition between individual establishments or to reap the gains and economies of larger scale production. The resources and abilities of a single individual are limited. Several individuals often accomplish collectively what one person could not hope to do alone. The partnership is a formal association of two or more individuals for the conduct of a specific enterprise. The partners jointly furnish the capital, manage the business, and share in the profits and losses.

Like the single enterprise, the partnership is fairly easy to organize. Aside from the restrictions or social-control measures which also relate to single proprietors, there are few special statutory regulations governing the formation of partnerships. The investments, duties, privileges, liabilities, and other relationships of the partners are mutually agreed upon; and as soon as the men, money, and materials have been brought together, the business is ready to function.

Usually, each partner receives one vote in matters of control, regardless of the size of his investment. If nothing is said to the contrary, profits and losses are shared equally; but in most cases, this important item is decided upon and definite ratios or percentage shares in profits and losses are established for each partner. The share of a partner in the profits and losses need not be in the same ratio as the proportion of his investment to the total capital.

Articles of Partnership. In order to avoid later misunderstandings and disagreements regarding these relationships, it is important, although not legally required, that they be set down in writing when the partnership is formed. This written agreement is called the *articles of partnership.* Among other things, it contains the name of the firm, the names of the partners, the place of business, the description of the nature of the business, the amount of capital that each partner is to contribute, the method of sharing profits and losses, the compensation, if any, that the partners

are to receive for services, the arrangements concerning withdrawals or additional investments, and the limitations of liability of one or more partners. In addition, provision is usually made for the admission of new partners and for the dissolution of the firm in the event of death, incompetency, or other causes of withdrawal of one or more of its members.

ARTICLES OF PARTNERSHIP OF SHEARMAN AND BLAKEY

Parties.—Maxwell T. Shearman and William M. Blakey both residing in West Hempstead, Long Island, do this day mutually agree to join their several assets and to become partners in the floor and wall tiling business.

Duration.—The partnership shall continue during the lifetime of the aforesaid partners, or until such time as they may mutually agree to dissolve it.

Investments.—Mr. Shearman invests net assets to the amount of eight thousand five hundred dollars, as indicated on the statement of assets and liabilities attached hereto, and Mr. Blakey invests his shop, located in Hempstead, Long Island, free of all encumbrances and valued at four thousand dollars, and cash of four thousand dollars.

Division of Profits and Assets.—Profits and losses shall be shared equally and, in the event of dissolution, net assets shall be divided between the partners in the same proportion as their capital contributions or net investments remaining in the partnership Both partners shall actively participate in conducting the regular operations of the business.

Duties, Rights, and Limitations.—It is hereby agreed that all deposits of the firm shall be placed in a bank mutually satisfactory to the partners, and that all disbursements of the firm shall require the signatures of both partners. It is also agreed that no contracts of purchase or sale or for any other purpose, involving sums in excess o one hundred dollars, shall be entered into by one of the partners for the account of the firm unless and until the transaction has been approved by both partners.

A drawing account shall be established for each partner against which each will make weekly drawings of fifty dollars (or more by common consent), except that no drawings may be made when and if the working capital shall fall below one thousand dollars and/or accumulated earnings are less than two hundred dollars.

The admission of a new partner or partners will operate to dissolve the firm under the present articles, and the shares of the existing partners will be divisible as in the case of a normal dissolution of the firm, pending the formation of a new agreement.

Witness our hand and seal. (L.S.) (*Signed*) MAXWELL T. SHEARMAN
(*Signed*) ANNA R. SHEARMAN (L.S.) WILLIAM M. BLAKEY
Witness

The above is an example of an agreement of this kind. Inasmuch as it is a document recording certain mutual arrangements made by the partners, there is no prescribed form that must be followed. There are almost as many classes of partnership articles as there are partnerships. Such papers vary in length from less than 1 page to as many as 50 or 60 pages and are usually drawn up by an attorney who is familiar with partnership law. Once each partner has signed the instrument, it serves as a legally enforceable contract.

Partnerships—Advantages and Drawbacks. Several reasons for the formation of business alliances of the partnership type have already been cited. The greatest advantage of this form is that it spreads the risk and enables several people to pool together their ability and their money. It does not put so much of a premium upon the judgment of one man. A partnership usually has the further advantage of a relatively high credit standing. Moreover, the ease of its formation and the flexibility of adjustment of contractual relationships among its members make the partnership a fairly simple and convenient method for uniting the business interests of individuals.

If a project organized along these lines is to work out successfully, however, it is of utmost importance that the personalities or viewpoints of the individual partners are, in general, compatible, since many issues will have to be decided mutually by the partners. Friction, mistrust, and constant stubbornness are not conditions that help to build a strong foundation for a business. Furthermore, a partnership, from the legal standpoint, is not recognized as an organization having an entity or existence separate from the partners who comprise it. Consequently the acts of one partner in the conduct of the firm's business are binding on the partnership and therefore on each individual member. Claims against the general partnership firm are satisfied by personal suit against one or more of the partners who are individually liable, to the full extent of their private fortunes, for the debts of the firm. Dishonesty, carelessness, and poor judgment of a partner not only may disrupt a business but are apt to cause the personal ruin of one or more of his associates. For example, one partner owns a considerable amount of property and the other partners may possess little wealth aside from what they have invested in the business. If, by unscrupulous means or because of general mismanagement, a situation should develop wherein the debts of the firm far exceed the company's resources, the aforementioned partner might lose most of his private possessions in addition to his investment in the business. Within limits, such risks of loss are not at all unlikely. They are similar to the risks of a sole proprietor with the exception that responsibility is not entirely centralized; in other words, one person's mistakes may cause another's losses.

Inasmuch as partnerships are simply associations of individuals in a business venture, the life of the organization is governed by the retention of this combination of interests. If, for any reason, one of the partners seeks to withdraw or a new member is to be admitted, the agreement governing the relationships among the existing members must be replaced by a new contract. This practically amounts to the formation of a new firm. The physical incapacity, death, or financial insolvency of one of the partners terminates the agreement; and unless express contractual provisions

are made for the reorganization or extension of life of the firm in such an emergency, the concern will be dissolved. Such an event is likely to occur when it is least desired—often resulting in heavy financial losses.

Limited Partnership. In a limited partnership, not all the partners are exposed to unlimited liability. The advantage of this arrangement is that certain partners are protected against losses which exceed the amount of their investment. A disadvantage is that the firm may not obtain necessary credit on terms as favorable as when there is unlimited liability. In order to establish a partnership in which the liability of one or more partners is limited,[1] it is necessary in most states to file a copy, in the public records, of a "limited-partnership agreement." This is required in order to inform people who do business with the partnership of the extent to which legal claims for payment can be made against the individual partners. Failure to file such an agreement usually makes the "limited partner" an ordinary partner from the legal standpoint. Special classes of partners, such as "silent partners," whose identities are not revealed, or "nonactive" partners, who supply part of the investment but do not share in the management, are, nevertheless, subject to these liability provisions.

Characteristics of Partnerships—An Illustration. The case history of a firm that manufactured greeting-card envelopes illustrates some of the leading characteristics of partnerships. The members had agreed to combine their property and skill in the formation of a $30,000 enterprise. There were five partners—three of whom each had $5,000 invested in the enterprise; a junior partner, who had only $1,000 invested but whose skill at the machine was worth much to the business; and a senior partner who contributed $14,000.

Although promising in its prospects at the start, this little business soon ran into difficulties. Orders could not be obtained in sufficient quantity, and profits were low. At about this time, the junior partner, attracted by another offer, informed his associates of his intention to leave the firm. The other partners drew up a new agreement on substantially the same terms, except that the senior partner advanced an additional $1,000, and the firm continued on its way—somewhat handicapped by the loss of its best mechanic.

Soon afterward, a series of events, coming in rapid succession, wrecked the concern. A contract was made for the production of $20,000 worth of envelopes by one of the partners, who wired the good news from out of town to his associates. Simultaneously, he placed an order for supplies with a large paper house and directed them to be sent to the factory. The other partners, unaware of this latter move, ordered similar supplies. It was not until a week later, when the partner returned, that this duplica-

[1] At least one partner must, however, assume the risks of unlimited liability.

tion in orders was discovered. No persuasion could get either supply company to cancel the contracts, because they had already cut their stock to the ordered sizes. The envelope firm finally decided to receive both shipments and to carry part of the stock of paper by arranging a bank loan for $10,000.

A week later, the senior partner died; and not long afterward, his estate pressed for a cash settlement of his share in the business. Because of past losses, the business was estimated to be worth only $24,000, but the partners decided that if they should try to sell out their assets immediately, they would realize no more than $15,000. They finally agreed to form a new partnership consisting of the three remaining partners, who would take over the whole business, in an attempt to salvage their investment. The estate compromised by agreeing to accept $10,000 for the senior partner's share.

Two months after these arrangements were made, the company to whom the partners had shipped the finished envelopes went bankrupt and in the final adjustments paid its creditors 25 cts. on the dollar. This was the last straw. The bank called its loan, and other creditors pressed for payment. In all, these claims against the business amounted to $21,000, or $6,000 more than the partners had originally invested. The net outcome was that one of the partners lost his car, valued at $500 (the only remaining property that he had), and the two others, who were brothers, were forced to sell their $10,000 house to make up the deficit. This dismal story should not be considered as a brief against partnership organization. It should, however, serve to reveal pitfalls that must be avoided when the advantages of this form of business enterprise are sought.

Use of the Partnership. The partnership still has fairly wide application in the United States today, particularly among the smaller mercantile, professional, and manufacturing groups. However, this type of business enterprise is declining in importance in favor of the corporate form. Before it was incorporated in 1911, the Baldwin Locomotive Works was one of the largest industrial partnerships. R. H. Macy & Company, founded as an individual enterprise in 1858, was still a partnership as recently as 1918 and the large banking partnership of J. P. Morgan & Company did not seek a corporate charter until 1940. The partnership remains a favorite form of organization in professional fields such as medicine, dentistry, and law and in private banking and brokerage circles. Brown Brothers, Harriman & Company, in business since 1818, is an outstanding example of the private bank. Merrill Lynch, Pierce, Fenner & Beane with more than eighty partners is the most prominent brokerage partnership.

Joint-stock Enterprises and Massachusetts Trusts. The joint-stock company is little known in the United States. It received its widest appli-

cation in England. Like a partnership, it is formed by a contract of two or more individuals and does not require a charter from the state. Moreover, unless a special limited-liability agreement is drawn up, the members are, as in a partnership, liable for all claims against the company to the extent of their own private fortunes. Like a corporation, however, it is subject to certain regulatory statutes; it issues transferable shares of ownership; it conducts business under a firm name and may be represented by a board of directors, which binds the company by its decisions; and it is not subject to dissolution upon the death of one or more of its members. Although of little numerical importance in the United States, this type of enterprise is an interesting form of organization which stands between the partnership and the corporate varieties.

A few banking and investment houses in the United States are organized on this plan. Among well-known companies that were joint-stock organizations before they incorporated in recent years are Goldman Sachs & Company, Pierce-Fordyce Oil Association, and the Adams Express Company.[1]

Another class of business organization, which resembles the corporation but is not chartered as one, is the "Massachusetts association" or "trust." Originally applied to the real estate field as a convenient plan of organization, because of important disabilities of real estate corporations in the state of Massachusetts, it soon spread to other industries and into a number of states. The structure is based on the principle of trusteeship. The owners of cash or properties place their investments into the hands of a trustee, who issues trust certificates or other shares of ownership for their amount. Management is vested in a board of trustees which is appointed by the promoters of the enterprise at the time of inception. The powers and responsibilities of these trustees are set forth in a deed of trust. The life of the enterprise is limited in the sense that its duration is measured in terms of a life or lives—ending upon the expiration of the life of the last surviving trustee. Profits and losses are usually divided according to the ratio of investment. Liabilities of the owners are limited to the extent of their holdings. The spread in popularity of this form of business organization was based upon the fact that it afforded central control and limited liability to partners who, nevertheless, could escape some of the onerous restrictions or tax burdens commonly applied specifically to corporations. As states came to see the legal loophole that these "trusts" or "voluntary associations" provided in dodging some of the duties and responsibilities of corporations, they widened the application of their corporation laws to include these types.

[1] Cited by Avard L. Bishop, "The Financing of Business Enterprises," p. 40, Harper, 1929.

The Pepperell Manufacturing Company and the Amoskeag Manufacturing Company, in the textile business, have been frequently cited as concerns illustrative of this trust form.

The Corporation. A characteristic feature of the corporation is that it affords a combination of the ability to amass the investments of a large number of people, by means of easily transferable shares, into a single business unit, with the unity of action characteristic of single enterprises. It is created by the state through a charter that establishes an autonomous, self-perpetuating organization whose existence does not depend upon the length of life of those who enter into contract with the other associated members. Moreover, because of the ease of increasing the number of owners through the issue and sale of additional shares, there is a tendency to separate the function of ownership from that of active participation in the business. This makes possible the appointment of people skilled in managing such enterprises, irrespective of whether they have large funds of their own available for investment.

Legal Entity. As a creation of the state, a corporation is a legal entity; *i.e.*, it is endowed with a legal existence separate from the lives of the men who brought about its formation. The partnership has no such legal status. It is regarded at law as an association of individuals, and any legal claims arising out of business negotiations must be brought in the name of one or more of the partners, rather than in the name of the firm. The corporation, on the other hand, may sue and be sued in its own name, may become party to a contract, and is subject as a unit to taxes levied against the business. This separate legal existence is especially significant in that the original founders may pass away, ownership may be transferred through many hands, and the corporation will continue to function. This is in marked contrast to the other types of business organization that are dependent for their existence upon the lives of the men associated with them.

The fact that a corporation is considered a distinct legal personality does not, of course, alter the situation that it represents a definite collection of individuals united in one body for the purpose of conducting business. Under its grant of privileges from the state, the corporation is capable of acting as an autonomous unit, like a natural person. Yet it is an association of individuals whose membership may change without materially altering the identity of the corporate body. The span of life of the corporation is limited in its charter from the state or, as is more frequently the case, may be made perpetual.

Shares of Ownership. The succession or transfer of ownership is effected by negotiable shares of stock of the corporation The possessors of these shares, no matter how trifling their interests in the actual affairs of the business or how temporary their holdings, are the owners of the company

and as such are entitled to share in the profits of the enterprise as well as to assume the risk of the possible loss of their investments. However, it should be noted that these shares are proportionate parts of a complete or consolidated unit and do not convey absolute right or title to any individual piece of property or portion of the income without the collective consent of the other owners. In other words, unless the corporation is in process of dissolution or liquidation, shares of stock entitle the holder to a percentage interest in a composite whole but to no specific asset (no matter how small) owned in the name of the corporation.

These shares are ordinarily bequeathed, assigned, or sold by their owners without obtaining the consent of the other stockholders. The ready marketability of stock in some of the larger corporations listed on the various stock exchanges causes the composition of ownership to change rapidly from day to day.

Corporate Administration. The stockholders as a body are the ultimate source of authority in the corporation. Collectively they have the authority to direct its course, determine changes in its scope and function, decide upon the extent of its indebtedness, arrange for its sale, and bring about its dissolution. In practice, however, it is not feasible, indeed it is often impossible, to bring the shareholders together for the performance of these important functions. The actual management of the concern is in the hands of a board of directors, periodically elected by the stockholders, and a group of officers appointed by these directors. In a small corporation, there is usually a close identity among stockholders, directors, and officers. It is in the larger concern that this division between ownership and management becomes pronounced.

The directors form the liaison between the owners and the operatives of the firm. In an extreme illustration, this may mean that a small body of 20 men acts at once as the executive representative of some 700,000 owners and as the administrative head of an organization employing 350,000 workers. The chief function of this body is to determine the general business, financial, and dividend policies of the concern and to pass upon and assume responsibility for the acts of the officers whom it appoints. The executive officers, in turn, normally consisting of the president, vice-presidents, secretary, and treasurer, are paid employees of the company and, together with the subordinates whom they employ, manage and handle the details of the business. In order to serve as a connecting link between the directors and the active business force, several of the officers, notably the president, usually occupy positions on the board of directors.

Limited Liability. The extent of liability of the stockholders for the debts of a corporation is usually limited to the amount of their investment. This means that the stockholder may lose his investment but is not liable for more than that. In an organization that has thousands of stock-

holders, each of whom has acquired one or more shares of stock, it would seem inexpedient to hold such stockholders liable for the debts of the firm to the full extent of their private fortunes. A contingent liability of this sort would often be greatly disproportionate to the value of the investment and would materially reduce the wide popularity now enjoyed by such securities. In a small concern in which stockholders are few and the investment trifling, this problem does not arise, and the social value of such limited liability would seem somewhat dubious. However, no flagrant increase in mismanagement appears to have resulted because of this privilege extended in most states.

Nevertheless, a number of states do not grant complete limitation of liability. Companies chartered in California, for example, expose their stockholders to a liability for corporation debts contracted or incurred during the time when the stockholder owned the stock. This liability is in the ratio of the shares owned to the total subscribed capital of the company. In New York, Pennsylvania, Massachusetts, and Michigan, a similarly determined liability holds, except that it applies only to indebtedness to labor for services performed. In some states, stockholders of fiduciary organizations, such as banks and financial institutions, have frequently been personally liable for an amount equal to the par value of the stock in addition to the loss of their original investment.

Scope of Operations. One further feature of the corporation is the limitation of its scope of operations. Unlike individuals, who have wide latitude in the activities in which they might engage and who may go into business with little formality anywhere in the United States, corporations are limited by their charters to designated functions and are authorized to operate only within the state in which they are chartered until they pay certain admission fees and are duly recognized by the other states within which they propose to do business. At present, these limitations are more theoretical than real in some states of the Union. It is said, for example, that the charter of the United States Steel Corporation, granted by the state of New Jersey, is so broad that it permits the corporation to do almost everything but coin money. There are still, however, several important survivals of state policies that rigidly restrict the powers and scope of operations of corporate organizations.

In those lines of business where there is little need for a large investment, output is small, and the market is a local one, almost any form of business organization will suffice. There is no special need for corporate enterprise. On the other hand, the corporate form may prove to be of distinct advantage to ventures that require large-scale operations, involving heavy capital investments and unusual managerial or technical ability. In the latter cases, the trouble and cost of going through the legal formality of obtaining a charter, the limitations imposed by states upon powers delegated to cor-

porations, the regulations to which corporate enterprises are subjected, and the heavier tax burdens that may be levied against corporations are all far outweighed by the advantages obtained under this form of enterprise. Under circumstances where the simpler forms of enterprise will suffice, these drawbacks are sometimes significant enough to discourage the formation of corporations.

Inasmuch as a corporation must receive legal authorization in the form of a charter before it may start business, the steps involved in its creation are somewhat more complicated than those which are taken in setting up the simpler forms of enterprise. This will be the subject matter of the following chapter.

Questions and Problems

1. The employee in a small business comes in contact with many aspects of business enterprise. Give illustrations to show that this statement is true. Contrast such an employee with the one who works for a large corporation. What are the opportunities for business success offered by each type of employment?

2. What is meant by the *business economy?* Explain this from the following points of view: goal of production, welfare of society. What other goals and aims are there in a business economy?

3. America is a land of opportunity. Illustrate this statement by giving the case history of a small firm that subsequently became nationally known. To what can you ascribe its success? Would you say that this case is typical of most people who went into similar businesses at that time? Describe the opportunities that would be open if these same individuals went into business today.

4. What illustrations can be given of lines of business that are dominated by a few large concerns? Does this mean that the small business does not have a chance? What are the peculiar advantages of small business? The handicaps of larger concerns?

5. Clarify the statement that there is little competition in "new idea" fields. What examples of "new idea" businesses of a simple variety, not depending on technical inventions, can by cited?

6. The partnership is beset by many practical and legal limitations. Enumerate the limitations that apply both to the partnership form and to individual enterprise. How do you account for the fact that there are more single entrepreneurs and partnerships than there are corporations?

7. Show that the joint-stock company and the Massachusetts trust have some of the elements of the partnership and some elements of a corporation. In what fields, particularly, did these types of business prevail?

8. The corporation offsets the legal limitations of the partnership. Explain, giving examples. Which industries are more generally organized on a corporate basis? Why?

9. Cite major points of contrast between articles of partnership and a corporate charter. What is a limited partner, and how must his rights be safeguarded?

10. In outline or tabular form compare the individual proprietorship, general partnership, and the corporation from the standpoint of

a. Ease of formation.
b. Continuity of existence.
c. Expense of formation.
d. Liability to creditors.
e. Taxation.
f. Capital resources or expansibility.
g. Certainty of legal status.

CHAPTER II

CORPORATION ORGANIZATION PROCEDURE

Organizing the Corporation. The corporation derives its powers from the state; hence it is necessary to apply to the state for a certificate of incorporation which authorizes the existence of the company. Corporations were formerly created by special act of the legislature, and it was necessary to prepare a bill and pass it through the regular legislative bodies to be enacted as law before a company could begin operations. This cumbersome method was gradually done away with during the nineteenth century; and in its place, general incorporation laws were substituted. These laws prescribe a standard set of requirements which must be observed in forming a corporation. If the rules of procedure are closely followed, the corporation comes into being in routine fashion. This applies to regular business corporations. In those fields of enterprise closely related to the public interest, such as banking, insurance, railroads, and public utilities, special charters or franchise grants must be obtained.

It is practically impossible to outline any specific rule of procedure that is universally applicable in the forming of a corporation, for each state not only sets up its own requirements but also frequently revises, repeals, and supplements many of its statutes relating to corporations. There are a few essential steps, however, that are taken in virtually all states; and in a very general way, the procedure in each case is quite similar.

The incorporators must prepare an application for a certificate of incorporation, properly signed and acknowledged, clearly setting forth legally prescribed data relating to the proposed company. This is usually filed with the secretary of state or other designated officer empowered to receive applications for incorporation. If acceptable, the application is certified by the state officials. One certified copy is generally recorded in the county where the principal office of the corporation is to be located. Additional copies may be required to be filed elsewhere. Upon paying the initial fees and taxes prescribed by law and fulfilling any other requirements in compliance with provisions of the general corporation laws of the state, the persons so associating and their successors and assigns are recognized as a corporate body and are empowered to transact business in the name of the corporation.

Legal Services. In most instances, the technical details of incorporation are turned over to an attorney. In turn, attorneys will often solicit the aid of a service company or trust company that specializes in corporate organization. The latter are equipped to render expert advice and provide clerical assistance in the preparation of certificates of a corporation.[1] They furnish legal forms and extracts from statutes and obtain copies of charters of other corporations for comparison and study. They also verify corporate names, expedite the filing of papers, and speed up the process of obtaining certified copies of the charter. In addition, they assist legal counsel in drafting the by-laws and in completing typewritten organization records.

The handling of initial correspondence and the arrangements for procuring the corporate seal and for the printing and engraving of the stock certificates are other routine functions that must be performed. The minutes of a theoretical "first" meeting of the concern may even be prepared and recorded in the new corporation's minute book. After these formalities have been completed, the sponsors of the enterprise are elected as directors and the company is ready to begin business. Through these specialized services, the burden of organization detail is lifted from the shoulders of the incorporators. In some instances, the original founders participate more actively in the formation of the enterprise, but legal talent is almost always engaged to draw up the necessary forms and arrange for the filing and recording of the certificate.

The Corporate Charter. It was once the practice to issue a special engraved "official charter" to a new corporation whose application for incorporation had been approved. The majority of states now require the filing of applications in prescribed legal form and in multiple copies. The certification of approval is registered directly upon the application form, and the latter becomes the official charter of the company. This document entitles the concern to corporate privileges and subjects it to the responsibilities and regulations imposed by the state.

A typical form of corporate charter or certificate of incorporation is presented on pages 26 and 27. The leading features of the charter will be discussed briefly in the following paragraphs.

The Corporate Name. In most applications for incorporation, the name of the proposed company is among the first items stated. Practice varies in the several states with reference to the form in which the name shall appear. It is desirable to have a name that is descriptive of the type of business to be conducted, and in some states this is mandatory. The Gillette Safety Razor Company meets this requirement reasonably well; for

[1] The best known services of this type are the United States Corporation Co., the Corporation Trust Co., and the Prentice-Hall Corporation System.

although in recent years it has branched into other fields, it still claims to be the largest producer of safety razors and blades in the world. On the other hand, some companies have made important shifts in the nature of their business. Thus, Savage Arms, manufacturer of war and hunting implements, later turned its major attention to the production of washing machines, lawn mowers, and electric refrigerators. Perhaps the most amusing offender in this direction was the Manhattan Company, which in 1799 received a New York charter as a water company [1] but the founders of which really wanted to start a bank. Their plea for a bank charter was denied on the ground that New York was being overrun with banks. By a special provision in its charter, written by Aaron Burr, which permitted certain "other functions," this company later became the famous "Bank of" the Manhattan Company, and the water-supply feature was completely dropped. Where the field of expansion is expected to be large in the future, very general names are frequently selected such as "Cities Service Company" or "North American Company." Corporations are usually permitted to change their names, if occasion requires, by following a prescribed statutory procedure. Companies are, however, forbidden to "adopt" convenient names without specific authorization.

In the majority of states, there is an attempt to protect the name of a company by refusing a like name to any other company in the same line of business. This is also done in order to prevent confusion or deception which might arise as a result of similarity in names. Further protection is given along these lines through the use of trade-marks registered by the federal government. The Baker's Chocolate Company has won several suits against companies using the same name for cocoa and chocolate products even when the defendants proved that their rightful name was Baker. Considerable variation exists, however, both in the laws and in their interpretation by the courts. In some jurisdictions, it is further required to have an identifying word such as "Incorporated" or "Limited" so as to inform those who do business with the company of the limited liability that its stockholders enjoy.

Statement of Purpose. A second requirement in filing an application for a corporate charter is to formulate the purpose. This may be stated in the very simplest style, such as "to manufacture razors and razor blades" or "to produce and distribute penicillin and other drugs."

Usually, however, a lawyer will expand this clause to give broad powers to the incorporators, in order to avoid a limitation upon functions that it may be desired to assume at a later date.

Thus the wide latitude of powers given to the General Motors Corporation has enabled it to buy controlling interests in domestic and foreign

[1] "Manna-Hatin," Chap. 26, The Manhattan Company, New York, 1929.

CERTIFICATE OF INCORPORATION

Know All Men *By these presents, that the undersigned, adult residents of the State of Wisconsin, do hereby make, sign and agree to the following*

ARTICLES OF ORGANIZATION

ARTICLE FIRST.—The undersigned have associated, and do hereby associate themselves together for the purpose of forming a corporation under Chapter 180 *of the Wisconsin Statutes and the acts amendatory thereof and supplementary thereto, the business and purposes of which corporation shall be*

.....

.....

.....

.....

.....

ARTICLE SECOND.—The name of said corporation shall be.....

.....*and its location shall be in the*

.....*Wisconsin.*

Location P. O. Address

ARTICLE THIRD.—The capital stock of said corporation shall be.....

.....*and the same shall consist of*.....

shares, each of which said shares shall be of the face or par value of..... *dollars.*

(If preferred stock is provided for, show all rights, privileges and restrictions—rate of dividends, etc.) (In case of nonpar stock, see note on back of blank.)

.....

.....

ARTICLE FOURTH.—The general officers of said corporation shall be a President, Vice President, Secretary and Treasurer, ...*and the Board of Directors shall consist of*.....*Stockholders.*

.....

.....

.....

ARTICLE FIFTH.—The principal duties of the President shall be to preside at all meetings of the Board of Directors.....*and to have a general supervision of the affairs of the corporation*.....

The principal duties of the Vice President shall be to discharge the duties of the President in the event of absence or disability, for any cause whatever, of the latter.

The principal duties of the Secretary shall be to countersign all deeds, leases and conveyances executed by the corporation, affix the seal of the corporation thereto, and to such other papers as shall be required or directed to be sealed, and to keep a record of the proceedings of the Board of Directors, and to safely and systematically keep all books, papers, records and documents belonging to the corporation, or in any wise pertaining to the business thereof.

The principal duties of the Treasurer shall be to keep and account for all moneys, credits and property, of any and every nature, of the corporation, which shall come into his hands, and keep an accurate account of all moneys received and disbursed, and

proper vouchers for moneys disbursed, and to render such accounts, statements and inventories of moneys received and disbursed, and of money and property on hand, and generally of all matters pertaining to this office, as shall be required by the Board of Directors.

The Board of Directors may provide for the appointment of such additional officers as they may deem for the best interests of the corporation.

Whenever the Board of Directors may so order the offices of Secretary and Treasurer may be held by the same person.

The said officers shall perform such additional or different duties as shall from time to time be imposed or required by the Board of Directors, or as may be prescribed from time to time by the by-laws.

ARTICLE SIXTH.—Only persons holding stock according to the regulations of the corporation shall be members of it.

ARTICLE SEVENTH.—This corporation may subscribe for, take or hold stock in any other corporation.

ARTICLE EIGHTH.—These articles may be amended in the manner authorized by law.

ARTICLE NINTH.—Names and residences.

The names and residences of the persons forming this corporation are:

(Incorporators must be adult residents of Wisconsin.)

.....residing at.....

.....residing at.....

.....residing at.....

.....residing at.....

.....residing at.....

IN WITNESS WHEREOF, *We have hereunto set our hands, this*..... *day of*..... .....*A. D.* 19.....

SIGNED IN THE PRESENCE OF .....

.....

.....

.....

.....

.....

STATE OF WISCONSIN }
} ss.
COUNTY OF..... }

Personally came before me this..... .....*day of*.....*A. D.* 19..... ...
the above named.....
.....
.....*and*.....
.....*to me known to be the persons who executed the foregoing instrument, and acknowledged the same.*

.....

(*Notarial Seal.*)

Notary Public, Wisconsin.
My Commission expires.....

companies and to enter fields of enterprise ranging from lighting systems to automobiles and from electric refrigerators to airplanes. The United Corporation, incorporated in Delaware, similarly illustrates the case of a company that has a liberal range of functions. As stated in the charter, the corporation may acquire and hold the securities of electric-power and light and gas companies—either operating or holding companies. It is not limited to investments in strictly public-utility enterprises but rather is free "to acquire, hold, and sell the securities of other companies engaged in managing or supervising the management of utilities in companies doing a general construction, engineering, or contracting business with public-utility or other concerns."

An idea of the breadth of power and of the detail frequently given in defining such authorized functions is found in the following example of a charter object clause for a smelting and refining company incorporated in New Jersey.[1]

To buy, lease, or otherwise acquire mines, mining rights, quarries, and mineral lands and claims of every kind, nature, and description, and to work, mine, prospect, develop, and promote the same, to mine, quarry, and excavate gold, silver, copper, and other ores and metals and minerals of all descriptions.

To buy, lease, construct, own, control, operate, and maintain mills, works, and plants, for the crushing, sampling, milling, smelting, reduction, and concentration of minerals and metal-bearing ores, and the extraction therefrom of all kinds of metals and mineral products and by-products, on its own account and as factor and agent for others.

To carry on the business of mining, milling, concentrating, converting, smelting, treating, preparing for market, reducing, buying, selling, and merchandising in gold, silver, copper, and other metals and metallic compounds, coal, coke, charcoal, and other fuels, and all products and by-products of all ores and minerals.

To treat, prepare, and manufacture, and to buy, sell, and generally to deal in iron, steel, manganese, coke, copper, lumber, and other materials, and all or any articles consisting of or partly consisting of metal, wood, or other materials, and any and all products and by-products thereof.

To buy, sell, manufacture, produce, and dispose of all kinds of goods, wares, merchandise, manufactures, commodities, foodstuffs, drugs, furniture, machinery, tools, supplies, and agricultural products, and generally to engage in and carry on any forms of manufacturing or mercantile enterprise, necessary or incidental to the business of the company.

To construct bridges, buildings, machinery, ships, boats, engines, cars, and other equipment, railroads, docks, slips, elevators, water-works, gas-works, electric-works, viaducts, aqueducts, canals, and other waterways, and any other means of transportation; and to sell the same, or otherwise dispose thereof; or to maintain and operate the same, except that the company shall not maintain or operate any railroad or canal in the state of New Jersey.

[1] From the Charter of the United States Steel Corp.

Since the advent of the holding company and other forms of combinations involving intercompany holdings of stock, a clause specifically relating to the right to buy, hold, or sell securities is important. Such authorization might be stated as follows:[1]

> To acquire by purchase, subscription, or otherwise and to hold or to dispose of any stocks, bonds, or any other obligations of any corporation formed for or then engaged in or pursuing any one or more of the kinds of business, purposes, objects, or operations above indicated, or owning or holding property of any kind herein mentioned; or of any corporation owning or holding the stock or the obligations of any such corporation.

The extent to which such latitude of power may be written into a charter depends upon the state selected for incorporation. Not all states would grant the powers given in the clauses here presented for illustration.

Capital Stock. When a corporation receives its charter, it is given permission to issue a definite number of shares of specified classes of stock. This is known as the authorized capital stock of the company and, unless the charter is subsequently revised, fixes the permanent limit to which stock can be issued. A company does not always issue immediately the full amount of the stock that is authorized in its charter. The policy followed in this matter depends partly upon state laws and also upon the need for funds at the outset of the corporation's career.

The simplest division of corporate ownership is in the form of equal fractional shares, each entitled to the same rights. In a company that issues 100 shares of this stock, each share is entitled to 1 per cent of the distributed profits and participates in the accumulated surplus of the firm on the same proportionate basis. When only one class of stock of this description is issued, it is designated as the capital stock or common stock of the corporation (see illustration on page 30). Each share may be given a stipulated face value, or "par value." If no specific value is designated on the instrument, it is called "no-par-value" stock. In either case the shares are parts of a total investment and fundamentally derive their worth from the value of the corporate property or from estimated company earnings. The actual prices for which they are bought and sold in the financial markets will be influenced by a large variety of factors. The arbitrarily stated par value on a certificate is consequently of little significance. It does not entitle the stockholder to collect this amount from the company but merely expresses, in dollar units, the fractional part that this share represents in the total capital of the concern.

This simple capital structure, consisting of equal shares of one class of stock, is popular both among small concerns, such as the $1,000 and $2,000

[1] *Ibid.*

corporations, and among the largest types of enterprise, such as the Chrysler Corporation, Standard Oil Company (New Jersey), and American Telephone and Telegraph Company. In the first-mentioned concern, the stock has a $5 par value; in the second, the par value is $25; and in the last corporation, the par value is $100. In all three organizations, each share is on the same footing with all others, although there are several million shares outstanding.

Frequently, however, for different reasons, it is advantageous to the organizers or managers of a company to issue more than one class of stock.

Certificate for 100 shares of the capital stock of W. F. Hall Printing Company—par value $5.

This may be because of the desire to retain voting control or in order to differentiate between the profit- and loss-sharing positions of certain classes of stockholders. Another reason might be the need of raising funds and the inability to do so without granting special privileges, added guarantees of safety, or promises of income to new investors. The result is that some concerns have a considerable variety of stocks in their capital structure. The major classes that may be recognized are common and preferred shares. Common stocks are sometimes divided into classes of a voting and nonvoting variety; preferred shares, aside from the voting privilege, may be cumulative, participating, callable, and convertible. This differentiation among shares often makes possible broad powers of control.[1]

[1] See Chap. III for a further discussion of common and preferred shares.

The application for incorporation customarily states the amount of capital stock, the classes or varieties, the number of shares of each, and the rights, privileges, and liabilities of the stockholders.

Prescribed minima of authorized capital stock range in the several states from $500 to $10,000, the average level being established at $1,000. For industrial corporations, maximum capitalizations are not usually imposed. Most states have neither minimum nor maximum requirements and usually permit any number of classes of stocks to be issued. However, there are states that restrict the types of shares which may be issued or make some stipulation such as that all classes of stock must be entitled to vote. Although the latter provision appears equitable enough, it makes these states unpopular for the incorporation of pyramided holding companies, in which the control is closely held through the restriction of the voting right to a small issue of a special class of stock.

Several states prescribe the amount of stock that must be subscribed to or paid in before the concerns begin operations. In most jurisdictions having such requirements, a flat sum of $1,000 is usually fixed as the minimum. In some instances, however, the capital with which the corporation will commence business must be fully paid in at the time of filing the charter. This may entail some difficulty if the company is capitalized for a large amount.[1]

Miscellaneous Charter Provisions. It is also necessary to provide for a central office, in most instances at a location within the state of incorporation. Practice varies concerning the importance of function of such offices. A good many companies direct their corporate affairs from the designated central office. Others find it necessary to establish bona fide headquarters in some other state. In the latter instances, the legal requirements are satisfied through the appointment of a statutory agent. Serving in this capacity, an attorney or trust company will display the name of the corporation on an office door or bulletin board (see page 32), accept service of process and other papers, maintain duplicate records that may be required, furnish information, and generally assist in safeguarding the corporation's authority to do business. In some instances, the corporation meetings must be held at the main office. Where state laws are more liberal on this subject, the main office and the place of annual meetings may be located anywhere.

Some states limit the life of a corporation to 20 or 25 years with privilege of renewal. In others, an option is given to the incorporators to decide upon the length of life; and in more than half of the states, incorporation is

[1] For the actual text of the general statutes relating to the organization and operation of corporations in each of the American states and possessions see the latest annual edition of the "United States Corporation Manual."

perpetual. A brief clause is usually inserted in the application, stating the duration of the life of the company.

The balance of the certificate should state also the names and addresses of the incorporators, the number of directors, and their qualifications.

The gentleman pictured above is a country judge who conducts his practice from a one-room office on the main street of Dover, Del. He represents over 300 out-of-state corporations whose names make an impressive industrial roster covering his office walls. (*Courtesy of Pictures, Inc.*)

Where states require an initial subscription of the stock before a charter is issued, the names of the subscribers and the amount subscribed by each must be shown. In some states, the board of directors must include men who own substantial blocks of stock. Citizenship and residence restric-

tions are also specified. Sometimes additional provisions governing powers of directors and their terms of office, special methods of voting, and additional rights and powers of stockholders are inserted.

Selecting a State for Incorporation. Reference has already been made to important differences in state corporation laws. As a result, corporations frequently find it advantageous to incorporate in one state in preference to another. This, of course, depends upon the nature and scope of the business to be conducted.

The question of choice among several possible states of incorporation usually does not arise in the small firm. The most natural and convenient arrangement for the sponsors is to incorporate in their own state, and little thought is ever given to the possibility of obtaining a charter elsewhere. There is no advantage in choosing another state when the business is small and operations are purely local. On the contrary, there may be serious disadvantages: A company will expose itself to the taxing powers of two states. Furthermore, it places itself in the category of a foreign corporation (*i.e.*, one incorporated in another state) in the state in which it conducts most or all of its business.

Large concerns are sometimes disposed to select for incorporation purposes the state in which they expect to conduct the largest volume of business. However, this rule does not always govern, especially in cases where a state imposes severe restrictions upon the powers of its corporations. For example, the Texas Company, which for over 20 years had been established as a petroleum producer and refiner under a Texas charter, voted to form a new organization known as the Texas Corporation, later incorporated under the laws of Delaware, which would take over the business of the old company. In explanation of this move, Chairman Beatty of the company stated at the time:

> The Texas Company has not been permitted to have more than one subsidiary in any single state or foreign country. The principal competitors of the existing company are organized in states other than Texas and enjoy the privilege of holding stock of other corporations without limit so long as antitrust laws are respected.

Another important consideration is the matter of taxation. Tax laws, of course, are not static but are constantly being changed. Therefore, a company selecting a state on account of its liberal tax provisions is not guaranteed that this state will continue that policy. Nevertheless, the immediate tax burdens involved might justify the choice of one state over another, regardless of what the future might hold in store. Especially is this true when the incorporation tax (which is paid only at the time of incorporation) is considered. A subsequent rise in this tax in a given state will not work any hardship upon a concern already incorporated there.

For example, the United States Steel Corporation in 1901, by incorporating in New Jersey, paid initial fees of approximately $200,000, whereas in its home state of Pennsylvania the cost would have exceeded $3,500,000. A company that was capitalized at $1,000,000,000 in 1946 found that it could incorporate in Arizona at a cost of under $100, whereas in the neighboring state of California the initial fees were $90,100 and in New York $500,000.

At least one state prohibits firms incorporated there from merging with a corporation of another state. In some states, a company may not sell, exchange, or lease corporate property without the consent of the stockholders at the regular annual meeting. Other states prohibit a company formed under the general incorporation laws from owning or operating railroad lines, public utilities, or banks; such functions are limited in these states to corporations receiving grants of these specific powers.

There are dozens of other examples of limitations upon corporations in the laws of the various states. These include reference to stock-issue privileges, residence restrictions, place of meeting, and annual franchise taxes. In the majority of cases, these provisions do not seriously handicap the companies chartered there. However, in those instances where the statutes are likely to interfere with subsequent plans and activities of a company, it is important that the state from which the charter is obtained be selected with care.

Regulations Governing Foreign Corporations. One other question that deserves careful consideration in choosing a state of incorporation is the policy of the various states with respect to the rights and obligations of foreign corporations. Frequently the regulations affecting foreign corporations are no more serious than the following: "No corporation organized outside of the state shall be allowed to transact business within this state on more favorable conditions than are prescribed by law for similar corporations organized under the laws of this state." However, definite restrictions and limitation of powers are sometimes imposed. In one state, for example, no foreign corporation may acquire, hold, or own at any time more than a stated number of acres of real property, exclusive of mines and mineral lands necessary for milling, smelting, reducing, or working ores or for manufacturing or commercial purposes. This technically excludes all large foreign agricultural, lumbering, and real estate development firms, of a corporate character, from obtaining property in their own right.

Prior to the issuance of certificates authorizing them to do business, foreign corporations are required by most states to file copies of their charters and to pay certain filing fees or entrance taxes. Although the majority of these fees are nominal in amount, a few states impose very

large fees, and several arrange for reciprocal taxes; *i.e.*, they charge rates similar to those imposed upon their companies by the state of incorporation of the firm seeking admission.

No corporation prohibited from operating a business within a given state can secure this authority by obtaining a charter from another state that grants this privilege. Practically all states specifically affirm that a corporation cannot conduct a business authorized by charter or by laws of another state unless empowered so to do by some general or special law of the state granting it admission. In Michigan a foreign corporation "has no rights of citizenship . . . nor can it exercise any of its powers or franchises . . . without legislative permission." The Illinois law states that the

> . . . general assembly has power to prescribe terms upon which foreign corporations shall be allowed to do business . . . and it may prevent such corporations from entering or transacting any business within the borders of the state; the only limitation upon such power being where the corporation is an instrumentality of the federal government or where its business is strictly interstate or foreign commerce.

Furthermore a corporation that undertakes to do business in a state in which it has not received official license to operate exposes itself to heavy losses or penalties. In the first place, all of its contracts, deeds, and other titles in that state might be declared void. If involved in litigation, the company is not legally qualified to maintain an action in the courts. In addition, the corporation may be subject to fine or liability for cumulative penalties in the form of back taxes.

Federal Incorporation. Except for special purposes, such as the organization of banks and of export companies, the federal government has not provided for the general chartering of corporations. The lack of uniformity in state regulations and the development of various abuses have, however, led to agitation for a federal incorporation law.

As early as 1910, President Taft recommended a general voluntary incorporation statute. Later attempts to secure federal legislation on the subject added a compulsory feature which would require all railroads, certain classes of interstate business, holding companies, and heavily capitalized firms to incorporate under federal law. None of these attempts was successful.

Chief among the criticisms against existing state statutes has been the charge of laxity in the supervisory laws of several states. This has resulted in the migration of corporations to states that have virtually made a business of "selling" charters. Promoters, given the opportunity of forming powerful holding companies with large issues of nonvoting stock, might

organize projects involving little personal liability either to themselves or to the incorporators and directors. This has frequently resulted in ventures of questionable merit.

Commenting upon the advantages of federal incorporation, Seager and Gulick in their book "Trust and Corporation Problems" said: [1]

> The conclusive advantage of a compulsory federal statute is that it removes once and for all the fundamental cause of the evils now existing: the competitive selling of charters by half a hundred different authorities. . . . Federal incorporation brings the entire matter under one jurisdiction and reduces the friction between federal and state authorities to a minimum.

There is, however, a constitutional question of the power of the federal government to give a company authority to conduct business within the borders of a state. Judicial decision has not yet indicated whether the central government can exercise this authority.

Corporate By-laws. In the sense that they supplement the certificate of incorporation, the by-laws might be likened to the legal code that is built up on the constitutional base. A great many rules and regulations are too detailed in character to be inserted in the original charter. Furthermore, it is desirable to have some degree of flexibility in the regulatory provisions governing the conduct of stockholders, directors, and officers. Hence, the by-laws are set up by the stockholders as a complete guide to the management of the company. They are designed to protect the stockholders against the overstepping of authority by their appointed officers and agents; they provide a body of working rules; and they make possible a ready adjustment, if necessary, through the power of a majority of stockholders to alter or repeal them. In general, the by-laws set up instructions governing the time and place of regular and special meetings of stockholders and of directors; prescribe the number, qualifications, terms of office, and powers and duties of directors, committees, and officers; set up rules governing the issuance and transfer of stock, the issue of bonds, and the payment of dividends; and define the limits of authority and the powers to amend or repeal the regulations relating to the affairs of the company.

Promotion of Corporate Enterprise. In an enterprise in which fewer than half a dozen investors are involved, there is usually sufficient mutual interest in the project to ensure the general participation of all concerned. It must be remembered, however, that the number of owners of a corporation may run into hundreds or thousands of shareholders. Where this is the case, someone must take the initiative in conceiving the enterprise and in getting it started. He develops the idea, makes necessary investigations

[1] SEAGER, H. R., and C. A. GULICK, "Trust and Corporation Problems," p. 643, Harper, 1929. See also Chap. 27, pp. 628*ff.*, for general discussion of federal incorporation.

about the prospects of success, prepares the essential plans of organization, works out arrangements for the provision of adequate capital, gets together the requisite men and materials, and starts off the venture. Such an individual is known as the *promoter* of the company.

In a very broad sense, no business enterprise can come into existence without the performance of the functions of a promoter. Someone must apply foresight, initiative, and action if things are going to happen in the business world. However, when a man sets himself up in his own business or goes into partnership with someone else, he is not generally thought of as a promoter. It is when, through his efforts to organize a new enterprise, he attempts to interest a great many other people in the project that he assumes this role. In other words, the promoter might be considered to be the active element who brings the passive capitalist into touch with economic opportunities. It is under the larger corporate form that this role becomes most important.

Classes of Promoters. There are several types of promoters—some specializing in this function almost as a business by itself. Lawyers, bankers, engineers, and so-called "professional promoters" are in this category. Through their knowledge of the law, control of finances, technical ability, and experience in organizing many ventures, these specialists have come to play a leading role in the creation of new enterprises. Frequently, they have little to do with the business once it has been set up, taking as their reward simply the fees charged for the service of getting the company started. Often such promoters receive compensation in the form of a substantial block of common stock and, through the possession of it, exercise a paternalistic interest over the affairs of the company. It is seldom, however, that these promoters supply any great portion of their own funds as part of the original capital investment in the company. Business executives or would-be executives acting as promoters frequently have a personal interest in their projects. They usually intend to assume a prominent place in the management of the going concern that they help to bring into being.

Promoters do not confine themselves to the development of new enterprises. A favorite promotion opportunity lies in the taking over of an old, well-established business that formerly belonged to a family or a few individuals. Such closely held firms often present attractive expansion possibilities, and the promoter seeks to reorganize them into corporations whose broad security issues will tap a larger investment market. The original owners are induced to sell their business, including such items as trade-marks, good-will, formulas, and patents, in exchange for cash or substantial blocks of stock. In some instances, they are offered official positions in the new firm.

A closely related promotion activity involves the building of combinations among existing concerns. Such effort generally involves considerable skill, tact, and sales ability to bring together groups of executives and to convince them of the soundness or desirability of a proposed combination plan.

Steps in Promotion. The work of promotion consists of three distinct stages. The preliminary task involves the inspection, investigation, and analysis of the proposed enterprise. If the results of this study prove satisfactory, the next step is to "assemble" the project, *i.e.*, definitely to formulate the idea, to obtain options on the necessary rights and properties to be used, and to attend to all other organization details. The final stage involves the actual distribution and sale of securities in order to raise the necessary capital.

Investigation of the Idea. In making a preliminary analysis of the soundness of the idea, the promoter must study it from many different angles. Is the suggested product or service new and untried, or have similar devices been brought forward before? If developments have already been made in the field, inquiries must be made concerning the degree of their success, their duration, and the probability of their continuance. The promoter also tries to discover if there is room in this business for a newcomer. If the venture involves the production of something completely new, care must be taken to sound out the possible public reaction, to ascertain whether the product may become a short-lived fad or have a more prolonged life, and to detect any weaknesses in the proposition. Profit possibilities are critically examined. The promoters seek to estimate the probable costs of production, the prices for which the product or service might be sold, the costs of advertising, the extent of the market that could be tapped, and other similar data.

Occasionally the scope of investigation involves technical research. For example, a product based upon a new invention is to be placed on the market. Does this invention cover all the methods that may be employed in producing an article of this type? Can substitutes be used with equally satisfactory results? Does this process infringe upon any existing patent rights? Matters such as these must be settled in the mind of the promoter before he can go ahead with confidence in launching a new enterprise.

Formulation of the Project. If the business possibilities of the proposed "idea" appear attractive, the next step is to formulate a plan for converting the idea into a profitable reality. How large a capital will be required to finance the venture? What physical properties will have to be acquired? What equipment? Must patent rights, franchises, or other grants and privileges be obtained? What specific markets will be sought? How may the best financial and trade contacts be made? In order to take form, the

project must be given a certain amount of definiteness. The initial question may involve the probable range in investments necessitated by a suitable factory or plant; the actual choice of a precise location can come later. If an especially desirable site is available, however, and the promoter is confident of the success of his plans, he frequently finds it advisable to purchase an *option* on the property in question. This is a temporary right which enables the holder to exercise the privilege of leasing or buying a given property within a given time period at a stipulated price. The possession of such rights often gives the promoter a strategic position and serves to guard him against those who would usurp his position or otherwise frustrate his plans. Particularly are such options advisable in the promotion of mines, real estate developments, and railroad lines. Needless to say, if the enterprise in question depends largely upon the use of patented processes, great care must be exercised by the promoter in protecting and in retaining control of these patent rights.

Further estimates are needed, in the formulation of a plan of organization, with respect to necessary investments. The equipment and supplies that will be needed and the working-capital requirements must be determined. At this point, the promoter may make advantageous use of accounting records of companies in similar lines of business and of statistical materials that will give a clue to the capital requirements of his project. In general, the following initial costs must be kept in mind:[1]

1. Expenses incident to promotion, including investigation of the plan, preliminary legal and engineering counsel, procuring options, etc.
2. Organization costs, including the expenses of securing the charter, with necessary books and instruments which go with it, expenses of running the corporate organization, or of keeping it going until actual operations begin, taxes and incidentals which include possible extra legal fees.
3. Costs of advertising and selling from the inception of the company until it begins to make money.
4. General financing, which may include bankers' commissions and promoters' profits.

The foregoing list of costs is in addition to the capital asset requirements and the needs for working capital of the going concern.[2] Very careful calculation of all capital needs must be made at the outset of the project, and no items should be overlooked. The percentage of deceased concerns that owe their demise to starting in business with inadequate capital is very large.

Obtaining the Necessary Capital. The problem of getting the necessary financial backing is usually uppermost in the mind of the promoter, for it

[1] EARLY, MARY L., Some Problems of the New Corporation, *Corporate Practice Rev.*, September, 1930.

[2] See Chap. VI.

is this feature which prompts him to direct his appeal to others. If his own fortune were adequate and the project sufficiently meritorious to justify investment, little organizing effort would be required, except the task of the proprietor in setting himself up in business. Most new ventures, however, require a capital in excess of the resources of the original sponsors, and public participation must be sought. In anticipation of soliciting outside aid, a definite financial plan, based upon the previous calculations of properties and working funds that will be needed and including adequate allowances for unforeseen emergencies, is made the basis of the capitalization of the company. The kinds of stocks and bonds or notes to be issued are decided upon, frequently in consultation with the bankers who handle their sale. The final step in this process involves the actual marketing of the securities. This subject is treated in Chap. III.

Questions and Problems

1. What procedure and what changes in organization are implied by the news item that a private brokerage firm of 12 partners has become a corporation?

2. What important facts will be included in the corporate charter? State the functions of the attorney in the early stages of forming a corporation.

3. Examine carefully the selection from the U. S. Steel charter. Why has this charter become a model used by attorneys in drawing corporate papers? What particular features in this charter make it so desirable from the corporate point of view?

4. A business publication was entitled "Why Corporations Leave Home." What would be the subject of discussion in this booklet? Give illustrations of corporations that "left home." Compare the advantages and disadvantages of the corporation laws of several states.

5. Why is the question of choice of alternative states of incorporation usually a matter of little or no importance to the small local concern?

6. New York State requires that three or more people may form a corporation. If that is so, how do you account for the fact that so many "one-man" corporations are in existence? If you were going into business with one partner, would this necessitate your getting a third in order to incorporate?

7. Some states pass laws governing *foreign* corporations. What is meant by a foreign corporation? Why is it necessary for states to pass special laws governing the business of such corporations?

8. After a corporation is formed, many essential details are decided with regard to policy and procedure. These are usually included in the corporation by-laws and minutes. Describe a scene in a law office in which corporate by-laws and minutes are formulated. How would the business policies be determined? How would such policies be determined in a very large corporation?

9. In the large corporation, outside capital is required. Describe the functions of the promoter in this respect. What factors determine whether the outside capital should be raised through the issue of preferred stock, common stock, bonds?

10. "An important field of promotion is the taking over of an old, well-established business which formerly belonged to a family or to only a few individuals." Discuss the functions of the promoter in this respect. Illustrate with one or more actual cases.

CHAPTER III

CAPITAL STOCK AND CORPORATE CONTROL

Classes of Corporate Securities. *Common and Preferred Shares.* The number and types of securities to be marketed will depend upon the financial plan originally drawn up by the promoter. In corporations issuing only one class of stock, the shares represent the sole equity or capital in the business and, as such, are entitled not only to an interest in the assets and in the net earnings but also to a voice in the management of the firm. The issuance of one or more additional kinds of stock in a corporation usually results in diversification of ownership, involving special privileges of one group, and the limitation of the rights of other stockholders.

In recent years, a differentiation has been made among groups of shares in the common stock category, particularly for the purpose of concentrating the voting privilege in a few shares. The American Tobacco Company, for example, has an ordinary common stock and a Class B common stock. Both classes of stock are of $25 par value, and both have received identical dividends. The ordinary common, however, has the exclusive voting privilege, the Class B common being nonvoting in character. This division of common stock into two classes is frequently made strictly on the basis of the voting privilege—all other rights remaining substantially the same.[1] At times, however, other variables are introduced, such as provisions relating to rights of participation in profits. For several years in succession, Armour & Company (Illinois) and Continental Baking Corporation paid dividends on their Class A shares, whereas the Class B issues received none. This was because the Class A shares were entitled to substantial earnings before any disbursements could be made to those in Class B. When this distinction is made, there is little difference between the favored common issue and certain types of preferred stock.

Preferred shares are usually granted privileges relating to prior rights in the earnings of the business or to a more favorable consideration in the distribution of assets in the event of dissolution of the company. This class of stock is frequently denied voting rights except, of course, in those states where the corporation laws require that all classes of stock shall be

[1] The use of nonvoting common stock has met with considerable disfavor. Both the New York Stock Exchange and the New York Curb Exchange have refused to list new issues of nonvoting common stock.

entitled to vote. Occasionally, however, provision is made for special voting privileges to be extended to preferred shareholders—especially with reference to a protection of their interests against unjust dividend policies or diversion of assets of the company. This voting power is usually contingent and does not come into being unless and until a special grievance arises. In the American Rolling Mill Company, for example, the preferred stockholders have one vote per share and upon default in four quarterly dividends are entitled to three votes per share.

In rare instances, preferred stocks have voting rights per share that exceed those granted to common stockholders. This does not necessarily imply that the preferred stockholders have a majority voice in the government of such companies. In most cases, the number of shares of common stock is much greater than the outstanding issue of preferred shares, so that, in spite of multiple-voting rights attached to the latter, the common stockholders still have control. In the National Biscuit Company, the preferred shares are entitled to seven votes apiece, whereas the $100 preferred shares in the International Nickel Company have twenty votes apiece.

Preferred Shares—Cumulative and Noncumulative. In the distribution of earnings, preferred stock is entitled to a dividend of a stated percentage which is payable in any given year before a dividend is declared upon the common shares. This dividend may be cumulative or noncumulative in character. Unless stipulated to the contrary in the charter of the corporation or in the stock certificates issued, the preferred shares usually bear cumulative dividends; *i.e.*, in case earnings in one or more years are insufficient to pay the preferred dividends in full, the unpaid balances are carried over to succeeding years as prior claims. These claims must be settled before common stocks are permitted to receive any share in future profits. Noncumulative preferred stock receives a stated rate of dividend prior in right to disbursements on the common stock, but only when and if earned. This payment is left to the discretion of the directors. If in any year the company fails to pay a dividend on such stock, the stockholders have no claim against the corporation's future earnings. Consequently, from an investment viewpoint, noncumulative shares have not been very popular. There is obviously a conflict of interest between the holders of such shares and the common stockholders on the subject of annual dividend disbursements, for all earnings not paid as dividends to these preferred stockholders would become part of the corporate surplus —title to which is vested (according to various court interpretations) in the common stockholders.[1]

[1] See, however, possible legal claims of these preferred stockholders given in A. A. Berle and G. C. Means, "The Modern Corporation and Private Property," p. 191, Commerce Clearing House, Chicago, 1932.

Examples of companies that have issued noncumulative preferred stock include American Ice Company (6 per cent preferred), New York Dock Company ($5 preferred), United States Rubber Company (8 per cent preferred), and American Car and Foundry Company (7 per cent preferred). The last company made consecutive dividend payments of $7 per share annually from 1906 to 1931. However, in 1932, only $5.25 was declared, and no further dividends were paid until 1937, when a $4 distribution was made. Full $7 dividend payments were not resumed until 1941. Other important illustrations of this class of stock may be found among the railroads. However, noncumulative preferred stock is comparatively rare and is seldom issued except when warranted by peculiar circumstances as in the case of reorganizations.

When the preferred stock is cumulative, a succession of years of poor business causes a rapid growth in accumulated obligations to stockholders. The Standard Gas and Electric Company and the Cities Service Company both "owed" millions of dollars of such accumulated dividends in 1947 on various preferred issues. Strictly speaking, these corporations owed their preferred stockholders nothing, since unpaid dividends are not a debt of the corporation unless these dividends have actually been declared. Back dividends must, however, be paid or a financial adjustment made with respect to them before there can be any distribution to the common stockholders. The American Woolen Company, for example, which paid its common stockholders $12 per share in 1946, had to liquidate arrears of more than $50 in cumulative dividends on the preferred shares before the dividend on the common stock could be declared.

Preference as to division of assets is a right regularly given to preferred stockholders. Briefly this means that should the company go out of business through voluntary liquidation or on account of proceedings in bankruptcy, the preferred stockholders rank ahead of the owners of the common shares in the division of net assets remaining. Occasionally the amount of such participation exceeds the par value of the preferred shares. However, in actual practice, preferred shareholders seldom receive these stipulated values of their shares except under the most favorable circumstances of liquidation procedure. Usually, in a forced dissolution, corporate net assets do not yield sufficient sums to reimburse investors and creditors of the company. The result is that a reorganization of the company is sometimes effected or else a receiver is appointed for purposes of winding up the affairs of the concern. In any event, creditors and the various classes of stockholders frequently agree to a prorata settlement of their claims—preference being extended to the preferred interests but seldom to the extent of their full legal claims.

Participating Preferred Shares. A distinction is made between ordinary

preferred stock and participating preferred shares. Participating preferred stock shares with the common stock in dividends, after both common and preferred have received a given return. Ordinarily such right of participation is distinctly denied or at least limited in the corporate charter.[1] The Diamond Match Company has outstanding approximately 15 million dollars worth of 6 per cent cumulative participating preferred stock of $25 par value. The preferred stock shares equally with the common stock in the profits of the company after both receive a minimum of 6 per cent (or $1.50) per share annually.

Callable or Redeemable Shares. The final equity in a company is vested in the common shareholders—preferred shares usually being entitled to a lesser amount of control. The common stockholders may reserve the right to "call in" or retire the preferred issue without requiring the special consent of the owners of these securities. When provision is made in the charter for this right, a redemption price is usually stipulated. It is customary to fix this figure at par or at several dollars above the par value of the preferred shares. The callable feature of the $5 cumulative preferred stock of the Goodyear Tire and Rubber Company gave that corporation the right to redeem the shares at $105, plus accrued dividends, at any time after October 1, 1946. Special provision is sometimes made for the retirement of preferred stock through the accumulation of a sinking fund, in much the same way as a long-term loan would be paid off. When this is done, the issue of preferred stock is almost regarded by the managers of the company as a long-term borrowing operation rather than as the admission of a new class of permanent owners to the business.

Convertible Stock. Another way in which preferred stock is retired is to make it convertible into common stock or other securities of the company at a stated price. If the market price of the common stock should subsequently rise, the privilege of conversion would become attractive, with the result that the preferred stock would be exchanged for common shares. The $3.50 cumulative, convertible, preferred stock (par $100) of the Burlington Mills Corporation was issued with the stipulation that it would be convertible into 4 common shares through March 1, 1951 and 3.6 shares thereafter. At the time when this preferred stock was offered for sale, the common shares were quoted at $20 or less. However, the possibility of a subsequent rise in the price of the common stock gave this conversion privilege an element of speculative appeal.

Guaranteed Stock. Another variety of stock sometimes found in consolidations, particularly among the railroads, is guaranteed stock. Such

[1] The preponderance of court decisions seems to hold that if nothing is said to the contrary, preferred shares are nonparticipating. Several Pennsylvania courts, however, have held preferred stock to be participating even though not specifically so designated.

securities are usually shares originally issued as either preferred or common stock by a company that later becomes absorbed in a combination. Instead of buying the stock of this company directly, the promoters may arrange for concessions or control privileges in return for the guarantee of a dividend upon the shares of the company. These dividends must be paid irrespective of the earnings of the subsidiary so acquired and, as far as the stockholders of the smaller company are concerned, are virtually equivalent to interest payments on bonds. Dividends of the Boston & Albany Railroad, for example, were guaranteed by the New York Central Railroad Company, which controlled it. The Pennsylvania Railroad Company guaranteed dividends of some 10 subsidiary lines, including the Philadelphia & Trenton, the Cleveland and Pittsburgh, and the Camden & Burlington County railroads.

Bond Issues. In addition to the many varieties of stock, a corporation may sell bonds to the investing public in order to provide further investment funds. Unlike stocks, however, which represent shares or certificates of ownership in a corporation, bonds give rise to a debtor-creditor relationship. The bond is a liability of the borrowing company and is payable to the investor who has advanced the cash. The date of maturity and a definite rate of interest on the obligation are usually stipulated in the contract evidencing the debt. Inasmuch as provision is made for retirement of a bond, it is regarded as a less permanent investment instrument in a company than stock. In practice, however, bonds often take the form of investments as lasting in character as actual shares of ownership by fixing their dates of retirement far into the future or by refunding or renewing a given issue at maturity. A more complete discussion of this form of investment instrument will be found in Chap. XXIII which deals with long-term financing.

The Prospectus. A prospectus is an invitation to the investor to buy securities in a corporation. It is therefore prepared in such a way as to stimulate interest, inspire confidence, and galvanize the investor into action. In order to arouse interest, such facts as the importance of the industry, the place of the enterprise in the industry, the prospects of profits, and any special advantages are usually cited.

Formerly a prospectus had no fixed pattern. It was frequently issued in the shape of a carefully prepared letter or advertisement or in the form of a simple pamphlet. Occasionally an elaborate folder was prepared. The following simple prospectus, issued by John Winthrop in 1635 when he promoted the first American chemical stock company, is of historical interest: [1]

[1] From "Chemical Industry's Contribution to the Nation," supplement to *Chemical Industries*, p. 8, May, 1935.

PROSPECTUS *of the first American chemical stock company organized in* 1635 *by John Winthrop*

IF ANY desirous to promote a publique good shall see cause to accomodate that businesse with a stock of 3000£ or 4000£ I shall indeavour (God permitting) to raise such commoditee as may be convenient for returnes, and in particular that staple of saltpeter of which some (blank) of tunes are yearly carried into England, Holland, Portugall and other parts; and that no adventure of detriment may be to any, doe hereby ingage that the said stock shalbe within (blank) yeares duly repaied to them, with some convenient consideration (if God please to add a blessing to the designe so farre as it be profitably effected); and when it shall appeare demonstratively incouraging, they may, if they please to joyne in the business and to a further proceeding, advance to a stock of 10,000 or 20,000£ or more.

The illustration shown on page 47 is the title page of a more modern offering of securities. The entire document, in this instance, was a booklet containing 25 pages of printed matter. Rigidly regulated by the federal government both as to form and content,[1] the modern prospectus sets forth, in considerable detail, such facts as are necessary to judge the investment merits of a given issue of stock. Among other things, it contains a description of the business and its properties, a statement of the proposed capitalization and the financial terms on which the securities are offered, a summary of past earnings if any, and the names of officers and underwriters. In order to induce the investor to pass beyond the initial stage of mere interest in the proposition and to get him actually to part with his

[1] See p. 56.

PROSPECTUS

140,000 Shares

Beech-Nut Packing Company

Common Stock

$10 Par Value

The regulations of the Securities and Exchange Commission require that the three following paragraphs appear on the first page of the Prospectus:

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION

Beech-Nut Packing Company has registered the securities by filing certain information with the Commission. The Commission has not passed on the merits of any securities registered with it.

IT IS A CRIMINAL OFFENSE TO REPRESENT THAT THE COMMISSION HAS APPROVED THESE SECURITIES OR HAS MADE ANY FINDING THAT THE STATEMENTS IN THIS PROSPECTUS OR IN THE REGISTRATION STATEMENT ARE CORRECT.

The 140,000 shares of Common Stock offered hereby are outstanding shares which are being sold by the Executors under the Will of Bartlett Arkell, hereinafter generally called the "Seller." No part of the proceeds from such sale will accrue to the Company.

	Price to Public	Underwriting Discounts and Commissions (a)	Proceeds to Seller (b)(c)
Total	See text below	$245,000	See text below
Per Unit	See text below	$1.75	See text below

The initial public offering price will be a fixed price per share based on the last regular way quotations reported for the Common Stock of the Company on the New York Stock Exchange prior to the time F. Eberstadt & Co. Inc. notifies the Seller that it proposes to make and to authorize its associated Underwriters to make as promptly as possible a public offering of the shares offered hereby and the Seller approves of the making of such public offering. Such price is to be equal to the last reported sale price of such Common Stock, provided that if no sale of such Common Stock shall have occurred during the trading session of such Exchange on the day such notice is given to the Seller or during the next preceding trading session, or if the last reported asked price of such Common Stock is lower than the last reported sale price, then the initial public offering price may be established by F. Eberstadt & Co. Inc. not lower than the last reported bid price nor higher than the last reported asked price of such Common Stock. During the period from May 1, 1947 to June 13, 1947, inclusive, 5,000 shares of Common Stock of the Company were reported as sold on the New York Stock Exchange at prices ranging from a low of $30.25 per share to a high of $34 per share. The total net cash proceeds to the Seller will be the aggregate initial public offering price less the underwriting discounts and commissions set forth above and less expenses payable by the Seller, the estimated amount of which is set forth in note (c) below.

(a) The Seller has agreed to provide certain insurance indemnifying against certain liabilities under the Securities Act of 1933 or other statute or common law. The beneficiaries of the insurance are the Company, the Seller, the directors of the Company, its officers who sign the Registration Statement, the Underwriters, and each person, if any, who controls the Company or an Underwriter. The Seller has also agreed to pay $5,000 to F. Eberstadt & Co Inc. as reimbursement of a portion of its expenses.

(b) Certain information with respect to the Seller is set forth hereinafter under the caption "Seller."

(c) Before expenses of the Seller connected with the distribution, estimated at $54,500.

No dealer, salesman or other person has been authorized by the Company, the Seller or the Underwriters to give any information or to make any representations, other than those contained in this Prospectus or in the Registration Statement, in connection with the offer contained in this Prospectus. This Prospectus does not constitute an offer by the Seller or by any Underwriter to sell securities in any State to any person to whom it is unlawful for the Seller or such Underwriter, respectively, to make such offer in such State.

Among the principal Underwriters named herein under the caption "Underwriting" is

F. EBERSTADT & CO. INC.

The date of issue of this Prospectus is June 18, 1947.

money, time limits are occasionally set for making original subscriptions. Stock-purchase warrants are sometimes issued, granting the holder the privilege of purchasing the stock at a stated price within a specified period.

Marketing the Securities. Unless the number of securities to be sold is small or the promoter has excellent business contacts which will simplify the task of selling the shares of stock, it is usually necessary to engage the services of brokers and investment banking houses who specialize in the marketing of new issues of stock. These banking organizations serve as middlemen between individual investors or financial institutions with funds to invest and the corporations wishing to raise capital. For a fee or commission, they undertake to market the securities and thus relieve the issuing company of further worries in this direction. With their networks of sales offices and through affiliated securities dealers, such organizations are in an excellent position to distribute corporate shares to the investing public.

In order to spread the risk of handling the distribution of large blocks of stocks, groups of banking houses commonly share the work by forming a temporary partnership known as an *underwriting syndicate.* The syndicate members guarantee to provide the issuing company with the requisite capital and assume the risk of selling the securities at the offering price during the initial period of its distribution.[1]

Purchase and Sale of Securities. The popularity of corporate shares among investors is explained partly in terms of the ease with which they may be purchased and sold. Stockholders might be much more hesitant in making commitments were it not for the fact that they felt assured of the ability to dispose of their holdings at almost any time. Especially is this true where they know little about the management that will be entrusted with their money. In a small corporation in which the stockholders themselves have an important role to play in the control of their company, the situation is somewhat different. The purchase of stock in an enterprise of the latter variety is usually regarded as a permanent investment in much the same way as the contribution of capital for a share in a partnership. Unless the investor should decide to leave the business and cast his lot elsewhere, he probably would not think of selling his shares of stock. In a larger venture, however, in which a more impersonal relationship exists between owner and manager, an important consideration on the part of the stockholder is that of liquidity. Shares of stock are negotiable instruments of ownership and therefore pass freely from one person to the next.

Listed Securities. The marketability of corporate securities is enhanced when they are listed for trading on one of the organized securities markets

[1] For a further discussion of underwriting see Chap. XXIII.

such as the New York Stock Exchange, where, during official hours, there is continuous trading in shares of ownership in hundreds of companies. The majority of corporations in this country have not listed their securities on any organized exchange. It is significant, however, that the corporations whose shares are so listed are the largest and best known, and handle the bulk of American business in their respective fields.

In order to make it possible for the stockholders to enjoy the privileges of being able to dispose of their holdings in a central market of this kind if they so wish, a company must apply to the exchange for the listing of its securities. This application is usually submitted as a formal petition giving the name and history of the company; the date and place of incorporation; a description of the business; the names of officers, directors, and principal stockholders; the character and amount of capital stock, and a statement of accounts. Staff members of the exchange's stock-list department carefully scrutinize each application and make a report to the board of governors. If the report is favorable, it ordinarily entitles the company to the right to have its stock traded on the exchange.

To be eligible for listing on the New York Stock Exchange, a company must be of recognized standing in its industry, have substantial assets or demonstrated earning power, and enjoy a sufficiently wide public interest and distribution of its stock to ensure a free and open market for the issue. A number of obligations are incurred by the corporation in exchange for this privilege. It must regularly submit assets and earnings reports to the exchange and frequently, if called for, make special reports to that body. Its annual financial statements must be audited by independent qualified public accountants. The stock exchange also insists upon a broad disclosure of such matters as the corporate setup, preference of securities, rights of stockholders, past business performance, and any other facts essential to an informed investment decision. Moreover, if the company plans to make any changes in its authorized or outstanding stock or if it intends to offer any "rights" or declare any dividends, it must usually serve notice in advance to the exchange. Somewhat similar standards are imposed by the New York Curb Exchange and by securities exchange markets in other cities.

Despite these various restrictions, however, the attractiveness of a listed security is great and is an important selling point in attempting to market a new issue. Hence some arrangements are usually made for the listing of stock if it is being offered for sale to the general public.

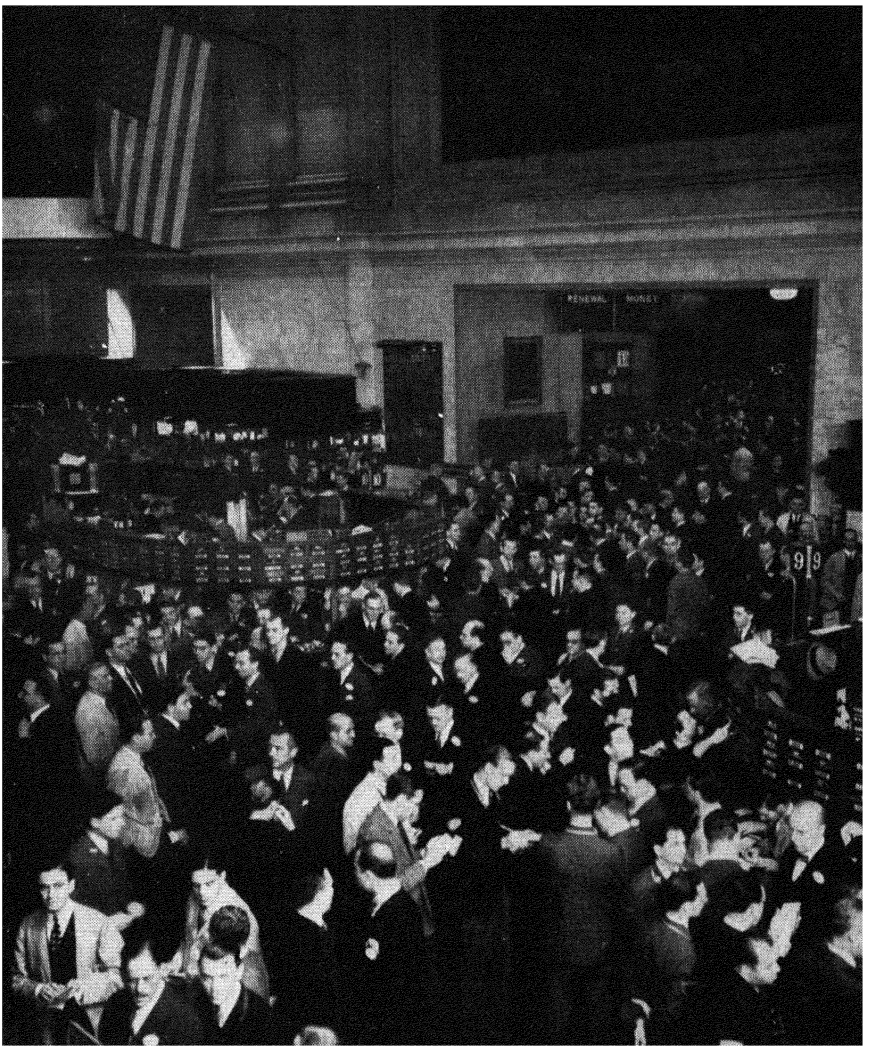
The Stock Exchanges. The stock exchanges are a vital part of the machinery through which capital is supplied to industry. Through their trading facilities, millions of investors, large and small alike, are able to buy and sell corporate securities.

The New York Stock Exchange is the nation's principal securities market. It has a trading list that includes the stock issues of more than 1,000 different companies representing every leading branch of industry. All transactions are handled through brokers or commission houses holding membership in the exchange. The latter serve as agents for customers who place orders with them to buy or sell specified quantities of stocks and bonds. A standard scale of commission rates is charged for their services. Each business day, orders flow in to the hundreds of member brokerage firms and are promptly relayed by private wire to their respective telephone clerks at the exchange. These orders are executed on the floor of the exchange at designated "trading posts" where all trades in specified shares take place.

Brokers gather at these trading posts and attempt to transact business for the accounts of their customers. Transactions are handled on an auction market basis; *i.e.*, the first bid or first offer at any given price has priority at that price. All bids and offers are made orally, and completed contracts are noted on the scratch pads of the brokers. These deals are consummated later through the delivery of the stock and the settlement of payments therefor in the offices of the brokerage firms involved.[1] The unit of trading for most stocks is 100 shares; but for a few, it is 10 shares. Sales involving any number of shares other than multiples of these units are executed through "odd-lot" dealers who specialize in such business.

The diagram on page 52 illustrates how a complete transaction is handled. The buyer in Connecticut (1) places an order with his broker (2) to purchase 100 shares of General Motors common stock "at the market." This means that he is willing to pay the lowest price at which the stock is being offered at that instant. The broker immediately sends this order over a private wire to the firm's New York office (3) where it is relayed over a second private wire directly to the firm's telephone clerk (4) on the trading floor of the exchange. The clerk flashes the number of the floor member (5) of his firm on the large wall annunciator board. Seeing his number, the member goes immediately to his telephone booth, gets the order, and hurries to Post 4 on the trading floor where the stock of General Motors is traded. Meanwhile, a seller in Seattle, Wash. (6), has notified his broker (7) to sell 100 shares of General Motors at 67½. The broker must therefore get this price or a higher price for his client's stock. This order is sent along in the same way (8), (9), and (10) to the floor of the exchange, and the floor member of this brokerage firm likewise travels over to Post 4 to effect a trade. Assuming that no other broker's representative arrives simultaneously at Post 4 with an offer to sell General

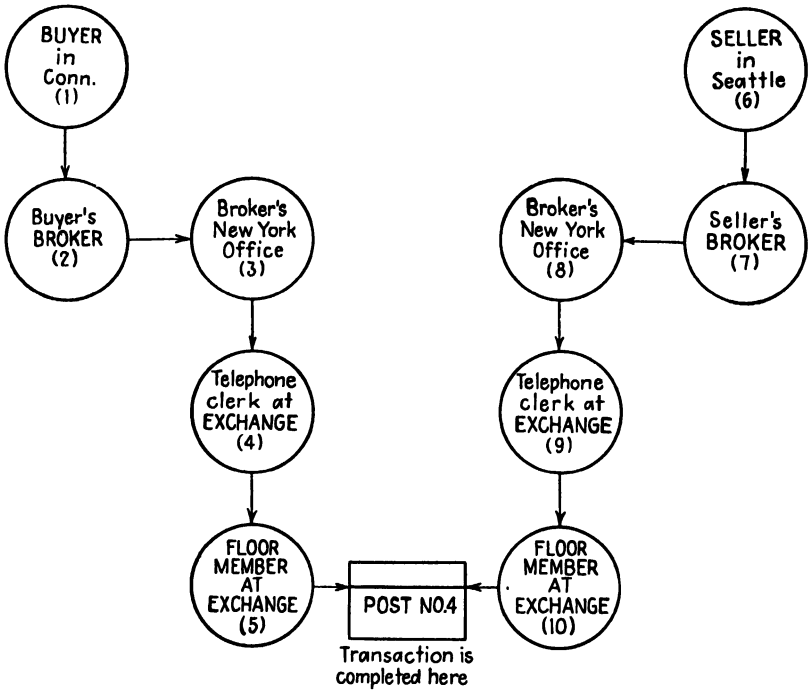
[1] Daily settlement of transactions is usually effected through the Stock Clearing Corporation.



(Gottscho-Schleisner Photo)

Close-up of a part of the floor of the New York Stock Exchange. Brokers are executing buying and selling orders. Post 10, where Bethlehem Steel Corp., Lily-Tulip Cup Corp., and U. S. Rubber Co. are traded, is at the left. To the right is Post 9 where transactions are made in Adams Express Co., Baltimore & Ohio R. R. Co., Standard Oil Co. (New Jersey), and other designated corporations. (*Courtesy of N. Y. Stock Exchange.*)

Motors stock at a price lower than 67½, a contract will be made at the latter price between the two floor brokers (5) and (10). Thus, within a few minutes, it is possible to effect a sale in an actively traded stock for the accounts of two customers separated from each other by thousands of miles. In the case of some securities for which the demand is not very active or where both buyers and sellers insist upon holding out for a stipulated



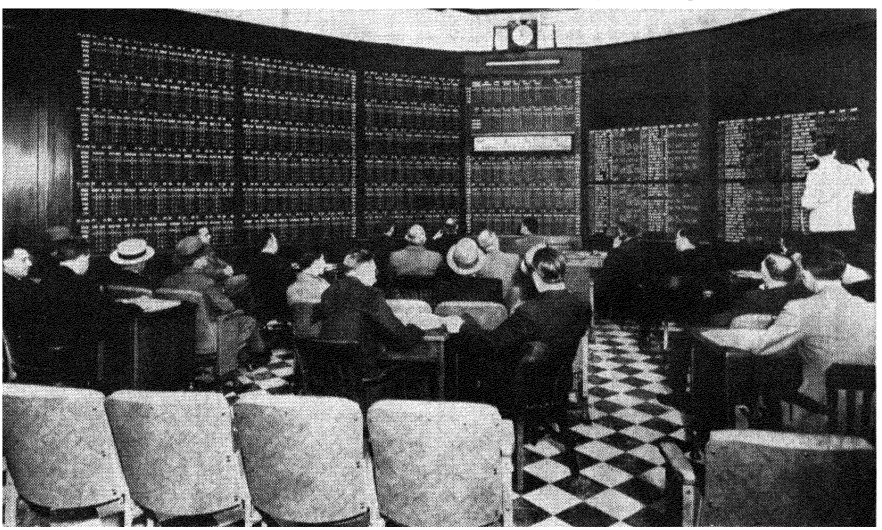
Steps involved in a stock exchange transaction between a buyer in Connecticut and a seller in Seattle, Wash.

price, there may be a delay in completing the transaction. However, as soon as there is agreement between bids and offers, a contract will be made. The actual delivery of the securities by the selling member and the payment of the full contract price by the buying member are made the following third full business day.

Prompt publicity is given to prices on every transaction by means of the ticker tape which flashes throughout the United States, Canada, and Cuba the amount of the sale and the sales price a few seconds after the contract was made. The name of the stock is reported in the form of abbreviated symbols. This information is further transmitted by telegraph and radio to all parts of the world. Summaries of daily transactions

in each security are printed in the financial pages of leading newspapers. The illustration on page 54 shows how these data are reported.

In the first two columns are given the range in price for the year. The next column shows the name of the stock, and immediately to the right of this there is indicated the latest known annual dividend rate or the amount of dividend actually paid up to that time. Symbols and abbreviations used next to the name of the security frequently provide further



(Ewing Galloway Photo)

Scene in the customers' room of a broker's office. Magnified ticker tape is projected on screen in front of room. Boards lining the walls show current quotations of leading securities. Price changes are posted by electric mechanism. *(Courtesy of N. Y. Stock Exchange.)*

information. Thus, "pf" means preferred stock, "a" indicates that an extra dividend is paid in addition to the stated rate, and "x" usually denotes that the stock is selling "ex-dividend"; *i.e.*, the record date, entitling stockholders to dividends, has passed. Other abbreviations are explained in footnotes to the stock tables. In the remaining columns are listed the sales (in 100-share lots) for the day, the first or opening price recorded, the highest price for the day, the lowest price, and the last, or closing, price. The final column shows (in fractions of one dollar) the net change between the previous day's closing price and the closing price for that day. In addition, newspapers sometimes print closing bid and asked quotations, which are respectively the prices that prospective buyers are willing to pay and the prices at which prospective sellers will sell.

The quotation of R. H. Macy & Company common stock in this table reveals that the high and low prices of the year were $41.75 and $31.875

per share, respectively. The stock paid an annual dividend of $1.60 per share; 200 shares were sold on that day; the opening price was $32.75 per

NEW YORK STOCK EXCERPTA

Range, 1947. High.	Low.	Stock and Div'd in Dollars.	Sls. 100s.	First.	High.	Low.	Last.	Net Chge.
52½	42¾	Kennecott Copp ½g	16	45¼	45½	45¼	45½+	½
33⅜	27¾	Koppers Co 1.60	1	28	28	28	28	+ ⅛
99¾	97	Koppers Cop pf 4†	10	97¾	97¾	97¾	97¾	..
39	34	Kresge (S3) 1g..	2	36½	36½	36½	36½+	⅜
50	40¼	Kroger Co 2.40..	2	42¾	43	42⅝	43	+ ½
7	4⅞	LACLEDE G .10g	1	5	5	5	5	..
14	11½	La Consol pf 43.	1	12¾	12¾	12¾	12¾—	⅛
44	31	Lambert Co 2a...	1	31	31	31	31	..
30¼	24	Lees J&Cons 1.40	1	24½	24½	24½	24½+	½
12⅛	10⅛	Lehigh G & N 1	3	10⅛	10⅛	10⅛	10⅛	..
44½	34	Lehigh Port C 1½	1	34¼	34¼	34¼	34¼—	½
3½	2	Lehigh Val Coal	6	2	2	2	2	..
25⅝	17⅛	Leh V Coal 1 pf	3	17¼	17¼	17⅛	17⅛+	⅛
9⅝	6½	Leh V Coal 2pf½	2	6½	6½	6½	6½	..
25	17⅜	Lerner Stores 1½	1	18¼	18⅛	18⅛	18⅛	..
11	8⅝	Libby, McN&L.3½	2	8⅞	8⅞	8¾	8¾—	⅛
96⅜	79	Liggett&Myers 3a	2	81	81	81	81 —	¼
190	161	Liggett&My pf 7†	1	188	188	188	188	+ 2
56½	47	Link-Belt 2a.....	1	52	52	52	52 —	1
49⅛	38⅝	Lion Oil 2.....	13	47¼	49⅛	47¾	49¼+	2⅛
30½	21	Liquid Carbnic 1.	1	22	22	22	22 +	¼
20	17⅜	Lockheed Airc ...	7	13½	13½	13½	13½	..
27	20¼	Loew's Inc 1½...	2	21⅝	21⅝	21⅜	21⅝+	⅛
79⅜	64¼	Lone St Gas 3½a	3	66¼	64½	64¼	64½—	⅜
21½	17⅛	Lorillard (P) 1...	4	19½	19½	19½	19½+	¼
53	43	Louisv &Nash 3.52	1	43½	43½	43½	43½	..
26⅛	18¼	Lowenstein 1½a..	1	18⅛	18⅛	18⅛	18⅛+	⅛
100¾	97	Lowenstein pf 4¼†	20	99¾	99¾	99¾	99¾—	¼
41⅜	31⅞	MACY (R H) 1.60	2	32⅜	33¼	32⅜	33⅛+	⅛
15½	12½	Mad Sq Gar 1....	2	13¼	13⅛	13¼	13⅛+	⅛
17⅞	12¼	Magnavox 1	1	12¼	12¼	12¼	12¼—	⅛
5¼	3½	Marcuslio Oil .05e	1	4	4	4	4	..
8¼	6⅞	Marine Midl .20g	3	7⅛	7⅛	7⅛	7⅛	..
13⅞	10⅜	Market S R pf 1†	20	11	11	11	11	+ ⅛
34⅜	25⅛	Marshall Field 2a	4	25⅜	25⅜	25⅛	25½—	⅛
34	18½	Martin (GL) 3...	17	18⅜	18⅜	18⅛	18⅜+	⅛
21½	14⅜	Martin-Parry .60..	2	16⅜	16⅜	16⅛	16⅛+	⅛
33	26⅜	Mathieson Alk 1..	1	27⅛	27⅛	27⅛	27½ ..	
49⅜	40⅛	May Dept Strs 3.	2	42⅜	43¼	42⅜	43½+	⅜
97⅛	92½	May D St pf 3.40†	20	92⅝	92⅝	92⅝	92⅝	..
12	8⅜	Maytag Co ⅛e....	3	9	9	9	9	..
36⅜	46⅞	McIntyr Porc 2.05a	4	46⅜	46⅞	46⅜	46⅞+	⅜
44	33½	McKess &Rob 2.40	1	33½	33½	33½	33½—	½
28½	21⅛	Melville Shoe 1.40	12	21⅜	21⅜	21⅜	21⅜	..
19⅜	14½	Mercant Strs 1....	3	14½	14½	14½	14½	..
47½	39⅜	Mesta Mach 2½..	2	40	40	40	40 +	⅜
18⅛	13½	Miami Copper ⅝g	6	16	16	16	16	..
39	33	Mid-Cont P 1¼g.	6	37	37¼	37	37½—	½
66½	52⅛	Minn-Honey R 1g.	1	53⅜	53⅜	53⅜	53⅜—	⅛
12½	8⅛	Minn-Moline	6	8⅜	8⅜	8⅜	8⅜—	⅛
115⅛	104	Minn-M pf 3¾k.†	30	107½	107½	107½	107½+	½
6	4½	Mo-Kan-Texas	3	4⅝	4⅝	4½	4½ ..	
23⅜	14⅜	Mo-Kan-Texas pf.	2	16	16¼	16	16¼+	⅜
51½	36⅝	Mohawk Carpet 2	1	37	37	37	37 —	¼
13⅜	9	Mojud Hos .20g..	1	9	9	9	9	..
63⅛	50½	Monsanto Chem 2	2	55	55	55	55	..
64⅜	50	Montgom Ward 2a	4	53½	53⅜	53½	53⅜+	⅛
25	20⅜	Moore-McC Lin 2	7	25	25½	25	25½+	1½
24¼	17⅜	Mot Products ½g	1	19¼	19¼	19¼	19⅛—	¼
19⅝	14½	NASH-KELV ½g..	8	15⅞	15⅞	15⅞	15⅞+	¼
39	25½	Nat Acme 2.....	1	26¼	26¼	26¼	26¼+	1½
16½	13	Nat Airlines	1	14	14	14	14	..
14	10⅛	Nat Auto Fib .60	4	10½	10½	10⅜	10⅜	..
16⅜	11½	Nat Aviat 1.35a..	2	11½	11½	11½	11½	..
28½	24	Nat Battery 1.20.	1	27½	27½	27½	27½	..
34⅛	27	Nat Biscuit 1.10g	4	28¼	28⅜	28¼	28⅜+	⅜

Range, 1947. High.	Low.	Stock and Div'd in Dollars.	Sls. 100s.	First.	High.	Low.	Last.	Net Chge.
30⅞	23½	Repub Steel 1a..	6	24⅞	25	24⅞	24⅞—	⅛
24⅜	17⅝	Revere Cop&B ½g	12	17⅝	17⅜	17⅝	17⅜ ..	
11⅜	7½	Rexall Drug 3½g..	21	7⅜	7⅜	7⅜	7⅜—	⅛
39	25½	Reynolds Metals..	3	27¼	27¼	26⅝	26⅝—	¼
124	107½	Reynolds M pf5½†	20	107½	107½	107½	107½—	1
44½	36⅛	Reynolds T B1.40a	13	37⅝	37⅝	37¼	37¼—	½
16⅜	13⅝	Richfield Oil 1...	2	14⅝	14⅝	14⅝	14⅝ ..	
10¼	7⅞	Roan Ant C .22g.	12	9	9	9	9 ..	
24⅜	20½	Royal Type .45g..	2	21½	21½	21½	21½+	⅛
24½	20½	SAFEWAY ST 1.	2	20⅝	21	20⅝	21 +	⅜
12⅞	6	St L San Fran...	3	6¼	6¼	6¼	6¼ ..	
32⅛	20½	St L San Fran pf	3	21½	21⅝	21½	21⅝+	¼
85⅜	26½	Schenley Distil 2	28	28⅛	28¼	28	28⅛ ..	
49⅛	41½	Scott Paper 2...	1	43¼	43¼	43¼	43½ ..	
18⅜	15⅛	Scranton Elec 1..	2	15½	15½	15½	15½—	½
24⅜	14½	Seab A L RR....	3	14⅝	15	14⅝	15 +	⅛
30	23	Seaboard Oil 1 ..	2	29½	29⅝	29½	29⅝+	⅛
39	31¼	Sears Roebuck 1a	18	33¼	33⅜	33¼	33⅜+	½
16⅛	11⅜	Seeger Refrig ..	1	11⅜	11⅜	11⅜	11⅜ ..	
16⅛	11½	Selberling Rub 1.	1	11½	11½	11½	11½—	⅛
16⅞	11⅜	Servel Inc .30e..	2	12	12	12	12 ..	
25	20½	Shamrock O&G .80	4	23½	23½	23½	23½—	⅜
36	28⅜	Sharon Stl 2.....	1	30⅛	30⅛	30⅛	30⅛ ..	
33⅜	20⅜	Sharp & Dohme 1	2	26⅜	26⅜	26⅜	26⅜ ..	
30⅜	24⅜	Shell Un Oil 1½e	6	26½	26½	26½	26⅝—	½
6⅜	6	Silver King Coalit	2	4½	4½	4½	4½ ..	
16½	14⅞	Sinclair Oil 1....	5	15⅛	15⅛	15⅛	15⅛+	⅛
73½	66	Skelly Oil 2e....	1	71⅜	71⅜	71⅜	71⅜+	⅜
20⅞	15¼	Sloss-Shef Stl ..	1	17¼	17¼	17¼	17¼+	¼
35½	26	Smith & Cor Ty 2	1	26⅜	26⅜	26⅜	26⅜+	⅛
39	30¼	Smith A&Sons1.40	3	30⅜	30⅜	30¼	30¼—	⅛
15½	13⅜	Soc-Vacuum .80..	39	15⅛	15⅛	15⅛	15⅛ ..	
5¼	3¼	Sou Am G&P .10g	2	3¼	3¼	3¼	3¼ ..	
56	41½	So P Rico Sug 4a	2	41½	41½	41¼	41¼—	½
22⅜	19¼	S'east Grey L1.60	2	17	17	17	17 —	⅛
34⅛	30⅜	So Cal Edis 1½..	2	32½	32⅜	31⅞	31⅞—	¼
28⅛	23½	So Nat Gas 1½a..	3	26½	26½	26¼	26¼—	¼
47⅞	34½	Southern Pac 4...	2	38½	38½	38½	38½+	⅛
50⅛	33	Southern Ry 3....	1	34	34	34	34 +	¼
20⅜	16	Spald-A Br .80e.	4	16½	16½	16½	16½ ..	
7⅜	5¼	Sparks Withing..	1	5⅜	5⅜	5⅜	5⅜+	⅛
55⅜	46	Spencer Kell 2.40	6	54½	54½	54	54 —	⅜
23⅜	19¼	Sperry Corp 1½e	3	19⅜	19⅜	19⅜	19⅜—	⅛
17⅛	10	Spicer Mf Inc ..	8	10⅝	10⅝	10⅝	10⅝—	⅛
85⅛	74¼	Spiegel Inc	8	74¼	75	74¼	75 +	⅜
85⅛	83	Squibb & Sons 1.	6	33	33	33	33 ..	
112⅛	109½	Squibb & S pf4†	20	111	111	111	111 —	⅜
101⅛	98½	Stand Brds pf3½	1	99	99	99	99 ..	
36⅜	22⅞	Std G & E $4 pf	3	23½	23½	23½	23½ ..	
125	100¼	Std G&E $7 pr pf	3	103¼	103¼	102⅜	102⅜—	1¼
88	86½	Std Oil Cal 3.40.	12	86½	86½	86½	86½ ..	
42	38⅛	Std Oil Ind 1½a.	17	38⅝	39⅛	38⅝	39⅛+	⅜
71¾	63	Stand Oil N J 2g	31	71½	71⅜	71½	71¾+	⅜
29	23⅜	Stand Oil Oh $4g	4	27⅛	27⅛	27⅛	27⅛+	⅛
49	37	Sterling Drug 2..	3	37⅜	38⅛	37⅜	38⅛—	½
24⅛	15⅛	Stokely-V C ⅜g..	2	16½	16⅜	16½	16⅜+	⅛
25⅛	18	Studebak Cp ½g..	4	19¼	19⅜	19¼	19⅛—	⅛
15⅜	12	Sun Chem .60....	3	12¼	12¼	12¼	12¼ ..	
122	118	Sun Oil pf A4½†	20	121	121	121	121 +	1
10⅜	7⅞	Sunray Oil ½e...	9	9⅜	9⅜	9⅜	9⅜+	⅛
45⅛	34¼	Sunshine Bisc 3..	1	36	36	36	36 ..	
13⅜	8⅞	Sunshine Mng .40	31	9⅜	9½	9⅜	9½ ..	
19	14½	Sweets Co A .60g	2	16⅜	16⅜	16⅜	16⅜+	⅜
37⅞	32⅜	Swift & Co 1.60a	3	33¼	33⅜	33¼	33⅜+	⅛
27½	22⅞	Swift Intl 1.60..	1	25	25	25	25 ..	
26½	21½	Sylvan El Pr .35g	1	21⅝	21⅝	21⅝	21⅝—	⅜
10⅛	7	Syming-Gould ⅛g	4	7	7	7	7 ..	

(Courtesy of The New York Times)

share; the highest price for the day was $33.25; the lowest price was $32.75; and the closing price was $33.25. The net change was a gain of one-fourth, or 25 cts. per share above the previous closing price. Shareholders are thus able to follow the day-to-day fluctuations in the market prices of their

securities and can ascertain at a glance the approximate cash value of their investments.

Trading in Unlisted Securities. The New York Stock Exchange requires that all securities traded on its floor must be on its official trading list. Some exchanges also permit trading in "unlisted securities," *i.e.*, those not fully listed but nevertheless admitted to trading privileges.[1]

Trading in unlisted securities occurs in considerable volume in an over-the-counter market, where the securities of thousands of corporations not listed on any exchange are bought and sold. Usually a dealer's office is the locale chosen for such transactions, the securities changing hands in a manner similar to that of an ordinary sale "over the counter" of a retail shop. In addition to unlisted securities, a number of listed securities frequently change hands in this way. This is especially the case when large blocks of stock must be liquidated. Newspaper reports of these sales usually list only the best known and most actively traded stocks submitted by brokers engaged in the over-the-counter business.

Records of Ownership. When securities are actively traded, either in an organized exchange or in the over-the-counter market, the maintenance of accurate records of ownership becomes a difficult problem. This is solved through the appointment of a transfer agent by each issuing corporation. The function of the transfer agent (whose duties are regularly performed by one of the large banks or trust companies) is to maintain an up-to-date list of the names and addresses of the stockholders of a corporation, to transfer the names of new owners into its record books each time a sale is reported, and to issue shares of ownership, registered in the name of the new owner in exchange for old certificates, properly indorsed by the previous owner. Through the services of the transfer agent, a corporation is thus able to ascertain on a given date who its stockholders are and therefore who is entitled to the payment of dividends or to the exercise of the right to vote.

Regulatory Measures. In order to safeguard the investor and to protect legitimate promotion from the adverse influences of fraudulent promotion schemes, both private and public groups have taken action. The stock exchanges and the banking community have established ethical standards to which their members must adhere in dealing with security issues. Furthermore, various organizations have been formed to track down suspicious offers and to report all irregularities among security dealers to the governmental authorities. Under federal law, the use of the mails in the perpetration of any schemes to defraud is punishable by heavy fine and imprisonment. In most states, so-called "blue-sky laws" aim to put

[1] An exchange must obtain the consent of the Securities and Exchange Commission in order to admit issues to unlisted trading.

a stop to the operations of high-pressure promoters of fraudulent securities by requiring registration of all investment banking houses and securities dealers. Notification by these dealers to the state of all new securities offerings is also mandatory. In addition, the Interstate Commerce Commission and the public service commissions exercise a check upon new issues of railroad and public-utility stock.

In 1933, the United States government took more complete action to regulate the issue of new securities by passing the Securities Act. This act aimed to protect the prospective investor by compelling individuals or companies who had any part in selling such securities responsible for the truth of all statements made in connection with their sale. As amended, it required the registration of new issues with the Securities and Exchange Commission. A registration statement, presenting detailed facts specified under the law, must be filed in advance of the sale of such securities. This is carefully examined by the commission; and if any incorrect statements are detected or if there is an absence of essential data, a hearing is called for purposes of bringing about the proper alterations or additions. When finally accepted, these statements are opened to public inspection and are distributed to the public. The officers and directors of the issuing company are responsible for the preparation of these statements; if later any part of the report to the commission is found to be untrue, the purchaser of the shares may recover damages from the officers, directors, underwriters, and other sellers of the securities. Criminal penalties of fine and imprisonment are also provided.

The prospectus is also regulated under this law. Each security purchaser must be given a copy of the prospectus, and copies of it must be filed with the commission. In addition, requirements are laid down with respect to the form of these papers, and the content is quite similar to the facts required on the registration statement. The latter includes the names of directors, officers, underwriters, and important stockholders; the name and character of the business and the place of incorporation; the financial history of the firm; the compensation to officers; and the expenses of promotion and sale of the securities. All advertising of these securities must in general meet the same requirements as those specified for the prospectus.

Finally, federal regulation of interstate sales of securities is more specifically defined under the act as follows:

> No securities of any kind may be sold in interstate commerce or through the mails by any device, scheme or artifice to defraud, nor may money or property be obtained by untrue statement of a material fact or omission of a material fact necessary to make a statement not misleading. Nor may any transaction, practice, or course of business be engaged in, which operates as a fraud or deceit upon the purchaser.

The Securities Exchange Act of 1934 went a step further in regulating the sales of securities. It required the national registration of securities exchanges and of the securities dealt in on these exchanges. Other provisions of the act and regulations thereunder afforded additional protection to investors. In both the exchange and over-the-counter markets misrepresentation, market manipulation, employment of deceptive devices, and other fraudulent practices in the purchase or sale of securities were made unlawful. A commission was also set up as a regulatory body with jurisdiction over the securities exchanges.

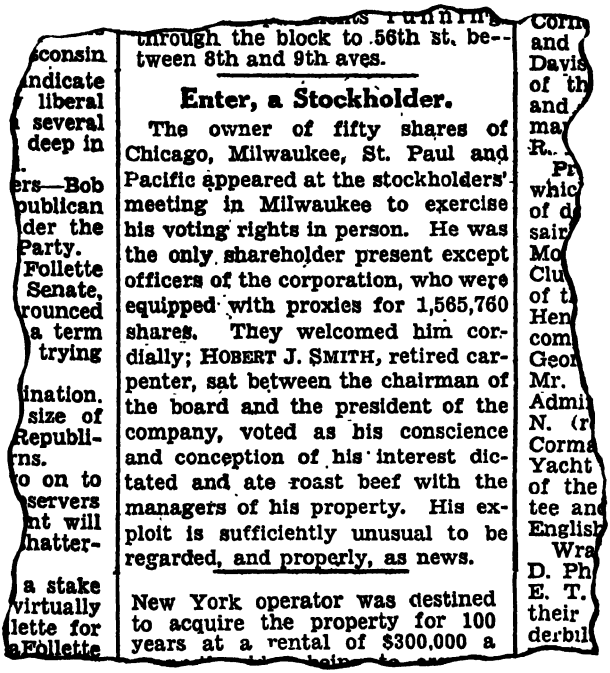
Diffusion of Ownership and Corporate Control. Theoretically, the stockholders, through the use of their voting power, are the final authority that directors and officers of the company must obey. In a small company, this is usually true in fact, either because each member directly assumes some function of management himself or because the inactive owners in a local enterprise have a close interest in the control of its policies.

Diversity in Interests. However, where the corporation is a large one and the stockholders are numerous, this relationship between the board of directors and the stockholders is less significant for several reasons. In the first place, who are the stockholders? They consist of those people who have purchased shares of ownership in the company. Several weeks in advance of a meeting a corporation will announce that all stockholders of record (*i.e.*, those whose names appear on the books of its transfer agent) on a specified date will be eligible to vote. Registered stockholders of National Dairy Products Corporation as of April 5 would be entitled to cast their votes at the annual meeting on April 19, for example. Meanwhile, some of these investors sell their shares. Responsibility of the directors then means responsibility to whom? To the collective group of stockholders, a considerable percentage of which represents an ever-changing constituency? The directors whom one group of stockholders elects may guide the destiny of a very different collection of investors at another period.

This assumes, of course, that stockholders are taking full advantage of their abilities to trade at will in corporate securities. There are many types of stockholders. One variety speculates on the possible rise or fall in the price of an issue and trades in it whenever a reasonable profit is in sight; another will place his securities in a strong box and retain them indefinitely. Then, there are trustees of estates who hold investments in trust for others, corporations that buy the stock of other corporations, and investment trusts which specialize in buying shares of stocks in many companies for investment and which, in turn, issue their own shares to the investing public. The variation in attitude on the part of these stock-

holders toward the control of the administration of the companies in which they own shares makes any attempt to locate the final source of authority in a corporation a very complex problem.

Voting by Proxy. Furthermore, attention has already been called to the fact that not all classes of securities carry the voting privilege, so many owners, particularly among the preferred stockholders, are deprived of a voice in the control of their company. Still another factor is to be recognized in any analysis of corporate control, *viz.*, that even when a stockholder has the privilege to vote he sometimes fails to exercise that



through the block to 56th st. between 8th and 9th aves.

Enter, a Stockholder.

The owner of fifty shares of Chicago, Milwaukee, St. Paul and Pacific appeared at the stockholders' meeting in Milwaukee to exercise his voting rights in person. He was the only shareholder present except officers of the corporation, who were equipped with proxies for 1,565,760 shares. They welcomed him cordially; HOBART J. SMITH, retired carpenter, sat between the chairman of the board and the president of the company, voted as his conscience and conception of his interest dictated and ate roast beef with the managers of his property. His exploit is sufficiently unusual to be regarded, and properly, as news.

New York operator was destined to acquire the property for 100 years at a rental of $300,000 a

privilege. This may be because he owns such a small share of the total stock of the corporation that he feels that his vote will be of little value.

Moreover, if the stockholder should care to exercise his voting privilege, he will probably not go to the stockholders' meeting to cast his vote. In many cases, he lives far away from the place where the meeting is held. Instead, he will sign a proxy, a copy of which is illustrated on page 59. This is a form which gives power of attorney to the person to whom it is sent to cast a vote in the name of the stockholder who sends it. Inasmuch as these proxies are customarily returned to the treasurer or the secretary on behalf of designated members of the existing board of directors, this act will cause an automatic reelection of the same board.

PLEASE EXECUTE THIS PROXY AND RETURN AT ONCE

KNOW ALL MEN BY THESE PRESENTS, that the undersigned does hereby constitute and appoint R. E. WOOD, A. S. BARROWS and CHARLES LEDERER, and each of them, the true and lawful attorneys, agents, and proxies of the undersigned, with full power of substitution and revocation, for and in the name, place, and stead of the undersigned, to vote upon and act with respect to all the shares of Capital Stock of Sears, Roebuck and Co., standing in the name of the undersigned, or with respect to which the undersigned is entitled to vote and act, at the Annual Meeting of Stockholders of the Corporation to be held at No. 360 West 31st Street, Borough of Manhattan, City and State of New York, on the 29th day of April, 1946, and at any and all adjournments thereof, with all the powers the undersigned would possess if then and there personally present, and especially (but without limiting the general authorization and power hereby given)—

(a) To vote at the election of directors of the Corporation.

(b) To vote _____ (insert "yes" or "no") upon the proposition to approve The Savings and Profit Sharing Pension Fund of Sears, Roebuck and Co. Employes, as amended, described in the Proxy Statement. IF NEITHER "YES" NOR "NO" SHALL BE INSERTED, THE UNDERSIGNED'S SHARES SHALL BE VOTED IN FAVOR OF THE PROPOSITION.

(c) To vote _____ (insert "yes" or "no") upon the proposition to approve certain amendments to The Supplemental Savings and Retirement Plan of Sears, Roebuck and Co. Employes as described in the Proxy Statement. IF NEITHER "YES" NOR "NO" SHALL BE INSERTED, THE UNDERSIGNED'S SHARES SHALL BE VOTED IN FAVOR OF THE PROPOSITION.

(d) To vote upon such other matters as may properly come before the meeting.

If more than one of the above named attorneys, agents, or proxies shall be present in person or by substitute at such meeting or at any adjournment or adjournments thereof, the majority of said attorneys, agents, and proxies so present and voting, either in person or by substitute, shall exercise all of the powers hereby given. The undersigned hereby revokes any proxy or proxies heretofore given to vote upon or act with respect to such stock and hereby ratifies and confirms all that said attorneys, agents, and proxies, their substitutes, or any of them, may lawfully do by virtue hereof.

The undersigned hereby acknowledges receipt of the Notice of said Annual Meeting of Stockholders, and copy of the Proxy Statement furnished therewith.

Dated_____, 1946.

_____

(Signature of stockholder should correspond with the name as printed upon the face of this Proxy. When signing as attorney, executor, administrator, trustee or guardian the full title as such should be given.)

Shares_____

Typical proxy form mailed to stockholders.

The use of proxies has come to be the almost universal practice in the larger companies, not only from the standpoint of convenience to stockholders who are widely scattered geographically, but also in view of the fact that it would be physically impossible, in a number of cases, to assem-

(Libsohn Photo)

Annual meeting of the Standard Oil Company (New Jersey) held in a theater at 31 Main Street, Flemington, N. J. [*Courtesy of Standard Oil Co. (N. J.).*]

ble all the stockholders under a single roof. At a recent annual meeting of the Standard Oil Company (New Jersey) held in a theater in Flemington, N. J., some 400 stockholders attended in person. When the ballots were counted, it was announced that 21,050,343 shares owned by 97,906 stockholders were represented at the meeting "in person or by proxy." This constituted 77 per cent of the shares actually entitled to vote.

To show how rare an occurrence it is for small stockholders to attend the meetings of some of the larger companies, the newspaper article reproduced on page 58, is of interest.[1]

Because of the emphasis that is given to proxy voting, the Securities and Exchange Commission has required corporations to provide their stockholders with complete information concerning the issues that will be put to a vote. A proxy statement, accompanying the proxy form and the notice of the annual meeting, must include the following data or declarations:

1. That any person giving the proxy has the power to revoke it at any time before it is voted.
2. The expenses involved in soliciting the proxies and by whom paid.
3. That the proxy is being solicited by and on behalf of the management of the company or by other specified parties.
4. The names of candidates for election as directors, their salaries if employed by the company, and the number of shares owned of record by each, beneficially or otherwise.
5. Those responsible for the original designation of the nominees as candidates for the directorships.
6. The purpose of the meeting and the business to be transacted.
7. That the stockholders have the right to bring before the annual meeting for consideration any matters which they desire.

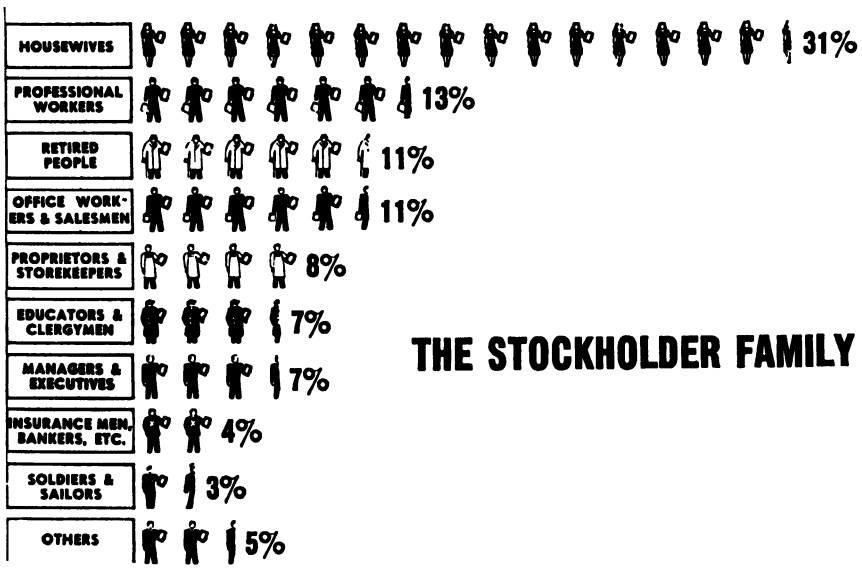
Even when sufficient data are supplied, however, the mixed composition of the stockholders makes it doubtful if intelligent decisions can be made by them on any but the simplest or most obvious issues. A survey made by the Borden Company for purposes of ascertaining the composition of its stockholders revealed the distribution by occupational groups, shown on page 62.

Moreover, there is always a considerable number of people who have bought their stocks on margin and have deposited their shares with a broker. In the past, stockbrokers frequently voted the proxies as they personally wished. Today the practice is to forward them to the stockholders, who may or may not decide to mail them, depending upon the degree to which their interests are purely speculative. In spite of the large number of stockholders, it is seldom that out of several thousand, more than a few dozen actively and intelligently participate in the guidance or control of the management of a large corporation.

Conflicting Interests. Occasionally a dispute occurs between the existing directors and a faction among the stockholders. This disagreement may arise simply out of a contest for power between opposing groups within the corporation, or it may be based upon the abuse of power on the part of those at the helm. At times, instead of working for the interests of the other stockholders, directors and officers have acted for their own benefit,

[1] *The New York Times*, May 19, 1929.

frequently to the detriment of the others. The power that they found they enjoyed led to such acts as the creation of super salaries or bonuses, favoritism in the granting of contracts, and the manipulation of stocks and dividends of the company to their own personal advantage. If the active management controls the majority vote, the minority stockholders are powerless to bring about any changes in company policies unless they obtain absolute proof of illegal or fraudulent practices of those in control. They may then bring suit against the corporation for damages. Their



Composition of stockholders of the Borden Company.

only alternative is to sell their stock. If, however, the existing administration does not possess the control of a majority but depends for its perpetuation upon the receipt of proxy votes, a "proxy battle" sometimes results. In cases of this kind, the dissatisfied stockholders form an organization that endeavors to lay before the other stockholders their basis for protest. A plea is sent out, requesting stockholders to mail their proxy votes to the committee. If this is successful and a majority vote is obtained, it will enable the committee to reorganize the management of the company. Inasmuch as this procedure is expensive and must usually be borne by the protesting stockholders themselves, these proxy battles are rare. The sensational changes in management some time ago in the Standard Oil Company (Indiana), in the Childs Company, and in Loft, Inc., clearly demonstrate, however, the effectiveness of this technique in raising the voice of discontented stockholders.

Cumulative Voting. In companies employing the system of cumulative voting, active minority groups may make themselves heard through the election of certain members of the board of directors. This method, required under Illinois statute, although not a widespread feature in American corporations, is rapidly gaining in popularity. It departs somewhat from the usual custom of allowing one vote for each share of voting stock. Instead, at an election of directors, for example, each stockholder of the company is permitted to cast votes equal to the number of shares that he owns multiplied by the number of directors to be elected. According to this device, a shareholder can either distribute his votes equally among the directors to be chosen or concentrate them all in favor of one candidate. Thus a minority group, acting in concert, may so combine their votes as to make certain the election of one or more directors who will truly represent their interests. The Anaconda Copper Mining Company, the Borg-Warner Corporation, and the Budd Wheel Company are examples of concerns in which this plan of voting is employed.

Concentration of Control. Authority in the direction of corporate affairs is, however, usually held in the hands of a small group of investors. The composition of this small nucleus is of significance in seeking to discover the center of corporate control. It may be, for example, that the original organizers of the company have been careful to retain their leadership in its management. This is possible in a variety of ways: through ownership of a majority of the stock, through ownership of the majority or all of a special class of stock which alone enjoys the voting privilege, or through the possession of a minority of the voting stock coupled with a general apathy on the part of the vast number of stockholders who collectively own the majority stock. In this last instance, as little as 10 per cent of the voting stock has often controlled the affairs of a company, because the other 90 per cent was widely scattered in the hands of stockholders who were indifferent to the problem of corporate management and who, if they voted at all, sent their proxies to the existing officers.

If the original organizers have not protected their position through a direct control of a majority of the voting stock, their authority in the management has frequently slipped from their grasp. This has usually been brought about not so much through the agency of proxy battles previously referred to as through the quiet accumulation of a substantial block of voting stock by larger investment houses.

The acquisition of a strong position on the board of directors by banking interests who have been called in to lend financial support is frequently obtained through their grip on needed credit extensions. Unless the managers allow the corporation to drift into such embarrassing straits that they cannot extricate themselves unaided, this emergency need never arise.

It frequently occurs, however, that a company is in a perfectly sound financial position, but the desire for expansion and growth may be more powerful than the wish to retain an assured control of its affairs. Or outside interests may bid sufficiently high for an influential hold upon the company that it is to the personal advantage of those in power to relinquish their control and retire from the active management of the business.

In the majority of cases, then, if an attempt is made to discover where the true authority lies in the management of the corporations in American industries, it can be said that such control is usually vested in one or more large individual shareholders, investment bankers, investing institutions, or the managers of larger corporations who have acquired controlling interests in the smaller units of enterprise. Occasionally, active minority groups of stockholders also participate in the control. The great army of shareholders, taken as a class, have ceased to play an active part in the affairs of their companies. They do not even remotely concern themselves with the management of the enterprises in which they have invested. As a prominent executive once stated:[1]

> They approve the quality of management by voting up the quotations of a company's shares on the stock exchanges, and they disapprove by unloading their shares. But otherwise they interest themselves mainly through a perfunctory signing of proxies, and only on rare occasions by direct action when appealed to for support in a struggle between rival managing groups.

Relation of Directors to the Corporation. The board of directors, in turn, which represents the interests of those who control, often consists of the very men who wield this power or of individuals whom they have selected to do their bidding. In the former case, the largest stockholders may be members of the board and participate in the deliberations and decisions of that body. This is especially the case when the original organizers elect themselves as members of the board of directors and continually reelect themselves to these posts, through their possession of the majority vote. It frequently happens that members of the board are selected from among the officers of a large company or investment house that possesses a substantial block of the stock. Many of these men possess no more stock in the company than the minimum that the state law prescribes and merely do the bidding of the interests who really possess the controlling votes. This is especially true in the case of large holding-company organizations which control subsidiaries through the appointment of directors who receive their instructions from the parent company. Occasionally, consultant directors, who are specialists in technological or finan-

[1] RORTY, MALCOLM C. (then vice-president of American Founders Corporation). *Nation's Business*, p. 23, February, 1931.

cial matters, are appointed if it is felt that their advice will be of material value to the company.

The position of the directors is a fiduciary one with respect to their corporation. Both in common law and in the statutes, these men are considered to be pledged as guardians of the interests that have been entrusted to them. The three main rules of conduct that the law requires a director to observe have been stated [1] as follows:

1. A decent amount of attention to business.
2. Fidelity to the interests of the corporation.
3. At least reasonable business prudence.

Not only must a director be honest, but in accepting the responsible post to which he is assigned, he should realize that he is expected to possess a reasonable amount of intelligence in directing the affairs of his company. It is also assumed that he will observe reasonable care in preventing any depletion of assets or earnings of the corporation.

In other words, the directors assume a certain personal liability for the sound management of the corporation. Directors are not liable for mistakes in judgment made by them in good faith, even though they result in great loss to the company, nor may they ordinarily be sued for losses to the corporation arising through their failure to take advantage of certain profitable situations. On the other hand, if it can be shown that a director has conducted himself so as to obtain a personal profit at the expense of the company, civil action may be brought to set aside certain contracts or to recover damages. In some states, proof of willful neglect, dishonesty, or gross violation of the interests of the stockholders and of those who deal with the company in good faith may make directors criminally liable.

Impersonal Nature of the Corporation. The discussion in this chapter has emphasized the impersonal character of corporate enterprise. The very small corporation does not differ materially from the less formal types of business enterprise from the standpoint of owner-manager relationships. Shares of ownership are held by a few men who directly participate in the operation and control of the venture.

The larger corporation offers a greater possibility of the separation of ownership from management and industrial operations. With the increase in size of a company and the distribution of its shares of stock into the hands of thousands of people, this separation (for practical purposes) may become virtually complete. The corporation stands as a business unit, controlling or directing the activities of employees engaged in certain productive functions. Its operations are planned and conducted over long periods of time

[1] BERLE, A. A., and G. C. MEANS, "The Modern Corporation and Private Property," p. 221, Commerce Clearing House, Chicago, 1932.

by the people who have been placed in charge of its affairs. Ownership vested in the stockholders changes hands from day to day. The active managers are usually paid employees who hold office regardless of whether or not they own stock in the company. As agents of the stockholders, these appointed officials appoint and discharge other employees, make contracts, and in general manage the company so as to yield an income to its investors. The majority of the shareholders know little of the problems of management of their company and in many instances may not even be familiar with the full scope or nature of the business in which they have invested.

Questions and Problems

1. "The corporation belongs to its stockholders." Show that this statement is an oversimplification of the financial structure of most large corporations. Do all owners have the same rights and privileges? Enumerate the types of securities that can be issued by a large corporation, and describe the rights, privileges, and limitations of each.

2. The American Car and Foundry Company made consecutive dividend payments of $7 per share annually on its ordinary 7 per cent preferred stock from 1906 to 1931. However, in 1932, only $5.25 was declared, and no dividends were paid until 1937 when a $4 distribution was made. Full $7 dividends were not resumed until 1941. What type of preferred stock was this? What was the position of the preferred stockholder in 1941? If this stock had been cumulative, how much would the company have "owed" the stockholder in 1941, assuming that the dividends actually paid from 1937 to 1940 were $4 each year? Why is the word "owed" in quotation marks?

3. Under a system of cumulative voting, if you have 300 shares and there are 10 directors to be elected, how many votes can you cast for any one man? What is the usual practice in determining who has the right to send in proxy votes?

4. Draw up an outline for a prospectus for a new corporation that you are helping to organize. What factors must you include to comply with current federal legislation? Compare your prospectus with the one issued by John Winthrop in 1635; with one issued before 1933.

5. What safeguards for the protection of the investor have the organized securities exchanges introduced in connection with their listing requirements? What are the advantages of securing a listing to the corporation? To investors?

6. On a given day approximately 2,000 shares of Bethlehem Steel common stock were traded on the New York Stock Exchange with 20 buyers and 20 sellers participating. By means of a diagram, trace all steps in one of these transactions involving 100 shares.

7. What information is supplied by the stock exchange page of a newspaper? Selecting a current issue, explain each column and the significance of the information to the stockholder.

8. What is meant by "over-the-counter markets"? What securities are bought and sold in such markets? Why are these securities not traded on regular exchanges?

9. Most states have enacted so-called "blue-sky" legislation. What are the purposes of these laws? What supplementary legislation was passed by the federal govern-

ment to deal with similar problems? Summarize the major provisions of the law at present. Although many brokers and businessmen resented the restrictions placed upon speculation, many felt that the security exchanges benefited by the law. Discuss.

10. The stockholder in a large corporation has been likened to the citizen in a large city. In what respects is this comparison valid? In what respects is it faulty? Describe the relationship between ownership and management of a giant corporation. Why is authority in the direction of corporate affairs in a large company generally held in the hands of a small group of stockholders?

CHAPTER IV

BUSINESS COMBINATIONS

Concentration of Business. The twentieth century has witnessed the formation of billion-dollar corporations. The Metropolitan Life Insurance Company, the Chase National Bank, the American Telephone and Telegraph Company, the Pennsylvania Railroad Company, the Standard Oil Company (New Jersey), the United States Steel Corporation, and the General Motors Corporation are a few of the well-known concerns whose assets amount to several billion dollars apiece. A dozen railroads and public utilities and about as many banks and insurance companies fall in this category.[1] More than 100 other firms have assets of several hundred million dollars. Corporations of this size have come to dominate most major industries, if not all industry, in the United States. For example, in 1946, three companies accounted for almost 90 per cent of the automobile production in this country, four iron and steel producers controlled better than 85 per cent of the structural shapes capacity, and four lead producers turned out 95 per cent of the output of primary lead.[2]

Virtually all corporations in this class are the products of the consolidation movement and hence cannot be considered to have begun their careers with original investments of this size or to have grown to this proportion within the original limits or scope of the enterprise. In other words, the industrial giants of today have, in most instances, been formed by drawing together several existing units of smaller size.

Causes of the Combination Movement. Several reasons have been advanced in explanation of the formation of these combinations. Basically the tendency expressed in this movement appears to run in terms of the pursuit for greater profits. More specific causes can, however, be detected.

Destructive Competition. One important condition that frequently drives businessmen to take this step is the existence of ruinous competition. During periods of good business, there is usually a tendency toward expansion. Established firms enlarge their plants, and new concerns come into existence. When a period of recession follows, firms with heavy plant invest-

[1] In 1947, there were 45 business organizations in the United States each having total resources of a billion dollars or more.

[2] U. S. Dept. of Justice, *Rept.*, May, 1947.

ments often continue to produce even at a loss. In order to dispose of their products, prices are reduced, and competition becomes "cutthroat" in character.

Businessmen then have the option of facing ultimate extinction or of uniting with their competitors to exercise some control over output and prices. As a means of self-preservation, they choose the latter course. Hundreds of industrial combinations in the United States trace their origins to such struggles for survival in the face of overproduction, excess capacity, and severe competition for limited markets. In rendering a dissenting opinion in an important case, Justice Brandeis of the United States Supreme Court took occasion to say on this subject: [1]

> Economists are searching for the causes of this disorder and are reexamining the bases of our industrial structure. Business men are seeking possible remedies. Most of them realize that failure to distribute widely the profits of industry has been a prime cause of our present plight. But rightly or wrongly, many persons think that one of the major contributing causes has been unbridled competition.
>
> Increasingly, doubt is expressed whether it is economically wise, or morally right, that men should be permitted to add to the producing facilities of an industry which is already suffering from overcapacity. In justification of that doubt, men point to the excess capacity of our productive facilities resulting from their vast expansion without corresponding increase in the consumptive capacity of the people. They assert that through improved methods of manufacture made possible in advances in science and invention and vast accumulation of capital, our industries had become capable of producing from 30 to 100 per cent more than was consumed even in days of vaunted prosperity; and that the present capacity will, for a long time, exceed the needs of business.

Control of Markets. Not in all cases, however, is the desire to control markets and prices a purely defensive move. Such control is often sought in order to realize larger profits or to satisfy personal ambitions. Many combinations have been planned deliberately with these ends in view. The big "trusts" of the past in sugar, tobacco, oil, and steel were formed mainly for the purpose of acquiring monopolistic control of markets and prices. The vast control that modern combinations have sought has been motivated by substantially the same goals. Wartime increases in concentration came about chiefly through the distribution of the great bulk of war contracts to a relatively small number of giant firms that could control huge aggregations of men and materials. The immediate availability of liquid funds resulting from this unprecedented government spending encouraged the movement toward combination. At the end of the Second World War, more than 18,000 companies had been swallowed up by other corporations.

[1] *New State Ice Company v. Liebman*, 52 U. S. 371 (1932).

Elimination of Competitive Wastes. A combination of business units sometimes results in the elimination of duplicate plants, equipment, and marketing facilities. One large plant may replace several less efficient smaller ones; one delivery truck is used for a given district instead of having several covering the same territory; advertising can be designed so as to create new customers, rather than to take business away from competitors.

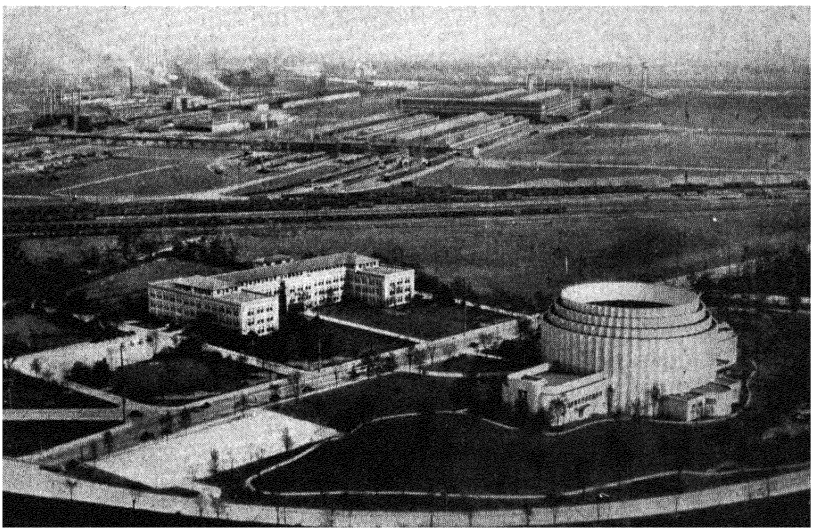
In short, combinations make possible the replacement of competing units by one single organization which employs the managerial and labor staffs and the materials, properties, and physical equipment in a more efficient manner. Higher profits may thus result—not because of higher prices but because of economies in the productive or distributive process when handled on a large scale.

The great crop of large consolidated enterprises that were formed in recent years bears testimony to the strength of the motives propelling business to a greater degree of united effort. In order to improve their competitive position in the markets, businessmen seek to control costs, to acquire better credit facilities, to deal on more satisfactory terms with labor, and to stabilize prices. Large units controlling vast resources and commanding a substantial portion of the supply of their product are in a position to ward off the attacks of other organized competitors or of concerns that continue in business despite the fact that they operate at a loss. The overdevelopment in coal, the overproduction in oil, the wasteful duplication in the rails, and the sharpening of competition in the automobile industry were largely responsible for the movement toward a greater combination of interests in these fields. In other branches of industry, although the struggle has not been so intense in all cases, the underlying motives for the formation of larger, more self-contained, and more powerful business enterprises have been much the same.

Finance and Promotion. Many large combinations were planned, launched, and executed, not by businessmen themselves, but by banking interests. Today, industrial establishments in many fields are controlled by financial institutions that engineered the promotions. Food products, public utilities, automobiles, chain stores, and motion pictures are only a few of the fields in which successful combinations were effected by bankers. This movement was particularly in evidence during boom periods. The public imagination was stimulated by the announcement of any combination of well-known trade names, and the new securities were eagerly purchased. Promoters and bankers were quick to see opportunities for large profits in financing these enterprises. Often, the firms that participated in such deals accepted stock in the new organization in payment for their physical assets, trade-marks, and good-will. The buoyancy and optimism

of speculators and investors during periods of rapidly rising markets were undoubtedly responsible for the inception of many of today's largest combinations.

Types of Combination—As to Purpose. *Vertical Combination.* From the standpoint of purpose, three major classes of combination may be distinguished. In the "vertical combination" or integration, two or more



The River Rouge Plant—one of the greatest industrial developments in the world. Here, within the boundaries of a single plant, are railroads, ships, machine shops, blast furnaces, glass plant, repair shops, coke ovens, and numerous other industrial works. The plant extends over 1,096 acres. Its buildings have a floor area of more than 7,250,000 sq. ft. Within its boundaries are over 90 miles of railroad tracks. It contains a foundry, covering 30 acres. Its power comes from its own industrial steam generating plant. (*Courtesy of Ford Motor Company.*)

enterprises, which would normally be related because one sells to the other, are united. The shoe factory that acquires its own hide and leather plant, the weaving mill that combines with a spinning mill, the printer who obtains control of a bindery are examples of this type of combination. The purpose is to join the activities that naturally follow from raw material to finished product and from production to final distribution of the product, so that the controlling unit is self-contained and quite independent of outside relationships. Such integrated operations from raw materials to finished products have contributed largely to the strategic competitive position enjoyed by some larger American firms.

Frequently attempts at consolidation along these lines result in a complex assortment of activities under the control of one organization. The

Ford Motor Company, for example, as a producer of automobiles, saw fit to acquire control of the different products that were necessary to make the car. As a result, the firm gradually entered the iron and steel business, which in turn led to iron mining, coal mining, and railroad and steamship operation. The lumber, plate-glass, paint and varnish, chromium-plating,

TABLE 1.—STANDARD OIL COMPANY (NEW JERSEY)

Principal Subsidiary Companies and Activities

Standard Oil of New Jersey (Del.)	Refining, marketing, service stations, etc.
Carter Oil Co.	Mid-continent producer
Humble Oil and Ref. Co.	Producing, transporting, refining, marketing
Imperial Oil, Ltd.	Manufacturing and marketing throughout Canada
International Petroleum Co., Ltd.	Producing, refining, and marketing in Peru and Colombia
Koloniale	Producing and refining in Dutch East Indies
Beacon Oil Co.	Refining and marketing in New York and New England
Standard Oil Co. of Cuba	Refining and marketing in Cuba
West India Oil Co.	Refining and marketing in West Indies, Central and South America
Standard Oil Co. of Brazil	Marketing in Brazil
Pennsylvania Lubricating Co.	Manufacturing and marketing greases
Standard Oil Co. of Pennsylvania	Marketing in Pennsylvania
Romano-Americana	Producing and refining in Rumania
Standard-Nobel	Producing, refining, and marketing in Poland
Cia Transcontinental de Petrolio	Producing in Mexico
Aqu. Petroleum Corp.	Refining in England
Creole Petroleum Corp.	Producing in Venezuela
Stanco	Manufacturing and marketing Flit, Nujol, and Mistol
Gilbert & Barker Co.	Manufacturing pumps, tanks, etc.
Standard Shipping Co.	Owning and operating fleet and other marine properties
Standard Oil Development Co.	Research, laboratories, etc.
Ethyl Gasoline Corp.	Producing and marketing antiknock fluid

cloth, and carpet industries were also brought under control. Interests in rubber-tire manufacturing, storage battery, and automobile-appliance firms were acquired. In other words, to make a complete vertical combination in this industry, it became necessary to bring dozens of separate industrial activities within the fold. Under the circumstances it is possible for this large firm to produce almost everything that goes into the finished car, without buying many materials and supplies from independent companies not within its own organization. The Anaconda Copper Mining Company is another example of an almost self-contained unit. It owns or controls great ore reserves in North and South America, smelting and refining

facilities, the largest copper and brass manufacturing plants in the United States, and a sales force spread over the entire world.

Horizontal Combination. In contrast to this type of combination, there is what is frequently referred to as "horizontal combination" or concentration. (This involves the joining of two or more competitive units in substantially the same line of business.) A newspaper publisher acquires control of the evening papers in 20 cities; a chain drug company adds more units to its retail outlets by joining 200 independent establishments with its organization. Several large coal-mining companies consolidate their interests. This is a type of combination which often leads to monopolistic powers. Substantially the whole of the vanadium business of the world is concentrated in the hands of the Vanadium Corporation. The Aluminum Company of America controls the bulk of aluminum production in this country. Frequently a horizontal combination is formed of companies that already are large integrated units, or vertical combinations. The Standard Oil Company (New Jersey), for example, is an organization of leading producing, refining, and marketing concerns in the petroleum industry. Table 1 presents some of the principal subsidiary companies and summarizes their general activities.

Circular Consolidation. Perhaps some of the largest combinations fit best into the category of what (for want of a better name) is called "circular consolidation." In enterprises of this description, the association of certain subsidiaries with the parent firm or the combination of several large units into a still larger aggregation depends neither upon the endeavor to command control over basic raw materials and a progressive series of processes of production nor upon the desire to control all companies in the same line of business. It is based rather upon the plan to associate in one family several allied groups of products so as to increase efficiency of operation. Economies in delivery, production, research developments, financing, or advertising are usually the bases for such combinations. In Standard Brands, Inc., for example, there is a combination of producers of yeast, coffee, tea, baking powder, gelatin, puddings, malt syrup, frozen eggs, pickles, spices, and sauerkraut. Obviously, there is very little relationship among these products except that they are all foods. From the standpoint of production, they do not have much in common. However, just because they are all foods, it is possible to use a uniform distributing system for delivery of these goods to grocers, bakers, and other retailers throughout the United States and Canada. Other economies, in advertising, for example, are also possible.

Another illustration of this circular form of combination is E. I. du Pont de Nemours & Company. Here the leading basis around which most of the many allied lines cluster is the common chemical content of cellulose.

Originally a manufacturer of explosives, this company has since branched out into the production of rayon, cellophane, dyestuffs, toiletware, toys, shatterproof glass, paints, varnishes, alcohol, ammonia, enamels, motion-picture films, synthetic rubber, and similar chemical products. Occasionally, large companies such as these acquire interests which bear little or no relation to the original purpose of the venture. E. I. du Pont de Nemours & Company, for example, owns a substantial interest in the General Motors Corporation and operates a hotel and a theater. These offshoots defy classification. All that can be said is that they are evidences of opportunistic developments which, if the charter permits, may, under favorable circumstances, lead a concern permanently into more profitable fields.

Types of Combination—As to Form. The annals of business are replete with accounts of the establishment of many different formal and informal varieties of combinations. They differ from one another in the degree of completeness of ownership or control that one company exercises over another or over a group of other enterprises. The formal types of combination involve the outright purchase of voting control or of the properties of concerns that are to be united. These include mergers, amalgamations, and holding companies. Among the more informal classes of combination are simple agreements, associations, cooperative enterprises, and pools of various kinds. A characteristic common to these latter groups is that, in general, their members retain a degree of independent operation and unite with the others only for purposes of realizing some specific end which depends upon mutual participation and agreement.

Mergers. Perhaps the most numerous industrial combinations have been of the merger variety. The Chrysler-Dodge organization in automobiles and the Consolidated Edison–Brooklyn Edison union in the power industry are examples of this type of combination. The essential character of a merger is that a process of complete absorption occurs between two or more companies. In other words, the Chrysler Corporation entirely absorbed the Dodge organization; stockholders in the Brooklyn Edison Company received shares in the Consolidated Edison Company for the shares of stock that they had owned in the former company. More recently, the stockholders of Pere Marquette Railway Company exchanged their holdings for Chesapeake & Ohio Railway Company stock when the merger between these two lines became effective.

A merger usually calls for an important change in the management of at least one of the companies involved. If the combination is complete, the absorbed company no longer has any stockholders and therefore no board of directors. Moreover, the officers are now employed by the larger concern, which already possesses a staff of executives. What happens to

these people? The answer to this question depends largely upon the manner in which the merger is engineered. If the existing officers of a company have little final control in the ownership of it and depend upon a prominent group of stockholders for their support, they are in a more vulnerable position than if they themselves wield a certain amount of the power as stockholders. Even in such cases, however, it does not always follow that they will lose their positions. It is not likely that the staff of one company can properly take care of the entire combined business of several concerns. Important economies are made in some departments, without doubt, but a wholesale dismissal of employees does not usually occur if their work has been satisfactory.

From the standpoint of authority, however, there are frequently important shifts. This is where the question of how the merger is effected becomes significant. If the promoter of a merger can obtain options on a sufficient amount of stock to negotiate successfully the transfer of such shares from one company to another, he experiences little difficulty. This is frequently accomplished if a convincing enough argument is laid before a number of large "absentee owners" who control a majority or two-thirds vote in the company or if a president of a company, who owns a majority of the stock, can be induced to retire in return for an attractive personal reimbursement. When the management of the company collectively possesses an important share of the control in its affairs, however, the promoter runs into greater difficulties—for not only is there the question of attractiveness of investment to be considered in such cases but also, as previously mentioned, the personal problem of what will happen to the officers and their staffs. Inasmuch as this latter situation is the one most frequently encountered, it will be seen that the greatest tact and diplomacy must be summoned forth in bringing about a successful merger of two or more going concerns. The stockholders must be pleased from the viewpoint of greater economies and larger prospective earnings. They must also be convinced that an exchange of stock in their corporation for that of another is on an equitable basis with reference to both earnings and assets. The managers of the existing companies must be satisfied that their personal positions will not be imperiled and that the sacrifice of their authority will not be too great. This is not always easy. One of the reasons why the Bethlehem-Youngstown steel merger failed to materialize some years ago was because of the protest of certain stockholders against the high salaries and bonuses paid to officials in the former concern. The refusal of the Bank of United States to agree to the merger plans that the Manufacturers Trust Company had offered prior to the collapse of the former institution is said to have been caused in part by the extremely distasteful shifts in rank which the officers of that bank would have been forced to accept.

If the initial operation of promotion is successful in the formation of a merger and the terms of combination have been agreed upon, the actual mechanics of establishing it in fact are simple. All that is required, usually, is for one company to issue some of its unissued stock in exchange for the outstanding securities of the company being acquired. The only variation of this is where it is necessary to apply for an extension of authorized capital stock, if the original authorization is insufficient. In a combination of the Gotham Silk Hosiery Company and Onyx Hosiery, Inc., the former was in reality a smaller enterprise than the latter; and in order to buy out the Onyx organization, it was necessary to readjust completely the capital structure of the Gotham Company.

At times, the terms in a merger negotiation call for payment in cash. In such instances, the money must be raised either by means of a loan or through the sale of new shares of stock. The ultimate effect, however, is virtually the same as in the case of a simple transfer of shares of stock.

Amalgamations. Somewhat similar to a merger, although technically different, is an amalgamation. When Standard Brands, Inc., appeared on the business horizon, it was unquestionably a new company. Yet it professed to be the manufacturer of Fleischman's yeast, Royal baking powder, and Chase and Sanborn coffee—products long known to the American food-buying public. A perusal of the stock market page showed that the names of these former companies were missing. How did this combination differ from the arrangements found in a merger? Simply with reference to the technique employed. Standard Brands, Inc., was an entirely new company, incorporated in Delaware in 1929 for the purpose of completely acquiring the above-mentioned concerns. Unlike a merger, a going concern did not absorb existing companies; a new company was chartered to buy out the existing food companies. Instead of having the value of a going concern compared with that of another, it was expressed in terms of shares of stock in an entirely new venture. Instead of dovetailing the management of the smaller concern into the larger, the executives and boards of directors were pooled together to form the management of the new company whose stockholders consisted of the former stockholders of the other three companies. In a merger, only the stockholders of the absorbed company undergo important changes in status with respect to the securities that they hold.[1] In an amalgamation, all the companies involved give way to an entirely new concern, and hence all the stockholders are affected. From a practical standpoint, however, the difference is so slight to the layman and the appearance of a strict amalgamation so infrequent as compared with a merger that the distinction between the two forms of combination is seldom recognized.

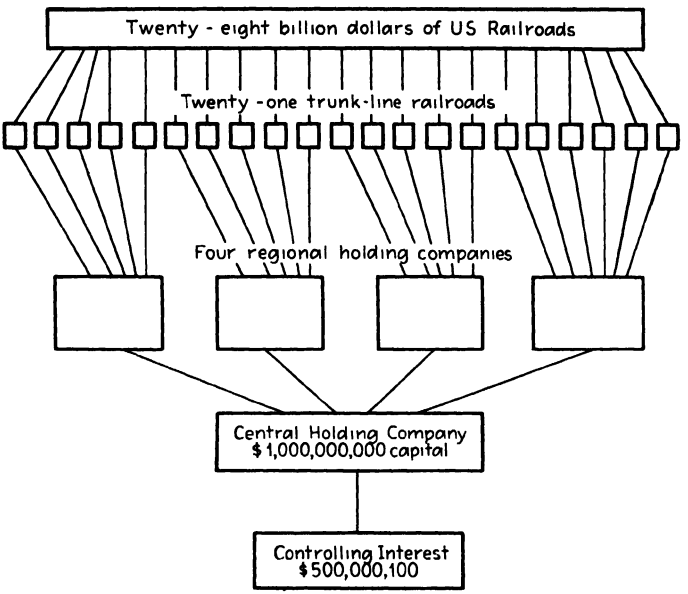
[1] The values of the securities of the parent concern may, however, change.

Holding Companies. Of much greater significance in the combination movement, however, is the holding company. The United Corporation, the American Telephone and Telegraph Company, Freeport Sulphur Company, Eastman Kodak Company, and the Pennsylvania Railroad Company are examples of great holding companies of the present day. In its pure form, a holding company does little more than acquire and hold securities of other companies in an amount usually sufficient to give it control over the affairs of such enterprises. The United Corporation fits the description accurately. The American Telephone and Telegraph Company and the Pennsylvania Railroad Company exceed these functions. In addition to controlling the majority of the voting stock of several large subsidiaries, both these companies perform a certain amount of direct operating service. The former organization handles the connection of all long-distance calls, although all local calls are served by its subsidiaries. The railroad company directly operates its great trunk line but controls over 20 subsidiaries which handle thousands of additional miles of freight and passenger traffic.

The holding-company device makes possible a greater amount of pyramided control in business than does any other means of consolidation. Chartered with authority to acquire title to shares of stock in other companies, holding companies have legal sanction to associate many subsidiary ventures under one unified management. Unlike the trusts of the nineteenth century [1] which issued certificates or receipts for the blocks of stocks deposited more or less informally with a "trustee" for the investors, holding companies are themselves corporations that buy securities in their own name. In order to obtain control over subsidiaries associated with it, a corporation of this type needs only a bare majority of their voting stock. In fact, not even this much is absolutely necessary if the holdings are widely scattered among thousands of small or disinterested stockholders. Furthermore, inasmuch as operating companies usually have bond issues and other liabilities, preferred and nonvoting stocks outstanding, the majority share in the voting stocks represents a small fraction of the total resources of these concerns. A holding company thus succeeds in acquiring control of a much larger aggregation of properties than would be possible if they had to be purchased outright. In the Public Utility Holding Company Act of 1935, a holding company is defined as "any company which directly or indirectly owns, controls, or holds with power to vote, 10 per cent or more of the outstanding voting securities of a public utility company or of a company which is a holding company by virtue of this clause."

[1] The trust or trustee device was the most important form of combination in the United States in the nineteenth century. Through court decisions and legislative enactment this form was forced out of existence.

It will be seen that subject to government regulation of business in restraint of trade, such expansion of control could continue almost indefinitely. For example, the railroad industry in the entire country might be conceived to be under the control of a single "supercorporation." [1] How much money would be necessary to control such a mammoth undertaking? The obvious answer might be 28 billion dollars—which is the total estimated capital value of the nation's railroad investment. By the use of



the holding-company device, however, this enormous investment could be controlled by a relatively small amount of cash. The country has been divided into great trunk-line areas by the Interstate Commerce Commission, with the ultimate aim of having possibly 21 trunk lines control the 135 large railroad companies in the United States. Suppose that these trunk-line systems have all been formed—being represented by such units as the New York Central; the Pennsylvania; the Baltimore & Ohio; the Chesapeake & Ohio; the Atchison, Topeka and Santa Fe; the Atlantic Coast Line; the Southern Pacific; the Union Pacific; and other similar groups. Each of these units will represent approximately a billion dollars or more in investments. All will be holding companies as well as operating companies. It may be safely estimated that from one-fourth to one-sixth of the value of the controlled properties in these railroad systems is repre-

[1] Any questions relating to the practical desirability or to the legal possibility of a combination of this character are, for the moment, dismissed.

sented by voting stock—the balance being made up of other shares of stock, corporate surplus, bonded indebtedness, and minority stock of subsidiaries held by the public.

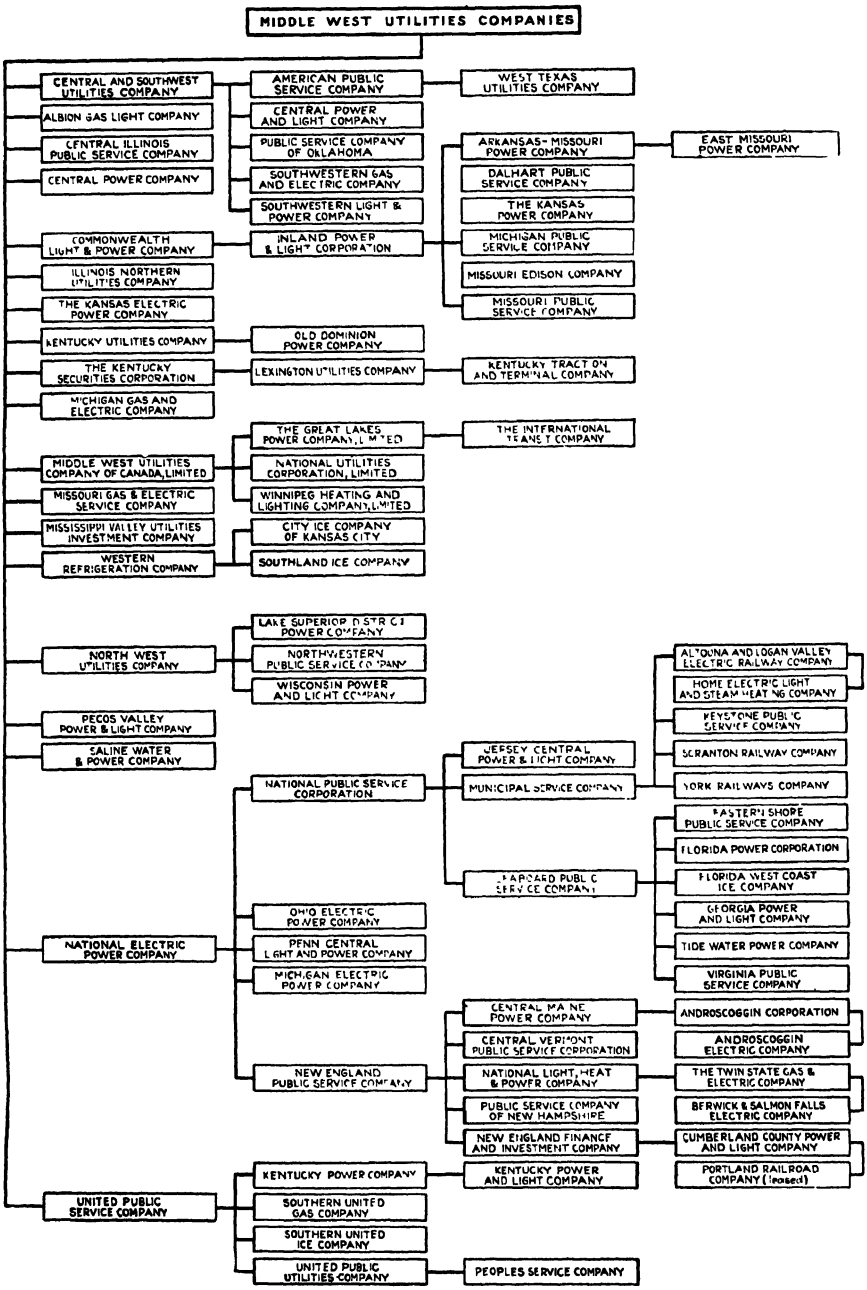
This means that a little more than $150,000,000 of voting stock would constitute a majority control per $1,000,000,000 of investment in each trunk line. If four holding companies were formed to buy the controlling interests in the trunk lines in four great areas of the country, each might have a total of $1,000,000,000 invested, provided control were equally divided geographically. If each of these holding companies issued $500,000,000 of preferred nonvoting stock and $500,000,000 of common voting stock, then $250,000,100 worth of common stock would be all that would be needed to control the holding companies. The formation of a central holding company to buy the majority share in each of these four district companies would therefore call for little more than a $1,000,000,000 investment, of which only slightly more than $500,000,000 would be required for final control. In other words, by this device, an investment of approximately $500,000,000 could be made to control properties valued close to $30,000,000,000.[1] This setup is graphically depicted in the chart on page 78.

An even more elaborate chart, depicting the actual holding-company organization of one of the largest public-utility combinations ever assembled in the United States, is shown on page 80. This was the famous Insull network, which went into receivership in 1932. At the time that action for the appointment of a receiver was instituted, the parent company was said to control properties nominally valued in excess of $2,500,000,000 and extending into 30 states and over the border into Canada. The parent concern—the Middle West Utilities Company—showed total assets at the end of the preceding year of approximately $300,000,000 against which, in addition to liabilities, were outstanding 15,700,000 shares of common stock and 607,000 shares of preferred stock. Although the company's stockholders numbered nearly 90,000, voting control in this greatly pyramided structure was held by the Insull Utility Investment and Insull, Son & Company which were dominated by Samuel Insull of Chicago.

Consolidation by Lease. Before the advent of the holding company, the combination movement, especially among the railroads, took the form of the negotiation of leases of certain lines by a number of the larger railroad corporations. Most of these leases were long term in character, usually running in excess of 50 or 100 years. Instead of directly merging the properties of one railroad with those of another (which would involve enormous expansions of stock issues on the part of the parent company),

[1] Of course, an extension of this pyramiding plan might very easily reduce still further the equity required for control.

COMPANIES INVOLVED IN INSULL RECEIVERSHIP



the practice was to lease (usually for a flat annual sum) the desired lines of those railroads over which control was sought. To the stockholders of these leased subsidiaries, the arrangement practically amounted to a steady guaranteed income, for rentals were payable whether or not earned. To the lessee corporation it gave the advantage of control without the cost of acquisition. Several of the lines of the Pennsylvania Railroad Company were acquired in this way. Although this method of combination is less popular today than it was in the nineteenth century, it is still used. According to consolidation plans of the New York Central Railroad, which were approved in 1930 by the Interstate Commerce Commission, several important railroad properties were leased to the New York Central Company. These included the Michigan Central, the C.C.C. & St. Louis Railroad, and the Chicago, Kalamazoo and Saginaw Railway lines.[1]

Communities of Interest. A somewhat less centralized and less formal means of obtaining unified control over a group of companies is the "community of interest." While the device depends upon the purchase of voting stock in the companies whose activities are combined, it differs from the holding company in that these purchases are not made by a single or central organization. Usually a small group of individuals succeeds in obtaining a controlling interest in several concerns. No single person owns a clear majority, but the combined investments of all make possible the ability to elect the directors of the companies in question and to dictate their policies. The success of this combination device depends upon the degree to which mutual agreement among the stockholders can be maintained. The influence over the several "Standard Oil" companies that the Rockefeller family was able to exercise was derived through this method of control.

Another application of this device is sometimes seen in the efforts of concerns to control the source of supply of their materials. According to this plan, several competitors mutually own and operate a company that specializes in producing a commodity needed by all. An example of a community of interest of this kind is found in the General Steel Castings Company which [2]

> . . . was formed and is owned jointly by the Baldwin Locomotive Works, American Locomotive Company, American Steel Foundries, Pullman, Inc., and the American Car and Foundry Company. These corporations constitute practically the entire market for the heavy steel castings which are the chief product of General Steel.

Pools and Agreements. Among the "informal" methods of combination and one that was widely used in this country in the past is the pool. Some-

[1] The New York Central, however, owned a very substantial equity in each of these roads.

[2] DEWING, A. S., "Corporation Finance," p. 302, Ronald, 1931.

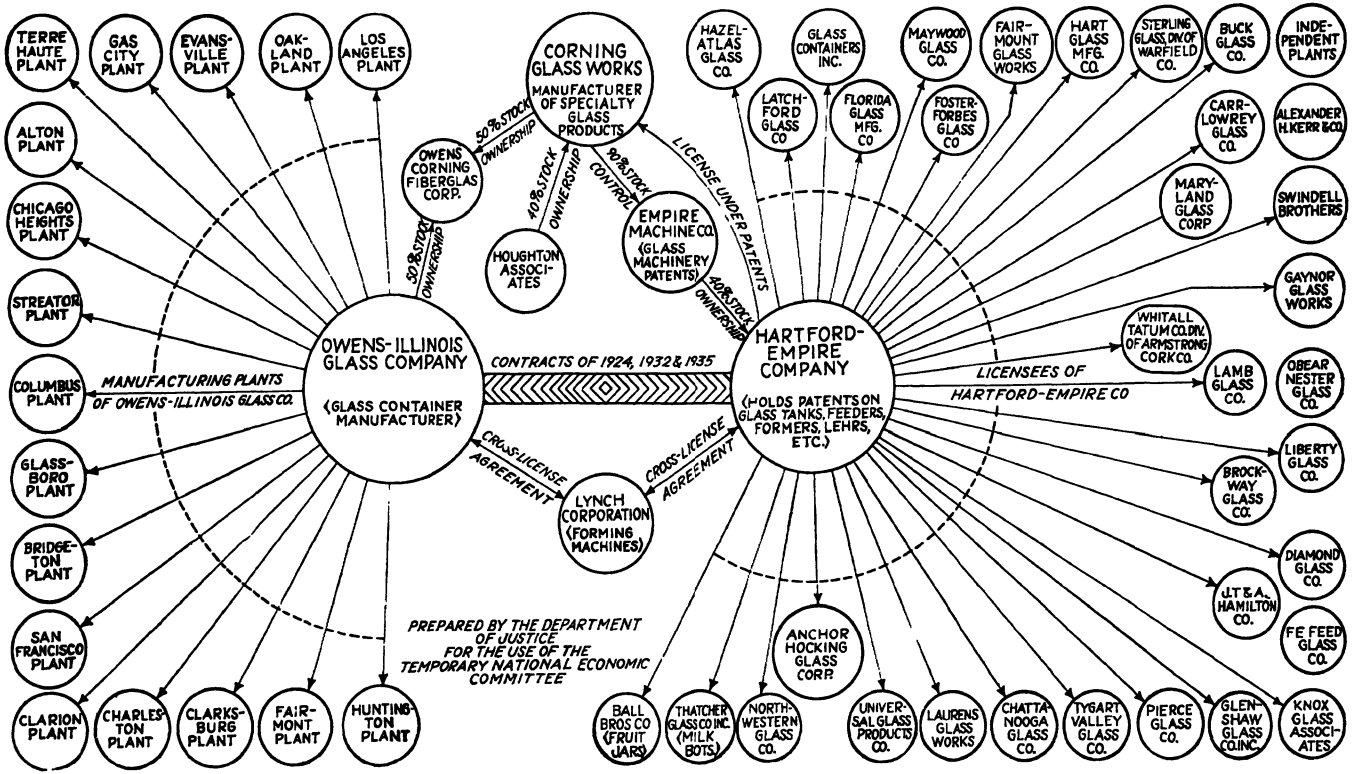
what like the pool, but simpler in form, is the "gentlemen's agreement."

In their endeavor to control prices, businessmen made informal agreements from time to time regarding price quotations and marketing policies. At times, such mutual understandings, or gentlemen's agreements, were extended to cover general policies in the matter of trade terms or discounts offered. The famous "Gary dinners" were the occasion for informal price-policy agreements of this sort among steel producers. Generally, however, these arrangements were seldom successful for any length of time because of the lack of any enforcing authority and the resultant ease and frequency with which they could be broken.

Pools, on the other hand, are somewhat more formal in character and more binding upon the members who belong to them. As in the case of the simple agreements just cited, the members of a pool retain their individual identity and enjoy a large measure of independence in the conduct of their operations. However, they unite or federate themselves under an agreement designed to control or regulate some one "factor" of common interest to all. The ultimate purpose of this is usually to exercise an influence or controlling effect over prices. The subject of mutual control may be the "output" of the plants concerned, the "market" to be supplied, the "income" or "profits of the group, or, in the case of transportation companies, the amount of freight or passenger business carried. In some cases, especially in the automobile industry, an arrangement is sometimes made to pool patents so that the inventions of one company can be used by the others on a royalty basis.

More complicated and somewhat more formal intercompany relationships arise when the holders of important patent rights create large empires of licensees. By means of contracts, licenses under patents, and cross-license agreements, a large number of subsidiaries are linked to the controlling parent firm. This was illustrated in the radio and the glass industries where the licensing system succeeded in developing broad areas of control. The chart on page 83 shows the organization that had been built up in the glass-container industry just prior to the Second World War.

Cartels. In the output or traffic pool, an agreement is usually made allotting a share of the total output or volume of business shared by each member of the pool over a specified time period. The European "cartel" is of this character. A cartel is an arrangement among producers or distributors in the same line of business by which they limit or eliminate competition, through restricting production, allocating exports and imports, and maintaining prices. These agreements are generally international in scope and frequently include government participation with private business houses in broad policies of legalized monopoly. Cross



The circles on the left represent the plants of Owens-Illinois Glass Company which had an agreement with Hartford-Empire Company. The circles with connecting lines on the right are other companies manufacturing glass containers which were licensees of Hartford-Empire. The unconnected circles on the extreme right indicate manufacturers who were not licensees of Hartford-Empire Company.

licensing of patents, the exchange of technical information, and the arrangement of "informal understandings" on countless subjects feature many of these cartels.

The scope of cartel control in world trade is difficult to estimate because of the impossibility of tracing many of these loosely knit organizations. However, tentative findings by one authority indicated that prewar cartel regulations directly affected about 87 per cent by value of the mineral products sold in the United States, 60 per cent of the agricultural products, and 42 per cent of the manufactured products.[1] A strong trend toward concerted action or collective controls—with or without government sanction—seems unmistakable. Usually mentioned among the most powerful of the cartels was the German I. G. Farbenindustrie which at one time took the lead in forming agreements covering chemicals, aluminum, and magnesium, in which American companies also participated. Other large cartels relate to such industries as steel, sugar, rubber, petroleum, tin, and electrical equipment.

Although the ability of American corporations to join these world cartels has been restricted under United States antitrust legislation with respect to domestic trade, many of them have concluded agreements affecting foreign markets, which has had the indirect effect of limiting competition in this country. Leading the list are such famous concerns as Allied Chemical & Dye Corporation, Aluminum Company of America, Bendix Aviation, Dow Chemical Company, E. I. du Pont de Nemours & Company, General Electric, Radio Corporation of America, and Standard Oil Company (New Jersey).

Buying and Selling Associations. The twentieth century has witnessed the formation of "cooperative corporations" and unincorporated "cooperative associations" in the United States that, in many respects, achieve many of the ends sought by earlier pools. The typical "cooperative" is organized by individuals or companies for a specific purpose—usually that of buying or of selling. Certificates or shares of ownership usually entitle each member to vote, regardless of the size of his investment. The primary purpose of such organizations is to bring about a certain amount of control for the members with respect to buying power or strategic selling ability. The federation of small or local cooperatives into larger cooperative associations makes possible a still stronger degree of control. It is not intended that the cooperative, as such, should make a profit. Earnings are distributed to the members on the basis of business done for their account.

[1] STOCKING, G. W., and M. W. WATKINS, "Cartels in Action," The Twentieth Century Fund.

Without doubt, the greatest stronghold of cooperative purchasing and marketing in this country has been in the agricultural industry.[1] Various types of buying and selling associations[2] in other industries may also be cited. To illustrate, the Furniture Syndicate of America, Inc., was formed some years ago to act as a buying agency for more than 200 furniture stores throughout the East. In addition to its function of furnishing advice in systematization, executive efficiency, advertising and selling, accountancy, collection, and banking problems, it was definitely authorized to make purchases for the account of its members—representing a purchasing power of some 40 million dollars a year. Similarly, at the time that the British Stevenson Plan of artificially maintaining a high price of rubber was in force, a powerful combination embracing the most important automobile and rubber manufacturers in the United States was organized to buy crude rubber. The members did not give up their identity as independent concerns; yet for the purpose of purchasing crude materials, they were closely united. In the retail business, the National Retailer-owned Wholesale Grocers' Association further illustrates this arrangement for group buying at more advantageous prices. Appalachian Coals, Inc., was formed as the joint selling agent for more than 100 independent southern coal-mining companies, with exclusive control over quantities of coal to be sold, prices, and terms of sale.

Limitations to the Combination Movement. *Economic.* In discussing the formation of business combinations, emphasis has been placed on their growth primarily from the standpoint of control. The desire to wield great power has undoubtedly prompted certain business executives to join forces in building up veritable industrial giants. This movement has also proceeded, however, as has been mentioned, from a need and desire to participate in the economies and advantages to be derived from large-scale operations. It is obvious that the uniting of executive control, the spreading of advertising, the pooling of freight and storage expense, and the joining of sales forces will make possible certain major economies in an industry. In addition, such advantages as greater buying power and borrowing ability are secured.

However, in large sections of industry the most efficient production is necessarily on a small scale.[3] Some of the general types of industry in

[1] See Chap. XVI.

[2] Some of these groups are organized as cooperative undertakings, whereas others, such as the cartels, are more of the nature of selling pools.

[3] President's Conference Board, "Recent Economic Changes in the United States," McGraw-Hill, 1929.

which small-scale production is required are

1. Industries whose products cannot be standardized.
2. Industries whose products must cater to differing tastes of consumers.
3. Industries producing for a small market.
4. Industries producing for a small market and whose product has a higher transportation cost.
5. Industries in which the material used is widely scattered.
6. Industries whose product is quickly perishable.
7. Industries in which skilled labor is the chief element.

The production costs and the problems of management are intimately related to the size and type of organization of the business unit.

Legal. Business combinations have been somewhat retarded in their development in the United States through a series of restrictive and regulatory acts.

Public opposition was aroused against "monopolies" and "big business" because of the fear of high prices and inferior quality of goods and because of the threat that the small independent producers would be driven out of business. While business combinations often resulted in these abuses, the legal restraints were invoked even when competition itself was ruinous and certain varieties of combination seemed economically desirable.

Monopolies and combinations were forbidden by common law, but this was a negative prohibition, since no punishments or penalties could be invoked. Some states passed antitrust measures, and popular feeling was so strong that 19 states and territories had such prohibitions in their constitutions prior to the passage of the first federal law in 1890. At present, almost all states have statutory or constitutional prohibitions against monopolies or combinations in restraint of trade.

The Sherman Anti-trust Act was responsible for the dissolution of several large trusts and undoubtedly prevented the formation of others. The passage of liberal corporation laws by New Jersey and other states, which made the holding company possible, provided business with a new device for effecting combinations. In the Northern Securities case, however, the Supreme Court decided that although the holding company itself was legal, it could not be used for the purpose of creating an illegal combination in restraint of interstate commerce.[1]

The Clayton and Federal Trade Commission Acts both broadened and increased the government's powers in restraining the combination movement. Specifically, the Clayton Act amended the Sherman law so as to outlaw unfair trade practices and to curb the evils of certain kinds of intercorporate stockholdings and interlocking directorates. It also prohibited price

[1] 193 U. S. 332*ff.* (1904).

discrimination and "tying agreements" with customers. It stated, in detail, the nature of the objectionable behavior of combinations that would be considered illegal under the antitrust statutes. An exception was allowed, however, under the Webb-Pomerene Act of 1918 to enable American exporters to organize themselves for meeting competition of the cartelized industries in foreign markets.

The Federal Trade Commission Act, declaring against unfair methods of competition in commerce, set up a commission empowered to issue complaints against offending concerns, to investigate their practices, and to issue orders to "cease and desist" from certain unfair methods of conducting business. The commission of five is assisted by a staff of from 500 to 600 attorneys, accountants, and economic experts. Its first concern is to protect business from dishonest tactics and the consuming public from fraudulent or misleading claims. It also acts as the chief agent of the government in ferreting out monopolies and horizontal price-fixing combinations. Finally, it conducts extensive surveys into industrial practices which, in turn, have served as the basis for further regulatory legislation on the part of federal and state governments.

The severity of these restrictive measures has been somewhat tempered by several broad interpretations by the courts. The "rule of reason" and the "rule of business expediency" have prevented a too literal application of the antitrust laws and have thus permitted the existence and growth of many powerful business combinations. The passage of the National Industrial Recovery Act in 1933 brought about a suspension of some of the statutes aimed against combinations and associations in restraint of trade. Practices that were formerly considered illegal were encouraged and defended as emergency measures. Control of the market, limitation of output, and price fixing became important features of the "codes" formulated by industry. The invalidation of the act restored the full effects of the antitrust legislation.

The federal government extended the scope of its regulatory enactments against monopolies and combinations with the passage of the Public Utility Holding Company Act of 1935. Convinced that many large interstate gas and electric utility systems had been engineered primarily by financiers and that the terms and conditions of many of the security issues were detrimental to the public interest, the administration sought to establish more effective controls over these companies. Enforcement of the act was placed in the hands of the Securities and Exchange Commission which was empowered to obtain from each holding company in the industry a registration statement containing data such as copies of its charter, its financial structure, salaries of officers, balance sheets, etc. The commission was given authority to pass on all security issues of holding companies and

their subsidiaries and any new acquisitions of securities or other utility assets. The "death clause" in this law provided that parent holding companies above the "second degree" relinquish their control over subsidiary holding companies unless they could prove that the relationship was necessary for efficient operation.

As the mid-point of the twentieth century was approached, the federal government again turned its attention to proposals for strengthening the antitrust laws—a problem admittedly aggravated by all-out production policies during the war. Comprehensive measures were introduced, which were calculated to arrest the growth of monopolies and big business and to give small independent firms a fairer chance to "start, survive, and grow strong in a competitive atmosphere." Chief among these were efforts to close up some of the most glaring loopholes in the merger provisions of the Clayton Act, to reorganize the patent system, and to establish a permanent fact-finding committee which would devote itself exclusively to a continuing study of the monopoly problem.

Questions and Problems

1. The tendency toward concentration of control is shown by the fact that in many fields, a few giant corporations control most of the production. Illustrate by actual figures or examples that this statement is true.

2. Explain the causes for the early combination movement in such fields as oil, meat, sugar, and steel. What advantages were gained by the members of the combinations? How did this movement affect the public?

3. What is meant by the terms horizontal, vertical, and circular, when applied to business combinations? Choose an illustration to show that a business concern can fit all three categories simultaneously.

4. How do patent pools and cross-licensing arrangements succeed in creating monopolistic conditions in industry? In what fields has such control been particularly apparent? Distinguish between the pool and the cartel. To what extent have American firms been members of such combinations?

5. "The holding company device makes possible a greater amount of pyramided control in business than does any other means of consolidation." Illustrate this statement by an actual or hypothetical case. Using a diagram, show that with very little capital the holding company makes possible the control of vast properties. Show how it differs from the trust.

6. In recent years, there has been a tendency for consolidation through outright ownership. By what methods is this accomplished? Give examples, and describe how these combinations were formed. What is the function of the promoter in this type of combination?

7. "Promotions of this type (of combinations of existing companies) usually call for a greater amount of foresight, ingenuity, and diplomacy than is needed in engineering the creation of new ventures." Explain this statement, giving tangible reasons in support.

8. Is size always desirable for a business organization? Show that there are economic limitations which make further growth, under certain conditions, undesirable. How

does the public benefit from monopolistic combinations? How may it be harmed? Illustrate by giving examples or actual cases.

9. Examine the diagram showing the organization of the Middle West Utilities Corporation. Explain by what methods this empire was organized and developed. How do such combinations affect the investor? The public (consumers of light and power)? How are public-utility holding companies affected by the Public Utility Holding Company Act of 1935? What is the death clause? What are second-degree holding companies?

10. Show the relationship of each of the following with the combination movement: the Sherman Anti-trust Act of 1890, the Clayton Act, the Capper-Volstead Act, the Webb-Pomerene Act.

Part II

MANAGERIAL CONTROL

CHAPTER V

BUSINESS MANAGEMENT

Directing the Going Concern. In a going concern there is a constant need for planning and direction. A steady succession of new situations and problems arises calling for important decisions and solutions. Change—incessant change—is the challenge that businessmen meet every day. New products, new markets, new modes of life, new methods of conducting business confront the managers of enterprises.

Essentials of Managerial Control. Adequate managerial control involves (1) the establishment of a well-balanced internal organization of the business and (2) intelligent direction and planning based upon reliable facts. It is essential that the managerial staff be selected with great care so that perfect confidence can be placed in the men charged with the responsibilities of administering a company's affairs. It is equally important that adequate provision be made for the collection and preparation of data to inform and guide the management.

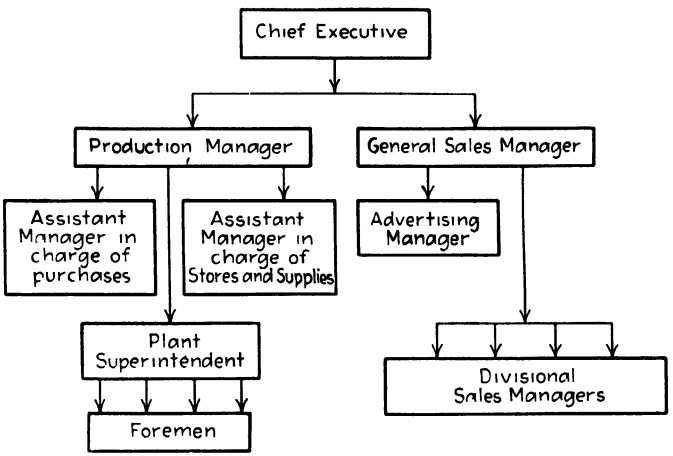
If attention is given first to the matter of internal organization, it should be recognized that in all but the smallest enterprises, management involves the problems of delegating authority and of coordinating responsibilities. The owner or owners, who individually manage a business, are personally responsible for the success of their own project. In a large corporate enterprise where the owners are numerous, the chief executives or an executive committee is vested with the responsibility of operating the business for the benefit of the owners. In either case where the volume of business conducted is such that it becomes impossible for a single executive personally to take care of all matters relating to production schedules, selling, financing, etc., it is necessary to delegate a certain amount of work to subordinates. This requires great care. Aside from the question of selecting the proper personnel for various managerial posts, it is important to assign authority with definite jurisdiction and limitation, so that each individual is made to recognize the extent of his powers and duties.

Formulation of Policy. A fine distinction is sometimes drawn between administration and management. Strictly speaking, *administration* involves the formulation of policies and the establishment of a general scheme of control or plan of operation. In a corporation, part of this function is already performed in drawing up the charter that limits the scope of its

operations. The board of directors then has the task of determining general policies to be followed by the company. These usually relate to such matters as the purchase and sale of fixed properties, the investment of idle funds, important changes in design or product, labor agreements, and credit arrangements. Any changes in basic policy or any matters requiring fundamental decisions relating to the interpretation of company policy must be brought to the attention of this administrative board or to the stockholders themselves.

These policies represent the general principles according to which the company will conduct its operations and are to be viewed as general mandates for the guidance of managerial action. It is the function of the *management* to direct the business and to execute the policies that have been formulated. A fairly wide range of powers is usually granted to the executive or managerial staff. The administrative board of a company attempts to achieve centralization of effort and uniformity of purpose without defining each managerial task too closely and without requiring an anticipation of the character of all the difficulties and problems that will present themselves to members of the operating staff. Administrative control which must be set up in order to hold the personal activities of subordinate managers in check should not be interpreted as a rigid limitation of authority that would stifle all initiative beyond the defined duties of a position. Such rigidity would destroy all advantages in the direction of progress and constructive improvement that are to be attained from a capable executive staff. A policy to sell for cash only would restrict the sales manager's powers in this direction. A policy to keep the plant in operation 50 weeks a year would influence the plans of the production manager. If, in the face of these policies, a sales manager decides to sell to several accounts on a credit basis, such action is a clear case of overstepping his authority. It constitutes a breach of an apparently clear-cut administration policy. If, however, a particular salesman who has unusual selling ability is transferred by the sales manager to a relatively dull area in order to stimulate sales in that region, the manager is acting, in accordance with his judgment, for the welfare of the company and in strict conformity with his authority. Moreover, he would be within his rights to resent any interference with such action. In other words, complete freedom within bounds should be a managerial prerogative. Every man is charged with responsibilities and is vested with a certain degree of authority which he may exercise in the performance of his duties to the best of his judgment and ability. At the same time, he must realize that his work must be coordinated with that of many others in his organization and that his efforts are tributary to the accomplishment of the ultimate aims or central purposes of the whole enterprise.

Types of Management. *Line Organization.* Usually managerial organization is divided into certain main classes of operation, depending in number and variety upon the nature and size of the business. For example, there may be separate production and sales divisions with a manager in charge of each. These officers are empowered to direct the affairs of the business within the limits of their respective departments. They are expected to make important decisions relating to the division of work, the arrangement of schedules, and the methods of handling specific details



"Line" organization chart of a manufacturing enterprise.

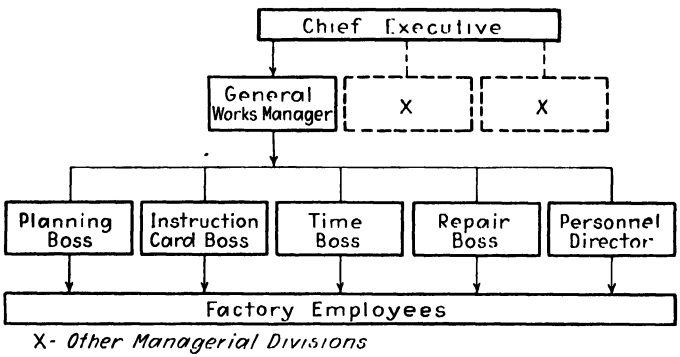
on various jobs. It is their function to decide whether or not a given task shall be done and, if it is to be performed, how it should be executed, by whom, and when.

These managers might, in turn, have superintendents, foremen, or junior managers in their charge, to whom they delegate authority. Factory employees and salesmen would then be under the direct supervision of these latter subordinates—final responsibility, however, being carried back all the way along the line, through the divisional managers to the chief executive.

The diagram shown above illustrates this form of managerial organization. In a setup such as this, managerial control closely resembles the plan of authority found in military organizations and is therefore frequently termed "line" or "military" organization. For example, in the army, the responsibility and authority extend from the general to the lowest officer, in a series of steps, thus: general, colonel, lieutenant-colonel, major, captain, first lieutenant, second lieutenant, sergeant, and corporal. All major decisions and directions are made by those at the top and are handed down

to subordinates next in charge. The latter, in turn, break up these instructions into more specific orders, each of which is ultimately executed. A direct relationship of authority and responsibility is thus set up between superiors and subordinates.

The chief executive is ordinarily the owner-manager or the president. Occasionally, companies have an executive committee as the central executive body; in this case, the chairman of this committee is the chief executive of the firm. In many instances, the president of the company is chairman of the executive committee and is given full executive authority during



Organization chart showing functional foremen.

the intervals between committee meetings. Managerial functions are then subdivided among vice-presidents or divisional managers in charge of specialized functions such as production, sales, accounts, and finance.

Although many variations are found in management, this form of central administrative control is more or less a basic characteristic of the internal organization of most firms.

Functional Organization. One variation that has tended to make important changes in relationships between the management and the ordinary employees has been the introduction of so-called "functional" organization. Under this arrangement, experts are brought into the organization to serve as executives or "specialized foremen." The worker is not directed by a particular "boss" as in the simple organization but is responsible to several superiors—each of whom has something to control in his work. Thus, in an electric-machine manufacturing plant, a die cutter might be subjected to the authority of the factory sanitation manager, personnel manager, steelworks foreman, and electrical-parts inspector.

The purpose of this arrangement is to make possible a greater extension of the principle of specialization in management. Each manager, or foreman, is an expert in his particular field and consequently is expected to be

more efficient in the execution of his tasks than is the individual who is responsible for the performance of half a dozen different functions. For example, in factory organization, instead of having a general production manager whose instructions are carried out by a number of foremen directly responsible to him, there may be several specialized foremen, each concerned with separate details of management and each on the same plane of authority or rank. One is a planning boss, or "route clerk," whose function it is to plan the daily flow of work for the entire shop and to specify the time sequence of operations on each job. Another specializes in preparing a set of instructions, explaining to the workmen exactly how every detail of a particular job (which has been planned by the routing clerk) is to be handled. A "schedule," or "time," boss may be delegated to supervise the operations in the plant and see to it that each task is performed according to specifications and in the allotted time. A repair boss is concerned exclusively with the proper maintenance and upkeep of tools and machinery. A personnel director or disciplinarian has the duty of hiring, discharging, and transferring workmen in the plant.

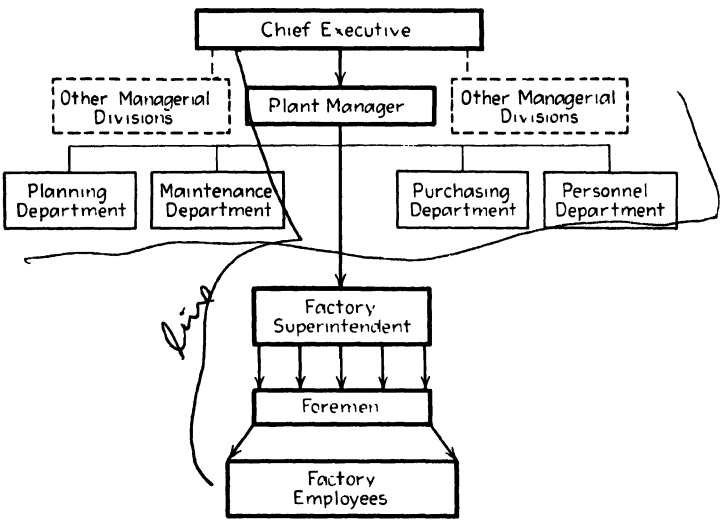
This has been illustrated graphically in the diagram on page 96. In a small establishment all these functions are performed by a single factory manager. As the scale of business grows, it is felt that a segregation of these functions will produce more efficient results.

Line-and-staff Organization. Because of the danger of overlapping authority with consequent friction and lost motion, the functional plan of management has not, in practice, been pushed to its extreme form. However, a compromise type between this and the simple line form is commonly found. This is called "line-and-staff organization." In essence, it preserves full centralized administrative control but supplements it by providing the services of a number of expert members of the staff whose functions are more advisory than administrative. In other words, such special services as those of engineers, accountants, legal advisers, and personnel directors and of planning departments, repair departments, purchasing departments, and maintenance departments are provided as auxiliary activities, to assist the regular administrative staff in the conduct of its affairs. These experts have no directive or executive role to perform as would be the case in the functional organization.

Direction and control are retained by the executives and junior officers in the line organization. The tasks of these responsible individuals are considerably lightened, however, through the work of the staff departments, which concentrate on specialized duties. Unlike the functional type of management, there is less divided authority—most of these staff specialists assisting or cooperating with, rather than directly engaging in, the management of the business. Again, with the illustration of factory management

used, the functions outlined above under a functional-management plan might be divided under a line-and-staff organization as shown in the chart below.

Thus, the direct line of management proceeds from the plant manager to the factory superintendent and from him to the factory foremen who supervise the workmen. Assisting the executive in charge of production is a staff of planning engineers, a maintenance and repair department, a purchasing staff, and a personnel department. Essentially the same

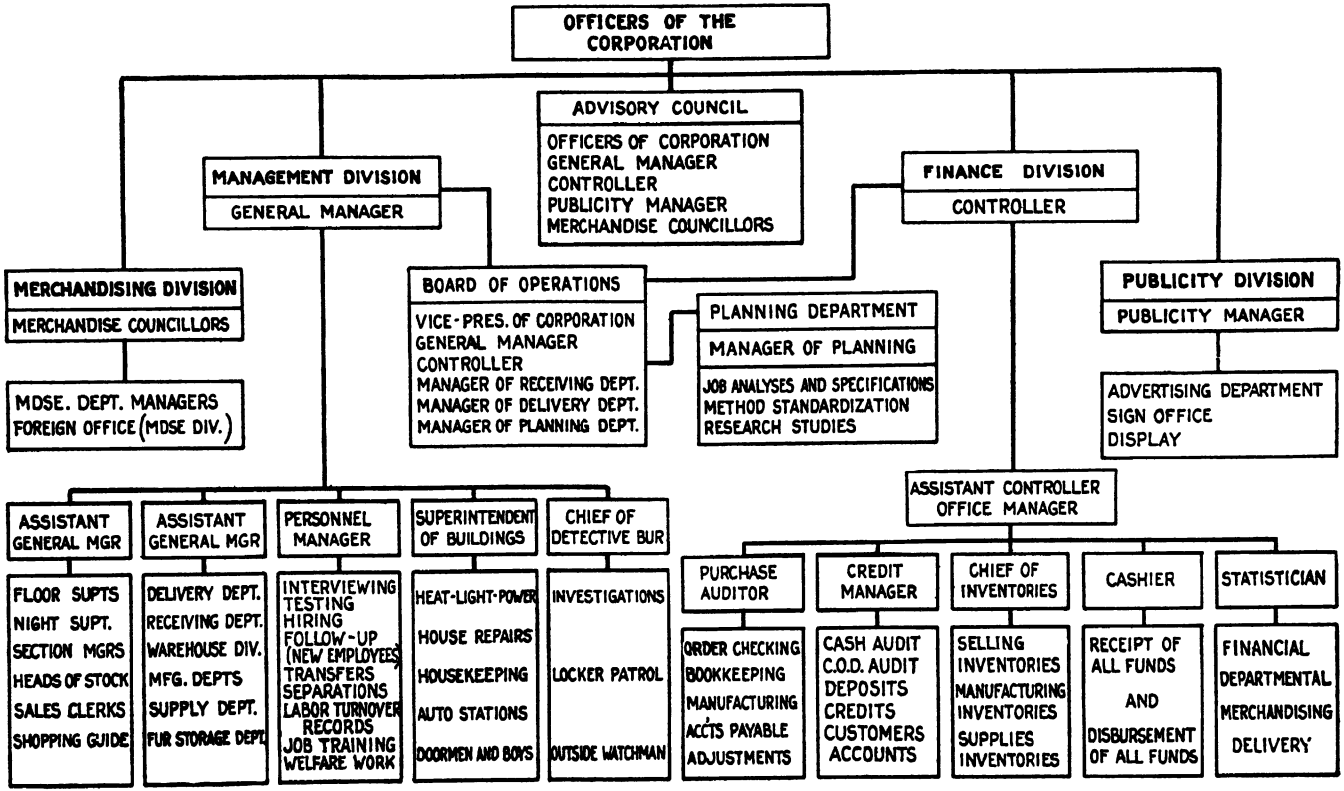


Line-and-staff organization chart showing production division.

functions are rendered, the major difference, therefore, being one of supervision and control.

Committee Organization. Mention has already been made of the fact that in some of the large concerns, an "executive committee" takes the place of a single individual at the head of the firm. It is frequently felt, in cases where an organization has grown to immense proportions or where its scope of operations has become very broad, that the task of general guidance or government is too much for one man. While a certain amount of power and responsibility is usually vested in a single individual in such instances, various committee organizations are created to act in an advisory capacity. Occasionally this is accomplished by calling together all departmental executives. They serve as an advisory committee or council for purposes of airing disputes or internal jurisdictional conflicts or in order to receive suggestions or opinions relating to general managerial practice. Other committees on plant safety, employee welfare, advertising, and

ORGANIZATION CHART



financing sometimes prove to be useful in coordinating the work of several otherwise independent divisions in a large corporation.

Committee organization as an exclusive managerial setup for purposes of executive control has never been of very great practical importance. As a supplementary instrument intended for use in guarding the management of an enterprise against making arbitrary decisions based upon inadequate data and experience, it is often of considerable value.

The organization chart presented on page 99 indicates the position of a committee or advisory council in the general managerial plan. It also serves to illustrate the more complex scheme of delegated managerial authority which is usually found in the larger type of business establishment.

Centralized vs. Decentralized Management. Because of the great variety of pursuits that a corporation has undertaken, the enterprise often appears somewhat unwieldy and difficult to manage. It may, for example, operate a series of plants, each turning out different kinds of products. Shall the efforts of the production manager, sales manager, comptroller, and publicity manager be directed toward the control over the production, sale, handling of accounts, and advertising of all these production units? Or should a separate manager in each of these classes be delegated to each production unit? To whom shall such managers be directly responsible if the latter course is chosen? Would it be better to make them responsible to separate general managers for every production unit, or should they be delegated directly in authority by a single central office?

Practice varies in the administration of industries that have reached such gigantic proportions. In a number of companies, such as General Motors Corporation, where many separate products are made for final retail sale, it has been the policy to abandon complete centralization of operation. In its stead, there has been substituted "decentralized operation with coordinated control." Centralized control therefore still exists and is administered through a central executive committee of the company. Each of the operating units, however, including Fisher Body, Cadillac, Buick, Oldsmobile, and Chevrolet, is like a separate self-contained company. It is known as a "division" and is under the direction of a general manager. Each division markets its products through its own sales organization. It buys materials and supplies from other divisions of the company for which it is billed at the regular competitive market price. It is privileged, within limits, to purchase its supplies in the outside market if it so chooses.

The segregation of operations into these separate production units facilitates their comparison, as complete operating entities, with competitive companies. This affords a ready check upon the individual effectiveness

of the management of the division, quite apart from its affiliation with the parent company. The executive committee of General Motors Corporation may [1]

> . . . deal with operating policies in respect to any division with an understanding of the characteristics of the particular business and the position of the division in its field of competition. This type of organization as applied to big business lends assistance to a high degree of centralized control, while at the same time it affords an opportunity of fixing responsibilities upon the administrative management on a clear-cut basis upon which they can be held accountable for results.

Some companies consider decentralized operation dangerous to the retention of centralized control. They feel that such organization brings about lack of harmony of operations, inasmuch as local officials seem to be given too much authority in the administration of company affairs. The cooperative activities in purchasing, research, advertising, etc., through the use of executive committees are deemed a poor substitute for rigid centralized control over all purchases, production, and sales.

The champions of decentralized operations, on the other hand, feel that the local production and selling problems call for specialized expert attention which a central office would be unable to provide. Local administration with central control appears to them a better managerial policy in a highly dissociated business organism.

The Borden Company has compromised these policies in what it calls its "flexible operating plan." [2] This requires the conduct of the company's business on a local community basis wherever practical, without discarding centralized direction if conditions make this necessary. Wherever the business is localized, *i.e.*, where it serves local customers and depends mainly on local supplies, control is vested in local management; but in other phases of the company's activities, where close coordination is essential for efficient country-wide operation, centralized management is preferred. Even in these latter cases, however, in such matters as employee and community relations, responsibility rests largely with local management.

An example of centralized control, as exercised in several divisions, may be found in the company's evaporated milk operations. Borden plants in about a dozen states manufacture a product that is sold on a nation-wide basis, and the direction of production and distribution would not be improved through decentralization. In the fluid-milk and ice-cream divisions, however, there is a different situation that lends itself admirably to de-

[1] From a paper read before American Management Association by Donaldson Brown of the General Motors Corporation.

[2] From a Borden Company report.

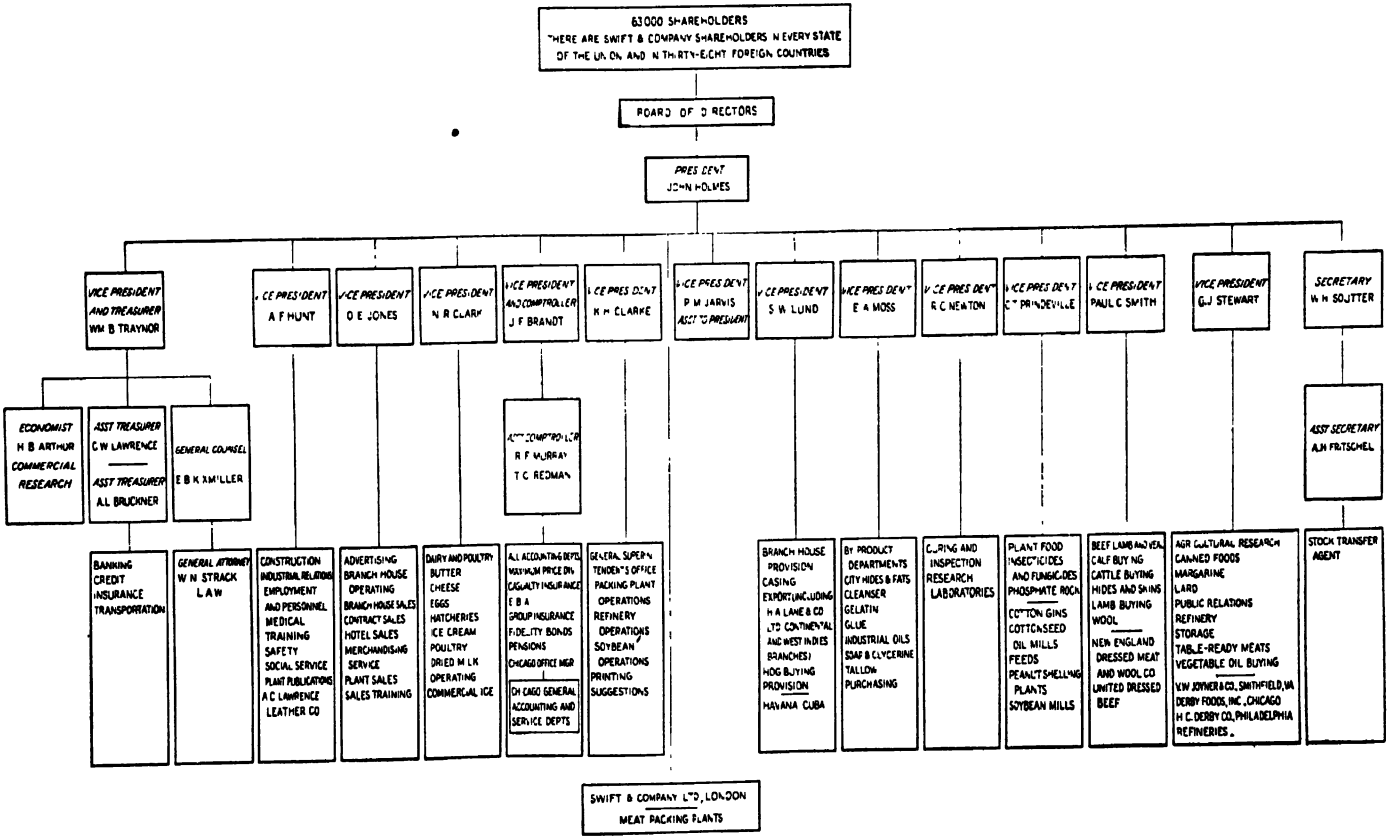
centralized operation. Every milk market is unique; it has its own pattern of consumer wants, its own board of health regulations and system of buying from producers, its own established practices affecting processing and distributing operations from farm to home. In his own community, the manager of a fluid-milk or ice-cream plant operates it very much as an owner-manager, being subject only to the broadest over-all policies of quality and service. By vesting authority in a responsible local representative, the company prevents the problems and dangers of remote control. Competent, resourceful local management is able to deal directly and sympathetically with producers and employees and understand the needs of the community that it serves. Yet behind the local manager are the resources of the entire Borden organization, aiding him through national advertising, through developments of the research laboratories, and through the services of professional and technical personnel upon whom he may call.

There is no single ideal in managerial organization. Different business situations call for varying types of executive control, and a policy of experimentation is often necessary in order to decide upon the most workable system. In all cases, however, "teamwork" in the achievement of a goal is essential. The successful executive must be able to place full reliance upon the responsible performance of the work of his subordinates, and he must coordinate such effort into a well-thought-out plan of systematic operation.

Complex Managerial Organization. The diagram on page 103 depicts the organization of the management of Swift & Company. The executive officers consist of a president, a treasurer, twelve other vice-presidents, and a secretary. In addition the managerial staff includes assistant officers and managers in dozens of different divisions. One division is devoted to banking and transportation; another to law; another to accounting; and still others to buying, branchhouse sales, etc. Each of these in turn is divided into specialized departments such as exports, construction, chemical laboratories, and packing plants. The separate departments are further subdivided into sections and subsections not shown on the chart.

It is not generally realized how complex an organization of this kind may become or how carefully its operations must be supervised if profits are to be earned. Each production department of Swift & Company can be considered almost a self-contained unit. Many of these units, such as beef, lamb, pork, and produce departments, are operated as independent business establishments—each one buying its raw materials and producing and selling its products. In addition, there is a series of sales departments which specialize in the handling of hides, wool, soap, fertilizer, and other goods.

ORGANIZATION CHART OF SWIFT & COMPANY



A record is maintained by each department of all its purchases, sales, expenses, and results. In this way, every department knows whether or not its individual operations are profitable. The profitability of the entire company depends upon the joint results obtained in these many separate departments.

The result of this degree of specialization is to place individuals at tasks that give them but a remote idea of the character and scope of the business in which they are employed. Unlike the beginners in a small enterprise, such employees see but a small corner of the business world. A bookkeeper may be assigned the task of entering transactions covering customers whose names begin with K and L; a mechanic's helper in the repair shop probably learns no more of the business than the proper method of adjusting certain bolts.

To the executive attempting to direct the operation of a gigantic industrial plant in which thousands of employees perform these many finely divided tasks, serious problems of coordination and control at once arise.

Absentee Management. The numerous and varied activities of large enterprises must be controlled from a central office. This may be at a great distance from the scene of production, distribution, and sale. The business of the Socony-Vacuum Corporation, for example, encompasses the entire globe. Crude oil is produced in many states and is imported. The finished products, ranging from gasoline and kerosene to vaseline, mineral oil, and lubricating oils, are sold in every part of the world. Yet these many segregated and integrated functions are controlled from the main office of the company in New York.

The head offices of railroads, steel plants, automobile companies, and food manufacturers are often located in the financial centers, hundreds of miles from the areas of physical activity in those industries. Those who manage business must be capable of seeing its varying aspects as parts of one whole organization. Important facts, essential to the sound conduct of business, must always be on tap. In the one-man firm or in the small company, it is possible for the manager to handle his affairs with confidence inasmuch as he is personally familiar with every phase of the business. When the company has become so large as to make this close contact impossible, how can those who direct the affairs of the business do so intelligently?

The answer is that they must depend upon various reports, facts, and figures which are submitted by those in charge of the different divisions of the business. Their ability to interpret these data and to analyze them in such a way as to formulate more effective policies of control is what characterizes such men as successful business executives.

Accountants and statisticians are important groups of specialists whose reports are the basis for the formulation of managerial policies. In addi-

tion, the services of other trained minds are frequently drawn upon. The lack of personal contact between the great masses of wage earners and the executives of a company sometimes necessitates the establishment of a separate personnel department in which psychological studies are made of the aptness and fitness of the worker for a particular task and in which the needs and problems of employees are studied. Legal research is carried on to guide and protect the firm in a day of numerous laws, codes, and regulations. Market specialists analyze the company's products. Advertising agents are called upon to study psychological reactions of buyers to certain forms of advertising appeal. Doctors and trained nurses guard the health of employees. Chemists and physicists test the products of the company and are on the alert for new production methods or improvements in the products.

The reports of these professional groups enable the executives to "feel the pulse," so to speak, of a complex organism whose every detail one individual could not possibly hope to master. Moreover, in an emergency, expert assistance can be summoned almost immediately. In an organization with far-flung activities, the telephone may, within an hour, convey to a manager's desk a dozen or more serious problems requiring immediate attention. Were not a staff of assistants—each expert in certain fields—ready to advise and assist the executive in the handling of these questions, the task of managing the supercorporation would be beyond the abilities of the men designated as its executive officers.

Specialized Services. Undoubtedly the tempo at which large corporations adjust themselves to changing conditions is accounted for in great part by the efficiency of their various specialists, who not only detect the new developments but assist the management in coping with the problems that arise. This has frequently been declared one of the greatest advantages of large-scale business as contrasted to the small concern which cannot afford to engage the services of these experts. This, however, is true only to a limited degree. The elaborate research organizations of many firms might in a sense be regarded as evidences of the handicaps under which the management is suffering. The main reason for the existence of these special services is that the managers cannot directly familiarize themselves with the factors which they seek to control. They are dealing with delegated functions; they have lost contact. The specialized efforts of those who establish these contacts are the salvation of such executives. They are the means by which "absentee management" is made possible.

In the small concern, many of these specialized services are not necessary. The local storekeeper wants no elaborate statistical check on his stock of merchandise; he has no need for a personnel department or a medical department. He does not even require the services of an account-

ant. He himself or a bright young clerk can keep all the bookkeeping records that are required in order to run his business intelligently and to make his tax reports. His personal contact with the many details of his business keeps him better informed than is the executive who depends upon an indirect or roundabout reporting system.

However, the trend toward an increase in size of the business unit has brought a greater proportion of business within the control of single managements. It has also added to the complexity of enterprise and made more difficult the perfect synchronization of producing and selling functions. As a result, there is a growing realization of the need for reliable information and sound guidance in the control of these larger ventures. The future will undoubtedly witness a growing demand for the services of specialists by businessmen who are seeking to remove some of the unnecessary hazards that arise through lack of knowledge and "blind groping in the dark."

The Business Office. The business office is the locale for the management of enterprise—the nerve center through which most of the functions of direction and control are performed. In the small firm, a desk and a file located off to one corner of the shop or store will often answer the proprietor's needs for an "office." On the other hand, the large-scale corporation might require literally acres of office space to house the thousands of people on its clerical and office staffs.

Most of the tasks associated with the *business*, as contrasted to the *physical production* aspects of industry, are handled by office personnel. The daily routine of receiving, sorting, and answering the mail, routing inquiries and orders to the proper departments, depositing cash or checks, filing and paying bills, and recording and classifying data relating to countless transactions are familiar office functions. The analysis of records, the preparation of contracts, and the holding of executive conferences to decide on new programs or to determine policies are examples of some of the less stereotyped activities of the business office.

Office Management. Office work not only consists of the maintenance and handling of a company's records (including all correspondence, computing, classifying, and filing) but also involves the managerial functions of coordination and control over the company's internal and external affairs so as to keep the business machine in motion. The efficient performance of these important tasks demands that proper attention be given to organization and method, the establishment of routines, and the suitable arrangement of office space.

The latter functions properly fall within the field of *office management* and require specialized skills and professional training. In the larger enterprises, the office manager is ordinarily a staff specialist in control of

the company's entire clerical force. Standards are set and tasks are assigned and controlled with scientific precision and definiteness. In the more modest-sized business unit, this function is usually delegated to some other executive such as the controller or treasurer of the firm.

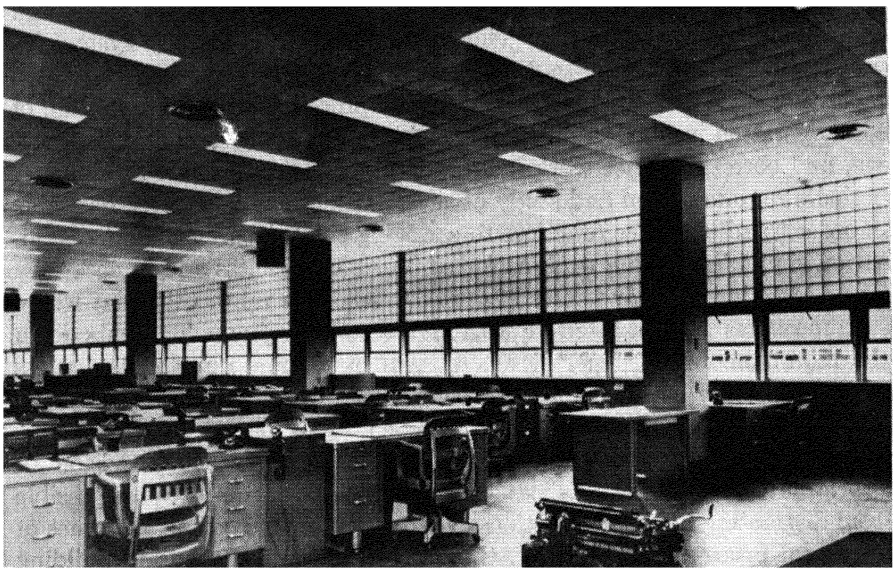
Office Routines. One of the prime requisites for the effective performance of office work is the development of organized routines. A *routine* is defined as a series of steps in the handling of work, each step in the series being performed in a definite prescribed sequence. The lack of standardized systems leads to confusion and delay, the duplication of some tasks, and complete oversight of others. The construction of an orderly system involves the analysis of day-to-day functions that lend themselves readily to repetitive steps and the planning of logical procedures for the handling of each operation in a given process. Bookkeeping, filing, billing, interviewing, and correspondence work have been standardized in this fashion. A periodic reexamination and study of such routines are considered desirable in order to adjust office practices to changing conditions. An alert organization simplifies routine work as far as possible. Useless and unnecessary forms are eliminated or reduced in number and size up to the point where such measures will not interfere with vital record keeping. This cuts down the requirements for paper stock, releases man-hours devoted to useless and unnecessary assignments, and permits the disposal of excess binders, files, and storage facilities previously needed.

Office Layout. Another important consideration is the provision of appropriate office space. Offices should be located as far away as possible from distracting noise or vibration and from the smoke, grime, or fumes of industrial processes. Generally, they are situated in a separate building or wing of a plant or in a downtown office section far removed from industrial operations. Problems of size, shape, and layout will naturally vary with each type of business and with the value of floor space. The allocation of space is usually concerned chiefly with the planning of the general offices, private offices, and reception rooms and with the adequate provision for storage areas and rest rooms. The general office houses the bulk of the working personnel. Careful attention must be given to proper ventilation and lighting and to the orderly arrangement of equipment so as to ensure an efficient flow of work through the several departments.

Major executives and persons whose duties necessitate an unusual amount of concentration generally require private offices. However, where space is at a premium, the trend is to reduce the erection of partitions and private compartments to a minimum on the grounds that they waste space and often interfere with the lighting, heating, and ventilation of the general office. Special conference or board rooms are sometimes provided for interviews and meetings so as to avoid disturbing the general office per-

sonnel. The reception room is the public entrance to the company office. It may be quite simple and small or very spacious and elaborate. The important concern is that it should be adequate in size to accommodate the average number of callers and sufficiently attractive and comfortable to convey a favorable impression to the firm's visitors.

Office Equipment. The choice of desks, chairs, filing equipment, and other office furniture has an important bearing upon the efficiency of the

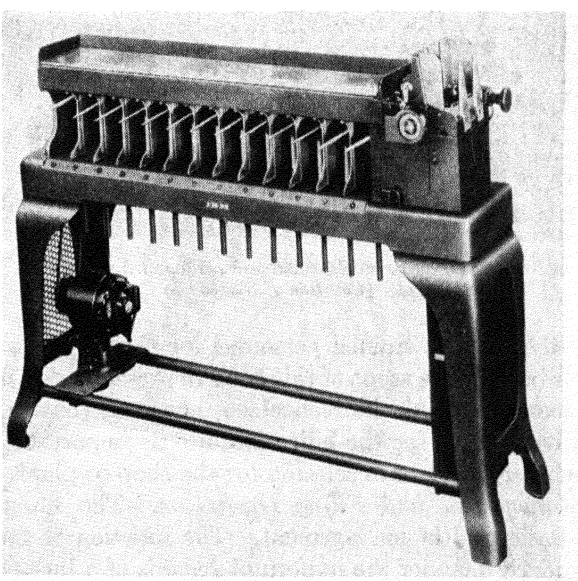


Careful attention must be given to proper ventilation and lighting and to orderly arrangement of equipment. Scene in one of the offices of the Sperry Gyroscope Company, L. I., N. Y. *(Courtesy of Owens-Illinois Glass Co.)*

organization. (1) The first requirement is that the equipment should be functional, *i.e.*, appropriate in size and height to the physical characteristics of the workers and convenient for the operations for which it has been designed. (2) It should have a good appearance and should be sufficiently uniform to fit in satisfactorily with the general office plan.

The manufacturers of modern office equipment have given considerable time and attention to these questions. They have conducted scientific studies of office functions and have designed special desks and tables to meet individual needs. Correct-posture seats have also been developed in seeking to eliminate common faults of office chairs. Most offices are equipped with various models of typewriters and adding and calculating machines. These are supplemented by special billing and bookkeeping

Special office equipment, showing posture chair, long-carriage typewriter, typewriter table and portable ledger tray. (*Courtesy of Remington Rand, Inc.*)



...ternational Business Machines Corporation's electric punched card sorting machine pictured above sorts cards into desired numerical or alphabetical sequence. Skilled operators are trained to feed cards properly and to regulate controls. (*Courtesy of International Business Machines Corp.*)

machines, addressing machines, duplicating equipment, dictaphones, time clocks, and various electrical and mechanical contrivances for interoffice communication. Companies manufacturing this equipment prepare catalogues and brochures describing their application and advantages and usually make arrangements for demonstration and trial. To operate some of these machines requires special training; and in those cases, the manufac-

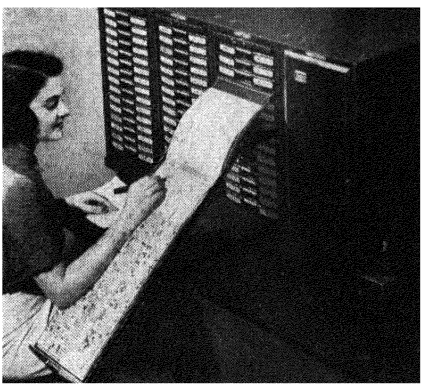
It is essential that business data be so classified and arranged that they are readily available when needed. (*Courtesy of Remington Rand, Inc.*)

turer frequently supplies trained personnel for their operation and maintenance. It is beyond the scope of this book to present a detailed discussion of these devices. It should be recognized, however, that the selection of the physical equipment for the office is quite as important as the workbenches, machinery, and tools selected for the shop or plant.

Records Management and Filing Operations. The filing of business records is a basic tool of management. The function of filing is to preserve in an orderly manner the important records of a business. Requirements differ from office to office, but business data must be so classified and arranged that they are readily available when needed. This includes not only the systematic arrangement of a firm's correspondence but the

handling of all important records such as reports, orders, contracts, vouchers, blueprints, forms, tabulations, and catalogues. It also involves the frequent transfer or removal of inactive records from the active files and a system of disposing of data that cannot justifiably be retained in storage space indefinitely.

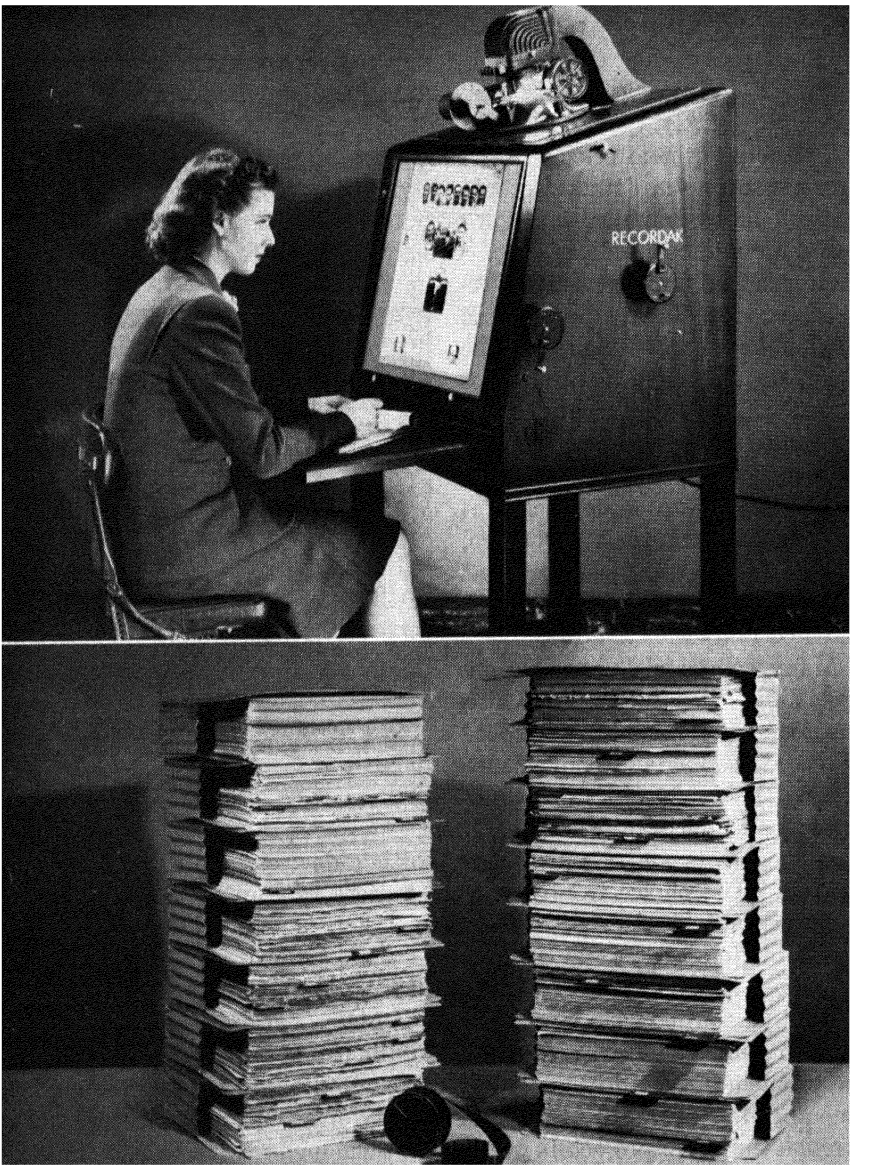
The filing system selected for each class of records depends upon the uses made of the data. Records may be filed alphabetically by name, subject, or geographical location or numerically according to order number, serial number, code, or date. Cross references are used to link together materials filed under several different categories. The methods chosen should be those which will be simplest, most logical, and most direct. Where organizations are concerned with pending or incomplete transactions, a "tickler" file or follow-up system is employed. Characteristic colors, labels, or other devices serve as automatic reminders at the time when certain items fall due.



An example of a visible-record cabinet from which facts may be obtained instantly and accurately. (*Courtesy of Remington Rand, Inc.*)

Many commercial firms supply specialized filing equipment which ensures facility, accuracy, and speed of record keeping and convenience of use. Examples of these include vertical and horizontal filing cabinets, transfer and storage cases, visible-record cabinets and stands, trays, sorting devices, special folders, and binders. The choice from this large variety of equipment is dependent upon the individual needs of the firm. There is no one best filing system applicable to all cases.

When it is necessary to keep on hand records running back for a number of years and when such filed material is bulky, entire storage warehouses are sometimes required. In such cases, the use of *microfilm* helps to solve the problem of record keeping. This is the process of photographing documents on narrow (16 or 35 mm.) safety film. Records are examined through the use of projectors which flash them on a small screen. Enlarged duplicates of one or more items on the film are quickly made at low cost. The film surpasses the life of ordinary paper and, with reasonable care, lasts as long as the finest rag paper. An illustration of the amount of space saved is shown by the fact that over 800 pages of a standard-size newspaper like *The New York Times* can be microfilmed on one 100-ft. spool of 35-mm.



The use of microfilm reduces the requirements for filing space. The stacks of correspondence, in the lower picture have been recorded on the small spool of film in the foreground. Magnifications of from 12 to 23 diameters can be projected automatically in focus on the translucent screen shown above. (*Courtesy of Recordak.*)

film. The reel fits into a carton, 4 by 4 by 1⅝ in. Six such cartons, containing a total of 5,000 newspaper pages, can be packed into a small case that will fit on a standard library shelf. The Westinghouse East Pittsburgh Works effected a saving of 1 acre of floor space and tons of filing cabinets by reducing to microfilm two million sheets of sketches and records going back to the early 1880's.

Recording and Analysis of Data. The recording and analysis of business facts require the special skills of accounting and statistics. Because of the importance of these tools and guides to management, they are separately discussed in the chapters immediately following. Other aspects of management (*e.g.*, factory management, personnel management, etc.) follow in later sections of the text.

Questions and Problems

1. What are the essentials of adequate managerial control of a company? What distinction is sometimes drawn between administration and management of a firm?

2. Suggest actual cases or construct original examples to show advantages and disadvantages of line, functional, and line-and-staff organization in management.

3. What leads some companies to turn to a policy of decentralized operations? Why under certain circumstances might this abandonment of centralized control in management prove to be a mistake?

4. The large corporation today is an example not only of absentee ownership but also of absentee management. Apply this statement to such firms as Standard Oil or U. S. Steel.

5. When a company becomes so large as to make direct contact between management and working force impossible, how might those who handle the affairs of the business do so intelligently?

6. You are appointed office manager in a large concern. What functions will you be expected to perform? How will the efficiency of your work be measured?

7. Contrast the problems of office management with those which might be associated with factory management. What similarities are there? What differences?

8. The filing of business records is a basic tool of management. Explain, and illustrate. Describe an adequate filing system for a particular type of business.

9. Discuss the trend toward the use of microfilm in helping to solve the problem of record-keeping. What are the advantages of microphotography? Give several examples of its use. What are its limitations?

10. The modern office, like the plant, has given way to mechanization. Describe some of the machines that have replaced manual procedures in office work. Show how each has led to greater efficiency, lower costs, and reduced margins of error

CHAPTER VI

ACCOUNTING RECORDS

Importance of Accounting. Business managers are constantly in need of recorded facts and reliable financial data about their enterprises. Such information is essential for the sound operation and control of the business as well as for the use and guidance of investors, creditors, and governmental agencies. Accounting has been developed as an efficient tool for the systematic recording, analysis, and presentation of these financial facts. Through its accounting records, management is provided with data concerning the current solvency of the enterprise and the effectiveness in application of its resources over a period of time. Information is currently available as to purchases, sales, investments, debts, expenditures, taxes, and earnings. Specific reports are made on such subjects as unit costs of production, quantity and value of inventories, and volume of sales in various territories. Other periodic checks relating to financial operations of the business can be had, if necessary, for the purpose of making current decisions or for the formulation of new policies.

Assets and Liabilities. One of the simplest yet most important purposes of accounting is to reveal at any given time the monetary value of a firm's assets and its liabilities. *Assets* are what a business owns; or more specifically, they constitute anything that a company owns (tangible or intangible) to which it attaches a money value. Real estate, machinery, merchandise, cash, and patent rights are typical examples of a firm's assets. *Liabilities* are what a business owes, consisting of any obligations that involve a future money payment or its equivalent. Bonds and short-term promissory notes that are payable to outside creditors are examples of liabilities. The latter constitute monetary claims against the assets of the business. What remains after these claims are satisfied represents the proprietorship or the claim of the owner or owners. In other words, the property or valuable goods of a business minus its debts will equal the *capital* or *net worth* of the venture. The stakes in the properties of a firm are thus seen to be held by its proprietors and its creditors.

This idea is formally expressed by the accountant in terms of a basic equation:

$$\text{Assets} - \text{liabilities} = \text{capital}$$

With the negative terms transposed, the equation would read

$$\text{Assets} = \text{liabilities} + \text{capital}$$

Accounting facts are classified in this latter form. On the left side are recorded all assets (everything that the business owns). The right side shows to whom these assets belong, *i.e.*, the liabilities (to outside creditors) and the capital (that part of the business which belongs to the owners). The items on the left side are called *debits*; those on the right are known as *credits*. It is a fundamental rule that on the basis of the equation, debits must equal credits.[1]

The Balance Sheet. The balance sheet portrays the financial status of a concern at a given moment so as to reveal the total amount of its assets, its outstanding indebtedness, and the equity of its owners. In other words, it is a systematically arranged statement expressing the value of all the terms in the equation

$$\text{Assets} = \text{liabilities} + \text{capital}$$

These elements are summarized as follows:

BALANCE SHEET

TAYLOR MANUFACTURING COMPANY, INC.

As of June 30

Current Assets:			Current Liabilities:	
Cash		$ 18,654	Notes Payable	$ 16,300
Salable Securities		6,275	Accounts Payable	9,750
Notes Receivable		5,570	Accrued Liabilities	1,667
Accounts Receivable		4,133	Funded Debt:	
Inventories (June 30)		68,975	Bonds	32,500
Fixed Assets:			Capital:	
Investments		8,600	Common Stock	90,500
Real Estate		48,000	Surplus	26,200
Machinery and Equipment	18,000		Reserves for Insurance	8,700
Less: Reserve for Depreciation	4,000	14,000		
Office Furniture		4,200		
Good-will, Trade-marks, and Patents		7,210		
		$185,617		$185,617

[1] This refers to the double-entry system of bookkeeping now almost universally accepted as the standard.

Current Assets. For purposes of indicating differences in liquidity, the assets are usually grouped into the two categories of fixed and current. Current assets are all valuable properties of the company that are in the form of cash or, in the ordinary course of operations of the business, can readily be converted into cash.

Cash is in the form of actual money on hand or of bank balances. It consists of money or bank credit immediately available. Other current assets are accounts receivable, notes receivable, salable merchandise on hand, or materials quickly convertible into salable merchandise. Readily marketable securities, whose sale would not impair the business owning them, are also included among the current assets.

Accounts receivable is a blanket term, used to describe the total sum of money due from debtors who have bought merchandise on credit. Naturally, in order to keep an accurate check on the amounts owed by each debtor, it is necessary to maintain a separate record for each person or firm with whom the company does business. It is frequently impossible, and moreover usually undesirable, to list the names of each of these debtors on the balance sheet. The lump-sum figure stated for accounts receivable is therefore the total of all the balances of the individual debtor accounts and represents the amount expected to be collected in cash within a reasonably short period of time. If there is any doubt concerning the bona fide collectibility of any of these items, the usual practice is to show the sum estimated as a possible default in the form of a deduction from the expressed book value of these accounts. Of course, if all hope of collecting certain of these accounts vanishes, the asset in question becomes worthless and is written off as a loss.

Notes receivable consist of promissory notes received from debtors of the firm. They may or may not be interest bearing. Where trading relations are such as to give rise to trade acceptances, these instruments are of similar character to notes receivable and are frequently thus classified. "Acceptances receivable" would be a more accurate subclassification.

Merchandise inventories are referred to briefly as "stock in trade." If, after a period of operations, a physical inspection and an evaluation reveal that a total specified value of unused or unsold goods remains in stock, this item or series of items is recorded among the current assets on the balance sheet.

Securities in the form of stocks, bonds, or readily marketable short-term commercial paper are often purchased when idle cash funds become excessively large. These investments are seldom regarded as permanent and have no relation to the conduct or control of the business. If no great losses would normally be sustained through sudden or immediate liquidation of these holdings, they are normally regarded as current assets.

Fixed Assets. Fixed assets consist of tangible and intangible properties that are regarded as essential permanent investments of a company. They may be divided roughly into four general categories, *viz.*, real estate, furnishings and equipment, investments in subsidiary firms, and intangible rights or properties.

In the first category are found such items as lands and buildings, improvements on land, construction work, and leaseholds. Most of these terms are self-explanatory. The last, *i.e.*, leaseholds, are temporary rights to the use of certain properties, granted under the terms of a lease. All these assets are ordinarily intended to remain in the business for operating purposes and are not sold in the usual course of operations. They form the physical foundation or basis for the conduct of the business of the firm.

In the second group are such movables as form a permanent part of the productive apparatus but are not usually considered a part of the real estate on which they are situated. Such, for example, are the many different classes of industrial and commercial equipment, ranging from the heavy machinery to the light tools and working parts. Furniture and fixtures, stacks, files, and display cases are included in this classification. So also are trucks, buses, automobiles, electric cars, airplanes, and other delivery and transportation equipment for use and not for sale. It is generally recognized that there is a gradual shrinkage in value of most of these assets because of deterioration, wear and tear, and general aging. Cumulative allowances are therefore made from year to year for depreciation, obsolescence, or depletion of the properties. These allowances are almost always arbitrary—being based upon the closest estimates available on the probable life of the article in question. Each asset is usually considered a separate unit and is the subject of individual calculation on this score. The cumulated credits, or allowance accounts, containing the total amount of these calculated diminutions in value of the fixed assets are usually indicated on the balance sheet as deductions from the recorded values of these assets, so as to show their true net values. This is illustrated in the balance sheet on page 115. The asset Machinery and Equipment is recorded on the books at its original cost value of $18,000. However, over a number of years, an accumulated allowance of $4,000 has been set up to show the estimated depreciation in the value of this equipment. The net value is therefore the difference, or $14,000.

A third group of fixed assets consists of permanent investments in the form of securities. These are usually represented by stocks or bonds of affiliated or subsidiary companies. Such holdings often provide the controlling interest in another company or at any rate furnish a certain measure of interlocking interest which is deemed essential to the sound operation of the venture. The value of such investments is normally

estimated at their original cost or the market value, whichever is lower. Should there be any doubt about their realizable worth, it is sometimes the practice to list them at a nominal figure. For example, following the Second World War, the F. W. Woolworth Company conservatively stated the value of its majority interest in its German affiliate as "one dollar."

Another variety of long-term security investment is the guarantee fund or sinking fund, set up for the eventual retirement of a bonded debt. Money put aside as a fund and invested in conservative liens or equities until needed for a specifically designated purpose is relatively fixed in character and, although often easily liquidated, cannot be considered as part of the current assets.

Finally, a number of valuable rights or intangible properties must be listed in this category of fixed or permanent assets. These include such governmental grants or privileges as franchises, patent rights, copyrights, and trade-marks and the value arising from reputation and business prestige—normally referred to as *good-will.*

Franchises are privileges granted by the state, to make use of public property usually in the conduct or operation of some public utility. The exclusive right of way of a railroad along a public highway or the authority given to a power company to run cables under the street is an example of franchise grants. Privileges of this variety are valuable and are sometimes assigned by one company to another at attractive prices.

Patent rights, copyrights, and trade-marks are rights registered with the federal government, conferring exclusive control of certain processes, literary or artistic productions, or trade labels or designs used to identify particular brands of goods. None of these rights is very expensive to obtain directly from the government; and when so secured, they may be recorded on the accounting books at the nominal cost of the services and fees that are paid. Occasionally a company places a high value upon these rights, in which case the latter may constitute a significant item in the list of assets.

Most intangible and evanescent of this list of assets is the item good-will. Briefly described, it is the value attached to the advantages or benefits that a certain business enjoys in view of income-earning abilities, based in part upon its established position, large clientele, or widespread favorable reputation. Naturally, there is much difference of opinion relating to the method of computing this value. Companies desiring to be conservative in policy and yet wishing to give public notice of their recognition of the existence of property of this character frequently record it at a nominal figure such as one dollar. Occasionally an arbitrary estimate is made and set up as the book value. The estimate of this intangible good is felt by many to be best established when the business is sold. It is then taken

to be equal to the excess of selling price over the difference between the carefully appraised value of the other assets of the firm and the liabilities.

Liabilities. Liabilities are divided into current and fixed obligations. Among the current liabilities are notes payable, accounts payable, and acceptances payable. Intrinsically these accounts are of the same character as the current assets: notes receivable, accounts receivable, and acceptances receivable; but, of course, instead of representing items due to the firm from debtors, for which cash will be received, they are items payable by the firm to its creditors and result in eventual cash disbursements. Notes payable are promissory notes requiring the payment by the company of a certain principal sum at a given date. Accounts payable are records of indebtedness to trade creditors from whom credit was received in the purchase of goods. It is a regularly accepted practice in the United States to allow from 10 to 60 days for the payment of most of such obligations. Acceptances payable are like notes payable; they are obligations arising from the acceptance or signing by the company of time drafts drawn against it by creditors.[1]

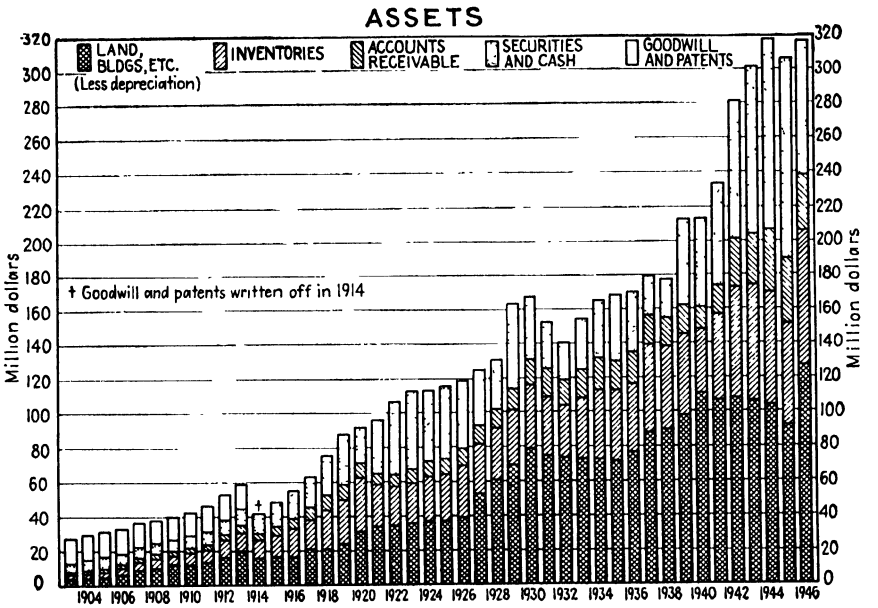
Interest expense that has accumulated on a note payable but is not yet due must, nevertheless, be considered as a current liability. Unpaid wages or tax charges are of like character. These are known as accrued liabilities.

Fixed liabilities or funded debts are obligations that do not require the retirement of their principal sums within the current year. Mortgage bonds or other classes of bonded indebtedness with long-term maturities are in this category.[2]

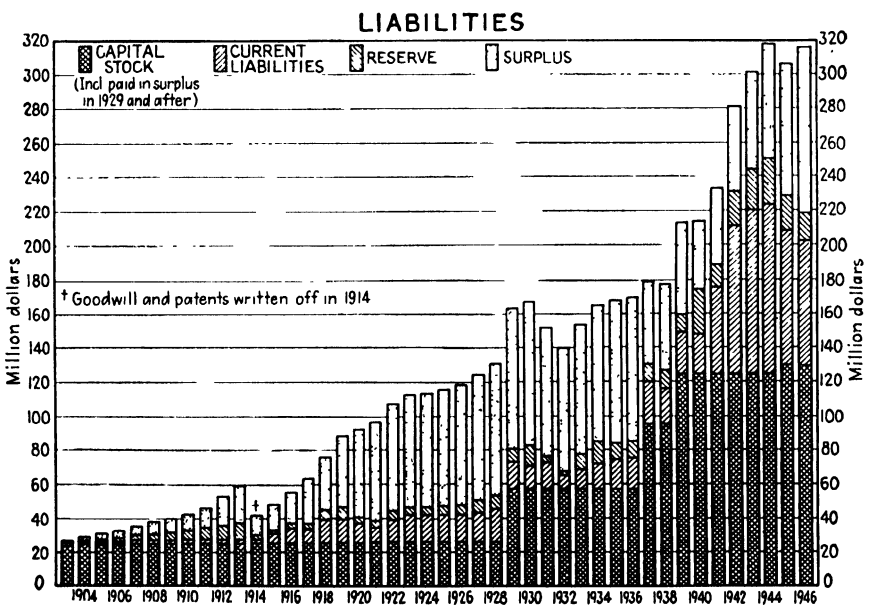
Capital. The capital accounts have been described as representing the net equity, net ownership, proprietorship, or net worth of the company. In an individual enterprise, the proprietor's capital account summarizes this net worth of his business. In a corporation, there usually are two sets of accounts that, taken together, constitute the capital of the concern. These accounts are capital stock and surplus. Capital stock is recorded at a fixed or par value which is arbitrarily assigned to it, or else, where there is no fixed or par value, it is given a value equal to the amount for which it is sold. In either case, the value so recorded remains fixed and seldom changes unless additional stock is issued and sold. During its regular course of operations, a business either achieves net gains or sustains net losses. Both of these constitute a change in the capital investment. In a corporation, these changes are recorded in the surplus account. Gains are added to the surplus; losses are subtracted from it. If losses are so large as to exceed any accumulated surplus, a deficit results. In that

[1] For a more complete explanation of this type of commercial paper see Chap. XXIV.

[2] See Chap. XXIII for a description of these classes of long-term indebtedness.



Classified assets of the Eastman Kodak Co. (1903–1946).



Liabilities and capital of the Eastman Kodak Co. (1903–1946).

event, assets would be less than liabilities plus capital. Therefore, deficits are subtracted from the capital; both sides will then balance.

In order to set aside a certain portion of accumulated profits for some specific purpose, "reserves" of various kinds are created. A part of the surplus is given some characteristic label, such as reserve for insurance or reserve for contingent losses. This procedure earmarks that portion of the surplus account and prevents its use for any other purpose than the one designated. Thus, if a reserve for insurance is set up, it means that part of the earnings have been earmarked to provide against certain risks, and none of such earnings may be distributed as dividends or profit shares to the owners of the business. This does not change the fact, however, that reserves created in this way are still surplus accounts and hence part of the capital or net worth of the business.

Changes in the assets, liabilities, and capital of the Eastman Kodak Company over a period of years are illustrated in the charts on page 120. Note that for each year, although the composition of the groups of items changed, the sum total of the assets was always equal in amount to that of the liabilities plus capital.

Explanatory Balance Sheet. The financial statement on page 122 issued by Swift & Company presents in some detail the specific character of the assets, liabilities, and shareholders' ownership, or capital accounts of the corporation. It is well worth studying, for it reveals with unusual clarity how the finances of a large firm such as this are distributed.

Records of Transactions. If business remained static, *i.e.*, if no changes occurred in the composition or in the value of the debits or credits, the fundamental equation, assets = liabilities + capital, would naturally remain constant. However, once the enterprise is put into operation, all these elements are in a continuous state of flux. Every going concern is extremely dynamic—each business transaction involving shifts in the character or financial importance of some asset or liability or in the capital or in all three sets of terms. Despite these changes, the equation remains in balance. It represents what may be termed a dynamic equilibrium; the individual items are altered but always in such a way that the balance is not destroyed.

Six possible changes can occur: an increase or decrease in assets, a growth or decline in liabilities, and a gain or loss in capital. In every business transaction, there is always a combination of two or more of these happenings. Assets and liabilities both decrease by the same amount, *e.g.*, when a loan of $1,000 is paid in cash to the creditor. In this case, the asset Cash is diminished and the liability Notes Payable is reduced by this sum. Or assets and capital may increase by $500 each, as is the case when additional cash of that amount is invested by the owners of the business. In both illustrations, the values of the two sides of the basic equation change, but

Balance Sheet of Swift and Associated Companies

(Listing What We Own, What We Owe, and What We Are Worth, as of October 26, 1946, the End of the Fiscal Year)

Assets (*What We Own*)		*Liabilities* (*What We Owe*)	
Cash:		Bonds:	
In 700 banks in various towns and cities used to pay wages, to purchase raw materials and supplies, and for other expenditures	$ 17,148,958	Owing to bondholders who have loaned us money	$ 18,750,000
Government Securities:		Miscellaneous	
Which can be sold to produce additional cash when business needs require, such as restoration of normal inventories, modernization of plants and equipment, etc.	67,508,113	Owing to manufacturers for materials and supplies; interest payable; also for wages and salaries payable to employes	19,911,202
Money Owed Us:		Provision for replacement of basic "Lifo" inventories	11,565,634
Principally from customers for products that we sold to them	64,961,492	Taxes Payable:	
Inventories:		Provision for income taxes	20,889,818
Meats and other finished products, raw materials, and other materials being processed, also supplies such as fuel, barrels, boxes, paper, salt, sugar, on hand	99,827,132	Provision for social security, state, local, and foreign taxes	2,928,967
Investments:		Total Liabilities	$ 74,045,621
Chiefly in A. C. Lawrence Leather Co. and subsidiaries in Great Britain	11,396,165	*Shareholders' Ownership* (*What We Are Worth*)	
Land, Buildings:		Capital:	
Also machinery, tools, delivery equipment, fixtures, and furniture used in our operations	99,859,317	Shareholders have invested their savings which were used to build and buy plants, equipment, tools, and other materials to operate our business. This is known as *capital stock*	$150,000,000
Miscellaneous Assets	5,435,925	Surplus:	
		Shareholders have left a part of earnings, for over 60 years, in the business which have been used for the building and purchase of additional plants, machinery, raw materials, etc. This is known as *earned surplus*.	117,324,481
		Reserves:	
		Other earnings that shareholders have left in the business are regarded as special reserves that could be used without impairing the surplus, in case of losses from fire, contingencies, decline in inventory values, or to catch up with deferred maintenance of properties	24,767,000
		Net Worth:	
		Total Shareholders' Ownership	$292,091,481
Total Assets	$366,137,102	Total Liabilities and Shareholders Ownership	$366,137,102

they continue to remain in balance. It may also happen that one asset is exchanged for another, such as in the purchase of furniture for cash, or one liability for another as in the settlement of an open account with a promissory note. In each individual occurrence in business, the amount of the debits will equal the amount of the credits. Hence, the sums of the debits and the total credits recorded in the books of account should at any given instant be equal.

The accounting records of a firm show the details of each of these changes in any one of its financial items. If properly kept, the books of account contain complete summaries of all daily transactions of a business. These are usually entered in their chronological order in books known as *journals*. The information is then transferred to volumes called *ledgers* which contain records of debits and credits relating to classified items. Each of these separate records is referred to as an *account*. It is a convenient summary of all facts and all changes—whether increases or decreases—relating to an asset element, liability element, or capital element. For example, all transactions involving cash, *i.e.*, receipts and disbursements, are recorded in one place, so that it is possible at any time to know exactly how much cash is on hand. Similarly, all dealings with James Boyle, a customer of the firm, are classified in one account so that the information relating to all sales made to him on credit and all payments made by him to the firm is readily available. So, also, all sales are kept together in order to facilitate summarizing total sales for any given period.

The following illustration will serve to indicate the general appearance of an account: [1]

CASH

	Explanation	Amount		Explanation	Amount
Jan. 1	Balance	$ 6,500.00	Jan. 2	Wages	$ 1,200.00
2	Sales	1,800.00	3	Taxes paid	300.00
2	H. Blake (on account)	200.00	5	Notes payable	580.00
3	Rent income	100.00	6	Interest expense	20.00
4	Sales	2,100.00	8	Balance	10,600.00
5	Commission rec'd	50.00			
6	Sales	1,950.00			
		$12,700.00			$12,700.00
8	Balance	$10,600.00			

[1] In actual accounting practice special journals are used which preclude the need for detailed explanations in the individual accounts.

This is a *cash account* and relates exclusively to the inflow and outflow of cash in the business. On the left side (*i.e.*, the debit side) are put the amount of cash in the business and any increases in that amount. All disbursements are entered on the right side (credit) of the account. The dates refer to the time when each transaction took place as recorded in the journal. The explanation columns briefly summarize the source of the cash receipts or the purpose of the cash disbursements. Thus, on January 2, the $1,800 was received through the sale of merchandise, and the $200 was received from a customer, H. Blake, who paid this amount on account. On January 3, the $100 was received from a tenant for rent. Similarly, on January 2, $1,200 was paid out for wages; on January 3, $300 was spent for taxes; and on January 5, $580 was disbursed to pay off a promissory note that had become due. At the end of the day, week, or month (or whenever it is desired to discover the cash balance), the totals of both sides are obtained and the difference, or balance, is ascertained. This is the net amount of the asset called Cash.

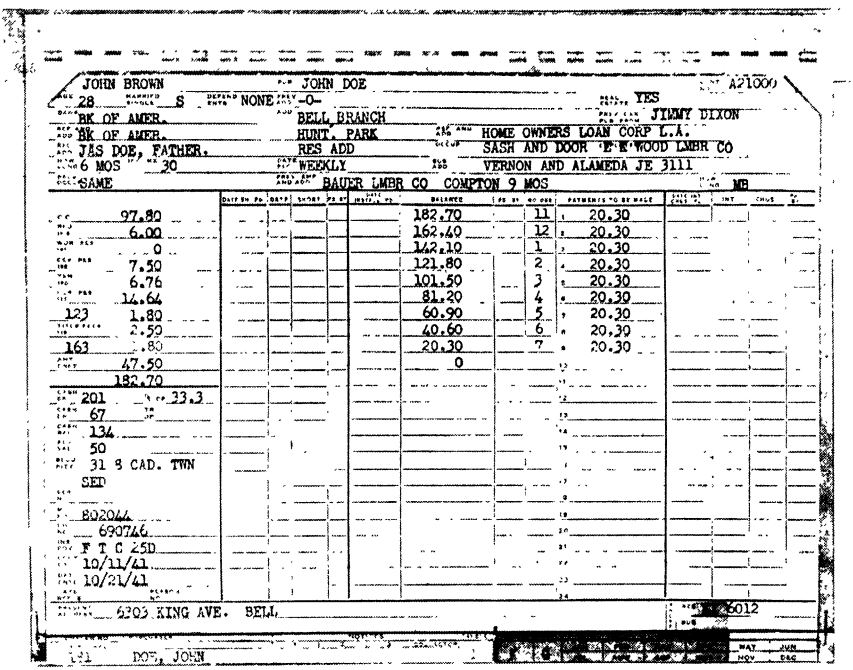
Asset accounts, like cash, real estate, and equipment, normally have debit balances; *i.e.*, the magnitude of the left side exceeds the sum of the right side. Liability accounts, on the other hand, normally have credit balances. For example, the following account reveals that on January 1 the firm owed $2,000 in notes payable. On January 5, cash payments of $580 were made. At the end of the week (January 8), this left a credit balance of notes payable of $1,420. If all the notes had been paid off, there would have been no balance, or remainder, and the account would be said to have been closed. As long as any balance remains in this account, it will be on the right, or credit, side.

NOTES PAYABLE

	Explanation	Amount		Explanation	Amount
Jan. 5	Cash	$ 580.00	Jan. 1	Balance	$2,000.00
8	Balance	1,420.00			
		$2,000.00			$2,000.00
			8	Balance	$1,420.00

In a relatively small business, a few dozen accounts will probably suffice to classify the elements of the business for the needs of the proprietor. In a large venture (depending, of course, upon the need for detailed in-

formation), the number of accounts might run into several thousand, particularly if business is done on credit and there are large numbers of customers for each of whom separate records must be kept. In the latter situation, it becomes necessary to maintain a series of ledgers and journals and to use loose-leaf and filing devices because of the physical impracticability of recording such voluminous data in one simple set of books. For

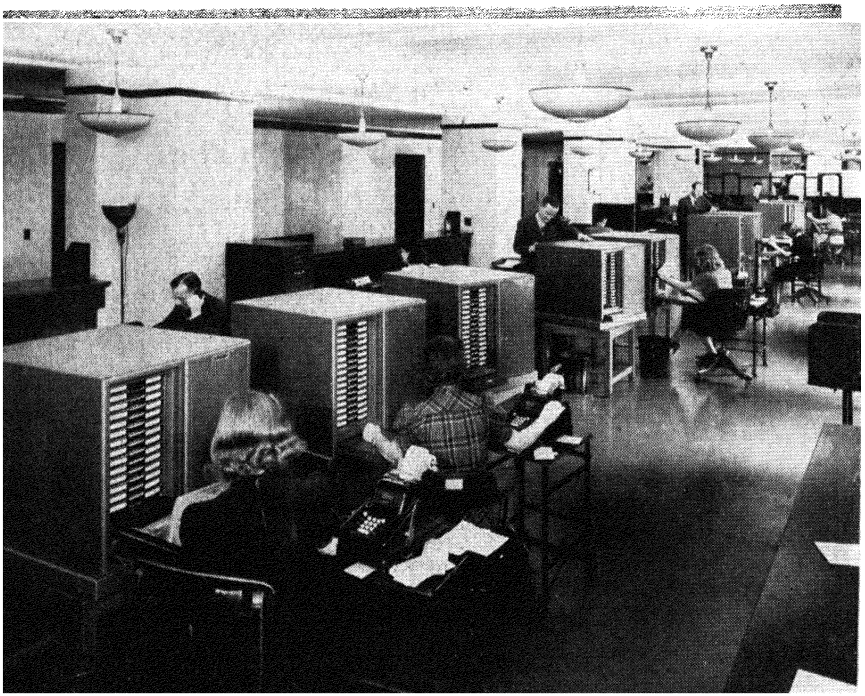


Accounts-receivable ledger card, held in position in a Kardex Visible Record Control File. (*Courtesy of Remington Rand, Inc.*)

example, the Pacific Finance Corporation, a large West coast credit company, controls its thousands of accounts through a convenient card-filing system. When a loan is made, a separate card is prepared for each borrower, showing a full schedule of payments due. As payments are received, the amounts and dates are recorded on the card. A typical accounts receivable card is illustrated above. On page 126 is shown a section of the Pacific Finance Corporation's office where these cards are filed in fireproof cabinets (Kardex).

Systems of the latter type are generally used in conjunction with machine operation. Modern accounting machinery, combining the features of the

typewriter and the calculating machine, makes possible the neat and accurate production of voluminous records at high speed. The operator merely inserts the forms required for a given accounting application and enters the necessary figures on the keyboard. The computing is performed automatically as each figure is typed. Additions, subtractions, cross computa-

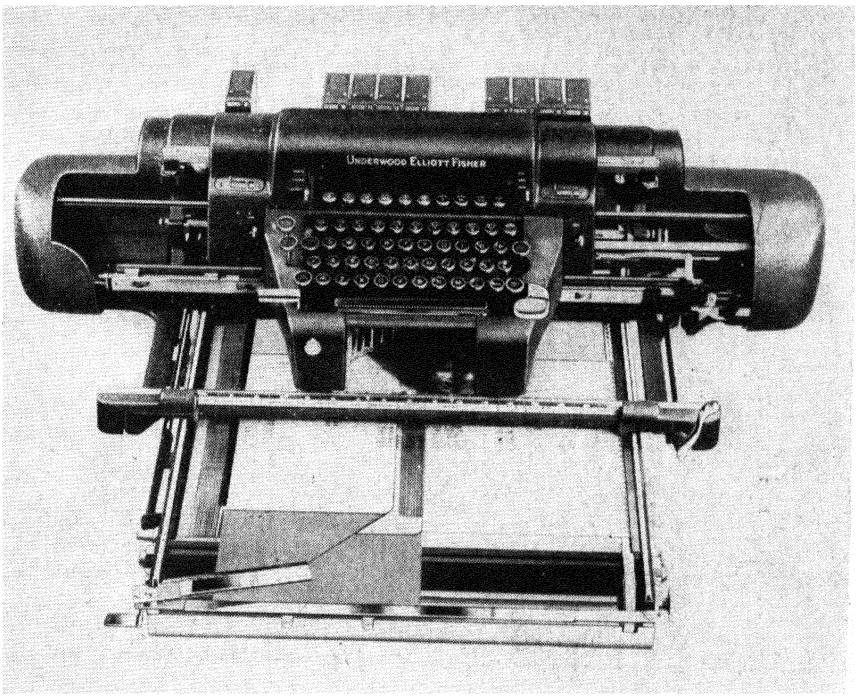


Section of Pacific Finance Corporation's office, showing grouping of large battery of Kardex files, permitting a high concentration of many accounts in a small area. (*Courtesy of Remington Rand, Inc.*)

tions, and totals are entered in appropriate columns, together with names, addresses, descriptions, and folio numbers. Forms of different sizes may be inserted and clamped in perfect alignment so that it is possible, for example, to prepare journals, individual ledger accounts, and itemized statements to each customer all in one operation (see illustrations on page 127 and at the top of page 128).

A further application of mechanical techniques to modern accounting procedures is seen in the use of electric punched-card machines. Numerical and alphabetical information is recorded in the form of permanent punched holes in numbered columns of standardized cards. The holes punched in the card actuate the accounting machine to list, classify, add,

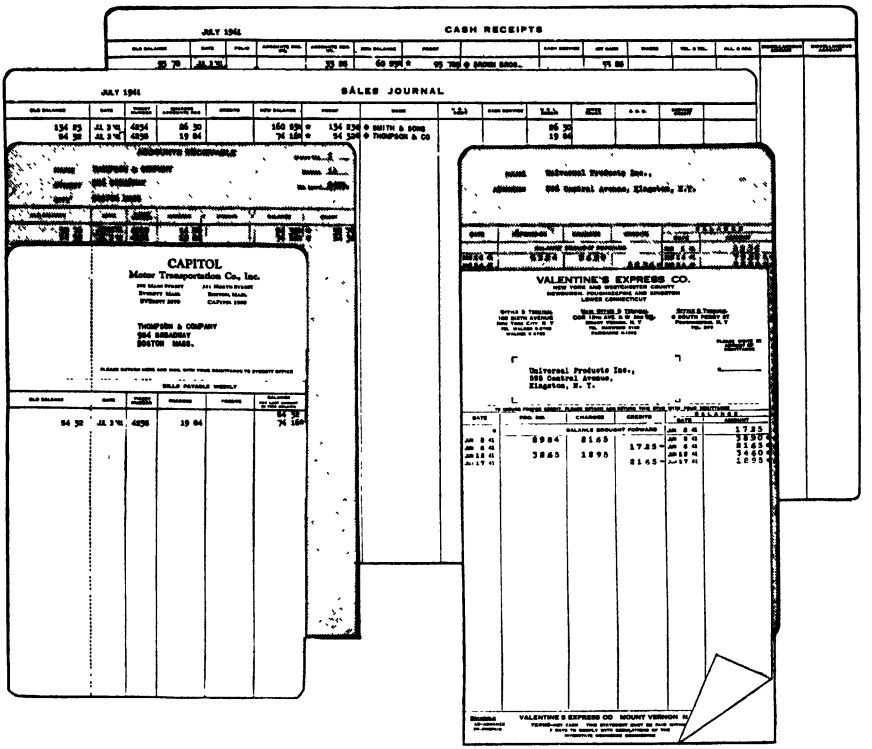
subtract, and print totals and net balances. In addition, it prints names and addresses and any other data punched in the cards. The arrangement for the compiled and printed reports is completely flexible. Therefore, the form of the report is not dependent on the arrangement of the information punched in the card. For example, in payroll accounting, the use of



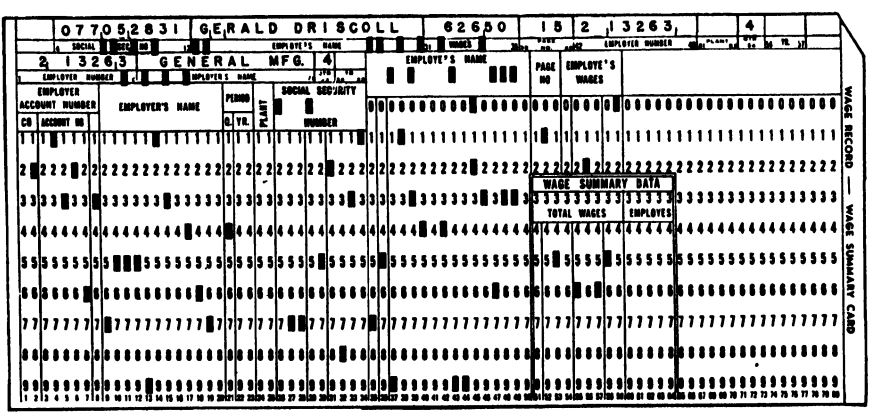
Electrified accounting machine which simplifies the production of accounting records. (*Courtesy of Underwood Corp.*)

this system enables a company to prepare entirely by automatic machinery a payroll register, employer's report of taxable wages paid to each employee, weekly statement of earnings for each employee, and many other tabulations. A typical card, containing payroll data, is shown at the bottom of page 128. One of the electric accounting machines that operates on the basis of these cards is illustrated on page 129.

The Profit and Loss Statement. The management of a business is interested in ascertaining, from time to time, the net effect of all transactions from the standpoint of their profitability to the owners. This information is reported in the *profit and loss statement* or income and expense statement, which presents a record of the results of business operation over



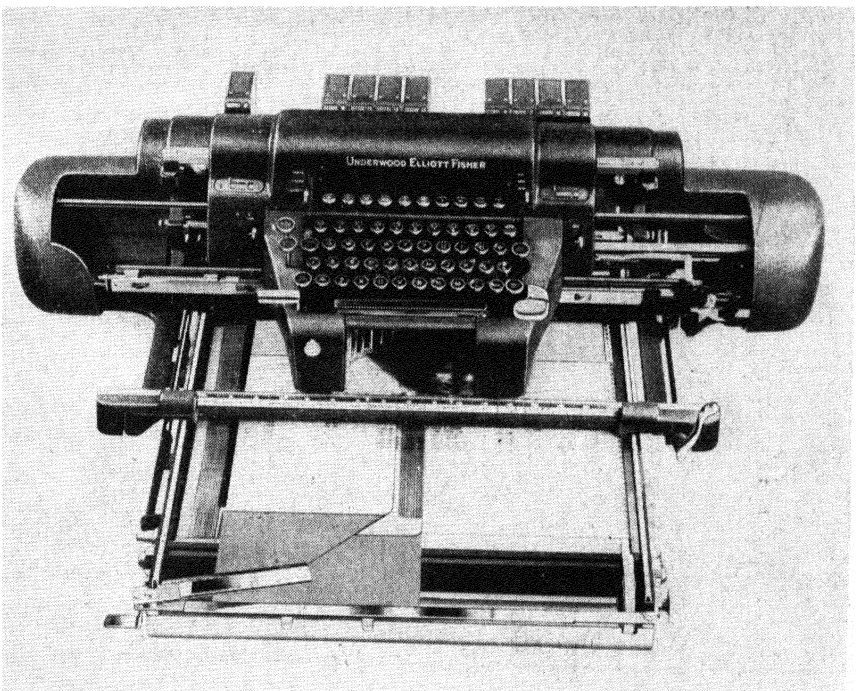
On modern accounting machines a variety of forms relating to a given transaction can be produced simultaneously. (*Courtesy of Underwood Corp.*)



Tabulation card prepared for mechanical sorting and tabulating. Holes are made with a punching machine. (*Courtesy of the International Business Machines Corp.*)

a period of time and reveals the causes of gain or loss to the company. It brings together in a logical arrangement all the items involving increases and decreases in the capital of the concern.

A detailed statement of the profit for a cigar manufacturing company for a six months' period ending June 30 appears on page 130. The first



Electric punched card accounting machine. (*Courtesy of the International Business Machines Corp.*)

item appearing on this statement is "gross sales." This represents the total sales income or revenue of the business for the period under review. It is of the nature of gain to the business and, if it were obtained without any cost or expense, would constitute *in toto* an addition to the capital or net worth of the concern. However, no business operates on this "costless" basis. There are costs of materials, supplies, power, insurance, interest, labor, etc., that must be met if a continued stream of goods or services is to be forthcoming for sale. Consequently, deductions must be made from these total original revenues derived from sales in order to arrive at the surplus or profit which is, in reality, the net addition to the capital.

These expenses (properly labeled) are classified into groups and are subtracted in a series of stages from the revenue originally stated.

PROFIT AND LOSS STATEMENT

THE TAYLOR MANUFACTURING COMPANY, INC.

FOR THE SIX MONTHS ENDING JUNE 30

Sales:			
Gross sales			$128,000
Less: Sales returns and adjustments			3,400
Net sales			$124,600
Manufacturing Costs:			
Materials and labor			
Inventories of materials (Jan. 1)	$ 70,500		
Purchases (Jan. 1 to June 30)	40,750		
	$111,250		
Less: inventories of materials (June 30)	58,275		
Total raw materials used		$52,975	
Wages of direct labor		15,050	
Prime cost		$68,025	
Factory expenses		12,475	
Cost of goods manufactured		$80,500	
Cost of Goods Sold:			
Finished goods inventory (Jan. 1)		12,700	
Total cost of goods		$93,200	
Less: finished goods inventory (June 30)		10,700	
Cost of goods sold			82,500
Gross profit			$ 42,100
Selling and Administrative Expenses.			
Selling expenses		$15,675	
Administrative expenses		18,155	
Total administrative and selling expenses			33,830
Operating profit			$ 8,270
Other Income and Expenses:			
Other income			
Interest income	$ 485		
Income from investments	345		
		$ 830	
Other expenses			
Interest and discount expense		270	
Net addition to income			560
Net profit			$ 8,830

The first item deducted from gross sales is sales returns, or allowances to customers for returned and defective merchandise. This results in "net sales" from which is next deducted the cost of goods sold. In a manufacturing concern, such as the cigar company whose profit and loss statement we are considering, the calculation of this latter figure involves two steps. First, the value of all raw material used, the labor costs, and other factory expenses are added together to arrive at the cost of goods manufactured. Then it is necessary to adjust for inventories of goods still on hand in order to arrive at the cost of the goods actually sold. When this sum is subtracted from net sales, the balance represents *gross profit.* From this gross profit are deducted selling expenses (such as salesmen's salaries and commissions, traveling expenses, advertising costs) and administrative or overhead expenses, including salaries of executives, general taxes, and insurance. This results in *operating profit.* The next step involves further additions of financial income, *e.g.*, interest income, income from other investments outside the firm, and the subtraction of other expenses like interest and discount. The final result is *net profit* which can now be distributed as dividends or profit shares to the owners or transferred to the surplus or capital account so as to increase the capital investment in the business.

There is often a substantial difference in appearance among the profit and loss statements prepared for various concerns. The reasons for this lack of uniformity are many. In some instances, the nature of the business is the cause. The items appearing in the financial statement of a manufacturing corporation will be somewhat different from those in a similar report issued by a trading enterprise. Calculations of costs in a service industry, such as a laundry, naturally differ materially from the statement of costs in a steel mill. Other causes for variations in published income statements are due to differences in policy regarding the separate classification of certain items, to the desire to avoid publicity of confidential data, or to an attempt to simplify the report so that it will be more easily understood. There is a definite trend on the part of large corporations to issue financial reports in simple nontechnical language understandable to its stockholders, employees, and the general public. Such statements usually form part of an education program. The simplified financial statement issued to its employees and stockholders by the Fruehauf Trailer Company, which is reproduced on page 132, illustrates this latter trend.

From the executive standpoint, the periodic profit and loss statement is a veritable storehouse of interesting facts. It makes possible a ready comparison of prime costs (*i.e.*, direct labor plus cost of materials) with total sales of these goods, of one class of expense with other expenses, or of all sources of income with all types of expenses. It reveals the relative ad-

vantages or drawbacks, from the pecuniary standpoint, in maintaining given departments. It indicates the margins of return on invested capital. In short, it is a useful summary which affords a rapid check on the effectiveness of current operations. Moreover, by comparing the profit and loss statements for several fiscal periods, the executive can discern interesting trends in sales and cost figures and should be able to discover whether

"WHERE FRUEHAUF DOLLARS GO" *

Statement of Profit and Loss

January 1, 1946, to December 31, 1946

Total Income:	
Received from customers for trailers, parts, and service	$77,056,089
Costs and Expenses:	
Income was spent as follows:	
Cost of materials, supplies, and services bought from other concerns in order to build our products	43,927,741
Wages and salaries paid to Fruehauf employees	22,424,166
Cost of tools, equipment, and buildings wearing out (depreciation)	620,886
Paid to local, state, and federal governments in taxes	4,427,844
Cost of borrowing money to operate business (interest), exclusive of preferred stock dividends	215,784
Total cost and expenses	71,616,511
Balance (Total Income minus total Costs and Expenses) which is known as profit	5,439,578
What We Did with Our Profit (last figure above):	
Dividends to stockholders (paid in return for the use of their money that they have invested in this business)	1,505,239
Put back into the business to enable us to carry on and grow	3,934,339
Total	$ 5,439,578

* Courtesy of the Fruehauf Trailer Co.

or not there has been any progress or improvement in certain variables.

Many other useful summary statements are drawn from accounting records for the guidance of management. For example, a schedule of customers' accounts can be used to show which people are most delinquent in making payments or which accounts are the most valuable. Or a comparative monthly statement of bank balances will reveal the extent to which the cash position of the business is influenced by seasonal requirements.

Investment Requirements. In setting up a new enterprise or in assuming control over one already established, an estimate should be made of the anticipated investment requirements. Whether an individual embarks on a business venture with his savings of a few thousand dollars or a

promoter organizes a corporation capitalized at a few million dollars, the problem of the proper allocation of available funds must receive careful study. How much should be invested in real estate, machinery, and plant equipment? How much should be set aside to pay wages to employees? What part of it will buy raw materials? For any individual concern there should be a normal balance of investments, so that the management will be neither embarrassed by a lack of capital nor saddled with a top-heavy financial structure with funds in excess of needs. Attention must be given, not only to the money invested by the proprietors, but also to the resources made available through the extension of loans by outside creditors. Care should be taken to distribute these total resources in the most effective manner so as to take full advantage of business opportunities.

An Illustrative Case. A theater on the Atlantic seaboard was constructed by two retired actors, at a cost of approximately $500,000. This represented their entire fortune, supplemented by loans extended to them by a few of their interested friends. The completion of the structure marked the realization of their life's ambition to have a theater of their own. It was complete in every detail, including the most modern stage equipment, dressing-room facilities, and lighting apparatus, and embodying the latest advances in theater construction from the standpoint of seating arrangement and acoustic properties. However, one thing was lacking. Money! The enthusiasm of planning and directing the construction of their ideal theatrical house completely carried these "actor-managers" away from the very practical consideration of the later need of additional funds for its operation and maintenance. A hasty estimate revealed that for general personnel alone—not including actors—the weekly payroll would exceed $1,000. In addition, costs of heating and lighting would have to be paid. Taxes were estimated to exceed an average weekly charge of $200. Interest was due on the loans. It would cost at least $50,000 to organize a show. Further loans were out of the question. Several stock companies were finally persuaded to move their shows into the theater, but the box office receipts were meager; and after a short time, these efforts ceased. Finally, the owners induced a corporation, operating a motion-picture chain, to buy their theater for $350,000.

The major difficulty here was the concentration of the entire investment in fixed assets with the consequent shortage of funds for current operating purposes. For a project of this size, these partners were inadequately financed. Either a smaller theater should have been built or else additional funds should have been guaranteed before construction work was ever begun.

It will be seen, therefore, that a sufficient portion of the invested funds must be kept in the form of cash or of current assets (which in the normal

course of business can be converted into cash), so that the regular expenses of operation can be met. This operating fund is used for the regular flow of business transactions. It may be regarded as the lifeblood of a corporation in the sense that the series of operations conducted by the company are dependent upon its smooth circulation. In contrast to the fixed investments, the prime characteristic of these assets is their repetitive liquidity within comparatively short cycles.

These working funds are used to pay recurring costs in a business. Of these, the cost of labor is the greatest item in most cases. Where raw materials or merchandise must be acquired for industrial or selling functions, another large portion of these funds is drawn upon. In addition, there are such expenses as advertising, insurance, taxes, interest, miscellaneous supplies, power and light, and telephone bills. These expenses must be paid currently, and the amount of cash should be large enough to cover such payments whenever they fall due. Naturally, if these outlays continue for any length of time, the cash, no matter how large, will gradually become depleted. However, these costs arise in connection with the productive process; and if the sales division of the firm is functioning properly, the regular round of operations should soon result in an inflow of revenues arising from the sale of goods and services. This inflow replenishes the cash balances which may now be tapped for further disbursements, and the cycle is repeated.

Turnover. The length of this cycle depends to a large extent upon the time required in the production process of an industry. In cotton growing, only one crop is obtained each year; in alfalfa, four crops can be harvested from the same farm annually in certain areas on the Pacific coast. Mining is a continuous process, and the amount of ore extracted usually depends upon the rapidity with which it can be sold. Some manufacturing operations require more than a year for their completion; others operate on a schedule of daily output of finished products. In the cotton industry, therefore, the money spent for seed, fertilizer, feed for work animals, gasoline and oil for machinery, and the wages of labor during the planting, growing, and harvesting periods will not return until the crop is sold at the end of the season. In the alfalfa industry, the outlays for seed, labor, etc., are made at the beginning of the season; and when the first crop is sold, the money is returned and can be used again for new seed, labor, and other costs of operation. The third crop is financed with the cash obtained in the sale of crop 2, and so on. Here the cycle is repeated four times in one year, as compared with the cotton industry in which almost a full year is required for the completion of a single cycle. A dairy that sells 1,000 bottles of milk for cash each day and with the proceeds buys new milk for distribution the following day illustrates the extreme possibility of re-

plenishing the outflow of current operating funds within 24 hours—thus completing the cycle in one day. On the other hand, when the glassworks at Corning, N. Y., pour glass for the construction of a 25-ton lens, they begin an operation that will take several years to complete—on account of the long time necessary to cool, grind, and polish the glass. To be sure, when completed, a product of this kind is of permanent value and to its owner is a fixed asset. To the glass company making it, however, it is part of a production process and, as such, ties up the use of current assets for this period until completed.

The frequency with which a complete cycle of this character occurs in a given business is referred to as "turnover." Turnover is usually expressed as a rate. The number of times that the cycle of production is completed within a year establishes the rate of turnover in a given industry. Thus in the cotton farm, the rate of turnover is 1. In the dairy industry in the sale of milk, it may be over 300. In estimating the amount of money that must be set aside to take care of current expenses, therefore, the rate of turnover in the business should be considered. When the rate is low, current investments will have to be relatively greater than when the turnover ratio is high. A manufacturer who is able to sell a fairly steady output of goods each month for cash must have a current investment available for raw materials and labor equal to only one-twelfth of his annual expenditures for these items.

Working Capital. Working capital, in the strict accounting sense, is the difference between current assets and current liabilities. At any given time, however, cash available for current disbursements may exceed or be less than this working capital. If payments to creditors are postponed, or if temporary borrowings are negotiated, the effect is to increase current assets without the necessity of making further investments. Conversely, if long periods elapse between the time of selling and the actual collection of cash from customers, a larger working capital will be required; for in this case, working-capital funds are invested, for some time, in the current assets—accounts receivable or notes receivable. Until these accounts are liquidated, the money is temporarily tied up and cannot be used for the financing of new current production. The turnover of accounts receivable is therefore as significant as the turnover in the physical production processes, for the number of days or months required for collection determines, in part, the degree of rapidity with which new operations can be begun. For this reason, certain firms (such as Macy and Woolworth) operate largely on a cash basis of selling. This increases the rate of turnover and reduces working-capital requirements.

Typical Ratios. There is a great degree of variation between fixed- and current-asset ratios in different industries. In a hydroelectric power proj-

ect, most of the investment consists of fixed assets. In an enterprise in which the property is rented monthly, machines are hired, and the workmen are paid as the work is turned out, there are practically no fixed investments. Such an organization could go out of business within a week's notice unless it had tying contractual agreements. On the other hand, a railroad company with its right of way, tracks, stations, switchyards, locomotives, and trains has heavy capital investments.

To a large extent, then, the nature of the industrial process will determine the proportions of a given investment that must be devoted to fixed assets and to working funds. The financial structure of a company should be modeled in terms of the industrial requirements. Sound management of these investments and careful attention to their proper allocation are essential for the attainment of the most satisfactory returns and for the preservation of the safety of the principal. Table 2 illustrates the ratio of fixed to current assets in a number of leading industries.

TABLE 2.—FIXED AND CURRENT ASSETS

(For selected industries)

Industry	Aggregate current assets *	Aggregate fixed assets *	Percentage of current assets to total assets	Percentage of fixed assets to total assets
Public utility	$171,524,471	$3,381,992,499	4.83	95.17
Petroleum	962,984,874	2,499,708,713	27.81	72.19
Railroad	138,577,608	5,173,394,183	2.61	97.39
Meat packing	326,251,826	402,759,844	44.75	55.25
Steel	633,117,030	2,594,563,944	19.62	80.38
Automobile	402,624,936	912,930,750	30.61	69.39
Department store	102,440,551	127,999,992	44.45	55.55
Copper	165,220,152	916,635,282	15.27	84.73
Dairy	115,671,271	434,713,841	21.02	78.98
General	26,761,677	44,513,946	37.55	62.45

* Stated assets for each industry represent the combined assets of five individual companies selected at random.

There is considerable difference in concentration of investment in fixed properties between a company engaged in an industry like steel production and one operating a department-store business. A national distributor of magazines and periodicals would need a much greater proportion of funds for current purposes than would a producer of bituminous coal. In gen-

eral, the mining, metal, heavy-machinery, and industrial chemical industries are characterized by comparatively heavy investments in fixed assets. On the other hand, light manufacturing, merchandising, and distributing concerns usually keep more than half of their resources in liquid form. In these latter lines of business, sales volume tends to be greater and profit margins of each unit of sales smaller than in the heavier industries. This necessitates a greater and more active volume of working capital.

Questions and Problems

1. Why should a business executive be familiar with the functions of accounting records and financial statements when he employs bookkeepers and accountants?

2. What are some of the important financial statements? How does each help the business executive in problems of policy? Of management? Compare in detail the accounting information presented on a profit and loss statement with that on a balance sheet.

3. Using your own figures, show how the balance sheet of a clothing manufacturer might appear, assuming that he owns the plant. Include three fixed and four current assets and one long-term and two current liabilities. What would be the difference in fixed and current asset requirements if the plant were leased instead of owned?

4. If assets equal $8,000, liabilities $2,000, and capital $6,000, what would be the effect upon the balance sheet if the company borrowed $1,000 from a bank and bought $500 worth of merchandise for cash?

5. Show by means of a balance sheet the proper relationship of the following debits and credits, and add a sixth item large enough to bring them into balance. What is the working capital?

Accounts Payable	$16,000	Bonds Outstanding	$32,000
Notes Receivable	66,000	Cash	7,000
Capital Stock	10,000		

6. What is the function of the profit and loss statement? With what item does the statement usually conclude? Briefly, what are the steps in arriving at this figure?

7. What two major books of account are commonly employed? What function does each serve?

8. Name the six possible changes that can occur in the fundamental equation. Give illustrations of each.

9. What constitutes a fixed asset in one business may be considered a current asset in another. Present several cases to illustrate the meaning of this statement.

10. Why can no ideal ratio be set up between fixed and current assets for all classes of business? How is it possible to determine for any given firm whether or not this ratio is satisfactory? Does a firm with a high turnover in working funds require relatively more or less working capital?

CHAPTER VII

STATISTICAL GUIDES

Application of Statistics. The problems of business management are to a large extent concerned with quantitative information other than that expressed in pecuniary units in the accounting records of a firm. Moreover, it frequently is necessary to analyze the financial reports in such a way as to reveal interesting combinations of data not ordinarily detected in the accounting records themselves. Executive officers are constantly dealing with such matters as volume of output, advertising quotas, trends in raw material prices, and average hourly wage rates. Not only do these officers require accurate facts on which to base their decisions; it is generally necessary to condense and simplify great masses of data before their full meaning and significance can be understood. Statistical methods have been developed to facilitate the preparation and handling of quantitative facts. They serve as tools that make possible the measurement, classification, comparison, and summation of data that, in their cruder form, are less meaningful. When applied to the internal administration of a firm, the techniques of statistics assist in the solution of countless problems in production, marketing, and financial administration. The analysis of relative costs, the comparative study of peak operating loads, and the forecast of sales volume all illustrate the uses of statistical methods in business. In broader studies of labor conditions, world-wide price trends, and shifts in consumer buying habits, the tools of the statistician are indispensable.

The amount of statistical work undertaken by a given firm will depend upon the nature and size of the business and the funds available for these functions. Some of the larger corporations rely heavily upon statistical guides and maintain separate statistical departments to conduct continuous studies. However, in most companies, the tasks of compiling data and preparing analyses from time to time are performed by one or more persons skilled in such work.

Averages. Businessmen are constantly in need of "average" figures. They like to be able to characterize a situation replete with little irregularities by a blanket term that will be fairly representative of general conditions. What size shoe is sold in greatest quantity? What have been the average profits of a company? What is the average wage level for

certain classes of workmen in New Jersey? In Ohio? Are comparatively low summer sales balanced by fairly large winter sales so as to make average sales sufficiently high?

The concept of a "normal" is something that they seek to develop—however infrequently such normal conditions occur in precise form. The builder of one-family houses wants to construct homes with room arrangements suitable for the average family. He may be told that the average American family consists of four and one-half persons. He is naturally aware of the fact that he will find no families in which there are actually four and one-half people. He knows also that in some families, he will find only two members and in others as many as eight or nine. He feels assured, however, that houses built from construction plans based upon this "average" figure will interest the majority of home buyers.

There are various kinds of statistical measures known as *averages* or *measures of central tendency*. The *arithmetic mean* is the most commonly understood average and the one most widely employed. It is obtained by adding together a series of numbers of like character and dividing the sum by the number of items added together. Thus in Table 3, showing the record of yearly losses through fire, reported for the United States by the National Board of Fire Underwriters, the average annual loss is computed as an arithmetic mean by adding the figures for the seven years and dividing the sum by 7.

TABLE 3.—ANNUAL FIRE LOSSES IN THE UNITED STATES

(In millions of dollars)

1940	$306.5
1941	322.4
1942	314.8
1943	380.2
1944	423.5
1945	455.3
1946	561.6
Average annual loss.	394.9

Another form of calculated average, less commonly used, is the *geometric mean*. This is obtained by multiplying the numbers to be averaged and then taking a root of the product. The multiple of the root is determined by the numbers of items being averaged. To illustrate, suppose that the numbers 1, 3, and 9 are to be averaged this way. Then $1 \times 3 \times 9 = 27$. There are three items; hence the cube root of this product must be taken. This will give 3, which is the geometric average. The arithmetic average would have been $4\frac{1}{3}$. A characteristic of the geometric mean is that it

is less influenced by extremes of high values; it is therefore particularly useful in cases where a few large items in a scale of values would destroy the representativeness of an arithmetic average.

The *median* and the *mode* are averages that depend primarily upon the relative position of the items in a given set of data and are not affected by

TABLE 4.—PRICE QUOTATIONS ON NO. 24 BOND PAPER

Price per Ream	Number of Companies Quoting These Prices
$0.98	2
0.95	2
0.90	3
0.86	5
0.85	4
0.81	3
0.80	2
0.79	2
0.78	2
0.77	2
0.76	3
0.75	2
0.74	1
0.73	2
0.72	3
0.71	8
0.70	13
0.69	12
0.68	8
0.67	7
0.66	5
0.65	4
Total ..	95

the values of all individual items. The median is the figure that divides a list of variables into two equal parts when the units to be averaged have been arranged according to magnitude or values. In other words, it is the value of the "middle" item in a group in which the terms have been arranged in *ascending* or *descending* order of size or value. It is used where this middle item is more representative of a group of figures than is the mean average of those figures. For example, suppose that a stationer desires to know what prices are being quoted, on the average, by wholesalers for No. 24 weight bond paper. He sends his buyers to investigate, and they come back with the quotations from 95 competing companies shown in

the schedule appearing in Table 4. The median price is derived by counting from either end of the list of quotations up to 48, which is the central item of the 95.[1] This will establish 70 cts. as the median or average price. If these figures were averaged by the use of the arithmetic mean, each price per ream would be multiplied by the number of companies quoting that price, and the sum of these products divided by 95 (the total number of cases). This would show an average of approximately 74 cts. In this particular case, the stationer finds that 70 cts. appears more repre-

TABLE 5.—SALES OF MEN'S SHOES, BY SIZE

Size	Number of Pairs Sold
5½	200
6	350
6½	550
7	1,600
7½	3,500
8	5,700
8½	3,100
9	2,600
9½	1,400
10	730
10½	220
11	50
Total. . .	20,000

sentative than 74 cts. as the average price that is charged because more than half of the quotations are 70 cts. or less. The median average is not materially influenced by the extremely high prices of 98, 95, and 90 that affect the arithmetic mean inasmuch as the former is determined by its position in the list of items and not by their size.

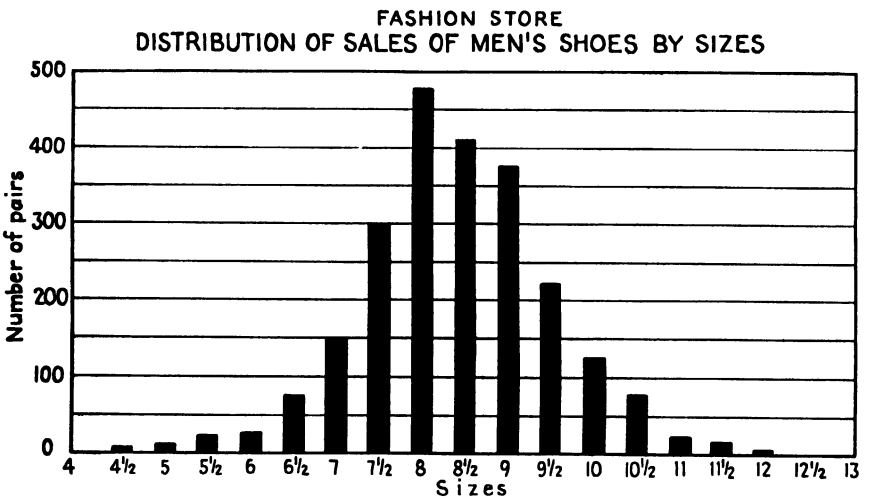
Like the median, the mode is an average that is employed for special purposes. The Regal Shoe Company, for example, once set out to discover what was the average size shoe sold in their stores. In other words, they wanted to know the "typical size" shoe worn by men. The average best fitted to this question is the mode. It is arrived at by selecting that value in a group of items which occurs more often than any other value. Thus, in a study of shoe sales there may be, out of total sales of 20,000 shoes, a distribution as shown in Table 5.[2]

[1] The number of cases here is uneven. When an even number of cases occurs, the central item is an interpolated value.

[2] These figures are fictitious and are used merely for illustrative purposes.

The mode in this case would be size 8, because that was the size most frequently sold. A similar distribution is graphically depicted in the chart below, showing number of pairs of men's shoes sold in the Fashion Store.

The applications of this average are varied. The manufacturer of drug products must make his containers fit the "average" medicine chest. The output of a new factory worker is expected to come up to the average within a week after he learns the job. Average in such instances is best expressed



as the "typical" situation or what occurs in the majority of cases. In price studies, too, this average proves useful. A concern with large cash funds available for temporary investment may require information regarding average interest returns in short-term market investments of reasonable safety. Some rates of interest, such as call-money rates, frequently show sharp changes within short periods of time. An arithmetic mean of the rates would give too much influence to such erratic fluctuations. A mode—representing the "most common" rate for all transactions within a period—would give a truer picture.

Averages, therefore, differ in their characteristics, and the one chosen should be selected so as to fit a particular problem. A statistical average often results in misleading conclusions unless one is aware of the nature of the average and the character of the data to which it applies.

Frequency Distributions. In the numerical illustrations given above for the median and the mode, the information was tabulated in terms of the number of individual items falling in each price or size class of the distribution. This classification of data according to their quantitative

characteristics is known as a *frequency distribution*, and its purpose is to show in organized form the character of the distribution of a given variable throughout a range of values.

In the cases cited, the number of classes examined was small, and therefore the significance of their frequencies could be readily grasped. However, where large masses of data are being handled and too many separate values are represented in the original figures, it is desirable to divide them

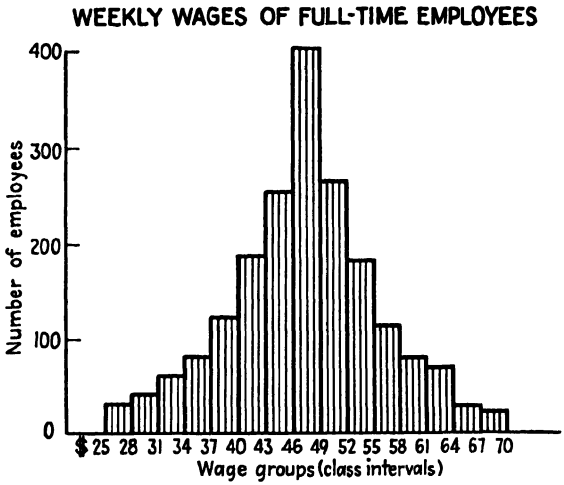
TABLE 6.—WEEKLY WAGES OF FULL-TIME EMPLOYEES

Wage Group	Number on Payroll in Each Class
$25 and under $28	30
28 and under 31	40
31 and under 34	60
34 and under 37	80
37 and under 40	120
40 and under 43	185
43 and under 46	250
46 and under 49	400
49 and under 52	260
52 and under 55	180
55 and under 58	110
58 and under 61	75
61 and under 64	65
64 and under 67	25
67 and under 70	20
Total	1,900

into a convenient number of groups or class intervals (usually from one to two dozen). This achieves further condensation and affords a readier comprehension of the data. For example, a corporation has 1,900 employees who receive 150 different rates of pay ranging from $25 to $69 per week. Grouping the payroll by class intervals of $3 reduces the volume of data to more workable proportions and results in the tabulation shown in Table 6.

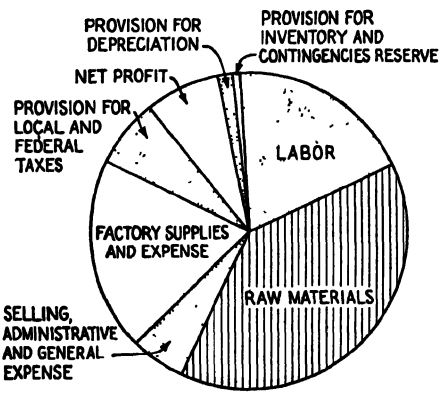
The information in this table is graphically depicted in the diagram below. This is known as a *column diagram* or *histogram*, the height of each column representing the number of frequencies in the class upon which it stands. The same information can also be plotted as a curve, or *frequency polygon*, that is drawn by connecting what would be equivalent to the mid-points of the successive columns. These graphic devices present at a glance a clear picture of the underlying structure of the data being

studied and convey some impressions of central tendency. In addition, they reveal the character of the distribution about the average, *i.e.*, how



Histogram, showing number of employees by wage groups.

closely the other values cluster to the average or how widely scattered they are with respect to it. This provides the statistician with a *measure of dispersion* or variation about the central value which enables him to determine how accurately this value represents the data as a whole. In studying these charts, he is also able to discover whether the distribution is symmetrical (as in the case above) or whether the items are bunched to one side of the point of greatest concentration. For this purpose, *measures of skewness* have been developed.[1]

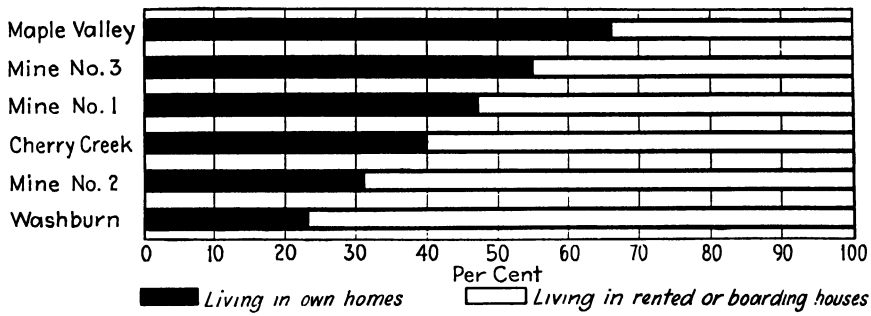


Circle chart showing distribution of receipts of the Container Corporation of America.

Ratios, Relatives, and Index Numbers. Absolute figures are not always satisfactory for use in certain types of investigation. Many problems arise in which ratios or percentage figures are far more expressive of the data under consideration. In an analysis of a company's gross income, for

[1] For a more complete discussion of measures of dispersion and skewness, the student is referred to one of the standard texts listed in the bibliography.

example, it is generally more important to discover the proportion of each major item of expenditure to total revenue than it is to have detailed figures of each of these items in dollars and cents. How large a percentage goes to labor, to materials, etc., and how much for taxes? The circle chart



Component-parts bar chart showing percentage of homes owned by workmen in six mining towns.

or pie diagram on page 144 indicates clearly the relative importance of each part to the whole.

A mining company may wish to compare the economic status of its workmen in different mine areas. One basis of comparison is in terms of home ownership. What proportion own their own homes as against those

TABLE 7.—TONNAGE TREATED AND TOTAL OUTPUT—KENNECOTT COPPER CORPORATION

Year	Ore treated, tons	Copper, lb.	Molybdenite, lb.	Gold, oz.	Silver, oz.
1946	27,501,932	594,427,860	12,334,816	155,749	1,305,283
1945	42,421,051	988,275,770	21,437,360	258,556	2,183,964
1944	51,022,995	1,161,589,341	25,071,285	313,386	2,693,558
1943	59,515,348	1,274,377,957	24,572,252	344,357	3,059,286
1942	56,457,708	1,264,761,701	23,817,631	333,158	2,650,206
1941	52,024,893	1,110,007,631	19,285,006	284,089	2,335,819
1940	43,784,610	962,481,028	18,104,828	260,341	2,227,420

living in rented quarters or at boardinghouses? For comparative purposes, this information is graphically depicted in the accompanying component-parts chart, the full length of the bars being made to represent 100 per cent and the parts divided off according to scale.

Percentage data are especially needed when comparisons are to be made among values expressed in varying units. For example, Table 7 shows

the tonnage treated at all plants of the Kennecott Copper Corporation and the production of copper, molybdenite, gold, and silver. The ore treated is in tons, the copper and molybdenite in pounds, and the gold and silver in ounces. Inspection of these figures does not afford a convenient basis of comparison for changes in output of these products.

What is really desired here is a common index of the percentage change in the production of each metal. Such information is supplied by *relatives*—a convenient statistical device used to show relative change or difference in size of numerical values at different times or places or over a given time period. They express percentage variations from a given base designated as 100 per cent. If the base adopted is 100, then variations above and below this arbitrarily established norm will be represented by numbers greater or smaller than 100. If output in 1940 is selected in this case as the base and therefore made to equal 100, then production in other years will be represented by relatives calculated as follows:

$$\frac{\text{Output of the item in any year } (x)}{\text{Output of the item in 1940}} \times 100 = \text{relative output in year } (x)$$

By this device, all production will now be expressed as comparable relatives of the standard base 100, as shown in Table 8.

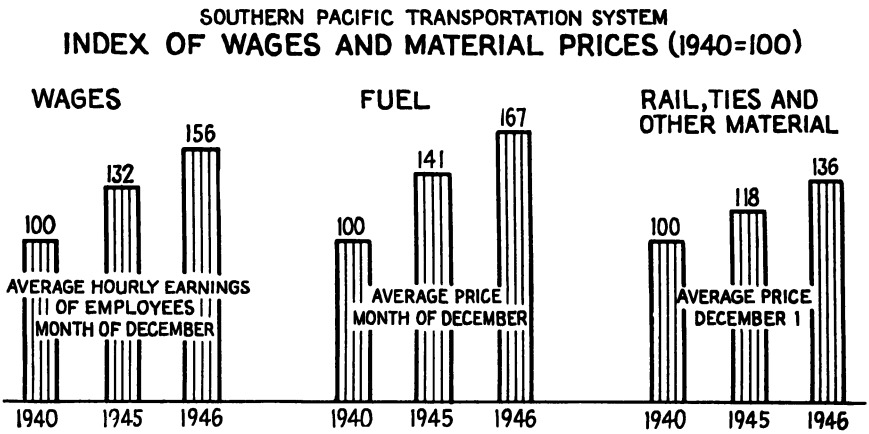
TABLE 8.—INDEXES OF PRODUCTION—KENNECOTT COPPER CORPORATION, 1940–1946
(1940 = 100)

Year	Ore treated	Copper	Molybdenite	Gold	Silver
1946	63	62	68	60	59
1945	97	103	118	99	98
1944	117	121	139	120	121
1943	136	132	136	132	137
1942	129	131	132	128	119
1941	119	115	107	109	105
1940	100	100	100	100	100

Similarly, the comparison by a railroad of the average hourly earnings of its employees, the average price of its fuel, and the average prices of rails, ties, and other materials would have little meaning unless reduced to ratio form. The chart on page 147 shows these data for the Southern Pacific Transportation System expressed as relatives, with 1940 serving as the base year.

Index numbers or relatives have several advantages. Apart from providing a method of measuring relative changes and of facilitating a comparison of changes in variables expressed in different units, they reduce cumbersome figures to a form in which they can be more readily understood and make possible the combination of dissimilar data when reduced to a common denominator of ratio terms.

The term *index number* is sometimes used in the more restricted sense to denote "composite relatives" or figures that represent the combination of a number of simple series. Where there are distinct variations in size or

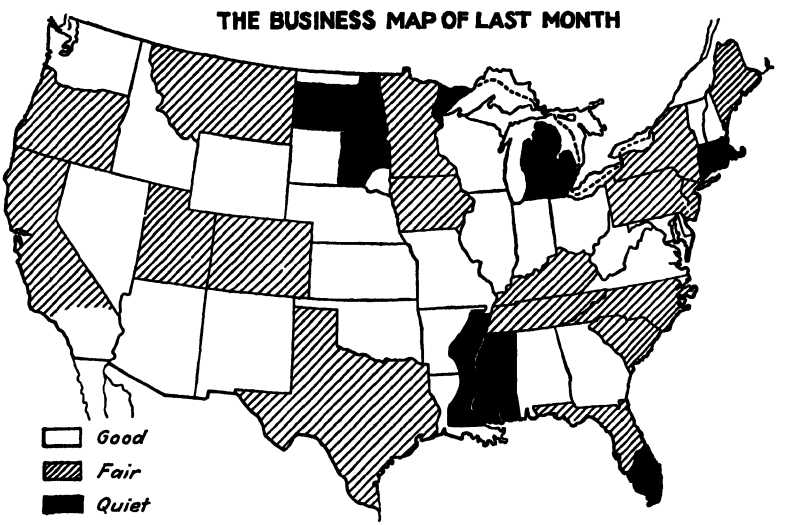


importance of the various items to be combined, an index number derived as a simple average would give a distorted rather than a typical figure. It therefore becomes necessary to assign to each item certain values that will take into consideration its importance relative to the other units in the group to be averaged. This process is known as *weighting* and requires considerable skill in order to avoid the introduction of an arbitrary bias.

Index numbers representing an average of a variety of factors may therefore be simple averages of the relatives of the constituent parts, or they may be calculated on the basis of a more complex weighting process. Certain indexes of wholesale prices are formed simply by averaging the relatives of steel prices, iron prices, and copper, petroleum, cement prices, etc. In the preparation of a representative index of the cost of living, on the other hand, consideration has to be given to the relative importance of various items in the family budget. Food, for example, represents a more important item of family expenditure than does clothing or rent when families with incomes under $2,000 per year are studied. The cost of food would therefore bulk larger in importance in constructing an index of retail purchasing power. The relative position of each class of expendi-

tures in a family budget must be known and each group of relatives properly adjusted to their importance in the family expenditures before they are averaged.

Another application of the index number is found in studying the general trends in business. Index numbers of business conditions are resultants of many conflicting and complex factors averaged together. Such items as the size of factory payrolls, percentages of people employed, federal reserve ratio, steel production, freight-car loadings, stock prices, and check



turnover could scarcely be averaged together in any other way. On the basis of such generalized figures, it is possible to construct a "business map" showing relative business conditions in different parts of the country (see illustration).

In a general index of business, more "weight" should be given to steel than to lead production and to freight-car loadings than to barge-canal loadings. This makes the derivation of the index more complex. Table 9 illustrates the use of index numbers in weighted form, in the reporting of farm prices.

The actual construction of some index numbers becomes, at times, a statistical problem of major proportions. For a statistician, the work of preparing such figures is often the central problem; for an executive, the interest lies chiefly in interpreting them and using them as guides in the formulation of company policies. Index numbers have become such an important part of the language of modern statistical presentation that an acquaintance with them is essential. Care must be taken to recognize

TABLE 9.—CONSUMERS' PRICE INDEX FOR MODERATE-INCOME FAMILIES IN LARGE CITIES *

(Index numbers 1935–1939 = 100)

Year	All items	Year	All items
1913	70.7	1930	119.4
1914	71.8	1931	108.7
1915	72.5	1932	97.6
1916	77.9	1933	92.4
1917	91.6	1934	95.7
1918	107.5	1935	98.1
1919	123.8	1936	99.1
1920	143.3	1937	102.7
1921	127.7		
		1938	100.8
1922	119.7	1939	99.4
1923	121.9	1940	100.2
1924	122.2	1941 †	105.2
1925	125.4	1942 †	116.5
1926	126.4	1943 †	123.6
1927	124.0	1944 †	125.5
1928	122.6	1945 †	128.4
1929	122.5	1946 †	139.3

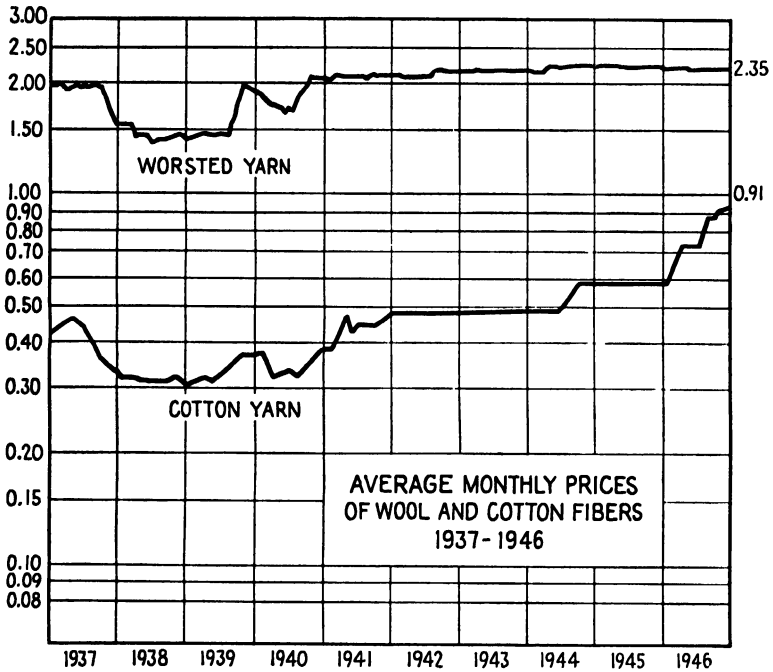
* Source: Bureau of Labor Statistics.

The "consumers' price index for moderate-income families in large cities," formerly known as the "cost-of-living index," measures average changes in retail prices of selected goods, rents, and services, weighted by quantities bought by families of wage earners and moderate-income workers in large cities in 1934 to 1936. The items priced for the index constituted about 70 per cent of the expenditures of city families whose incomes averaged $1,524 in 1934 to 1936.

† During the war and the immediate postwar period, the consumers' price index did not fully reflect quality deterioration, disappearance of cheaper goods, and other factors. The President's Committee on the Cost of Living estimated that the index understated the rise in retail prices of living essentials by 3 to 4 points between January, 1941, and September, 1944, for large cities and an additional ½ point for small cities, and later the stabilization director in December, 1945, made an allowance of 4½ points for large cities and 5 points for large and small cities combined. These adjustments were not included in the published indexes by the bureau. For a more detailed statement concerning these adjustments, see the *Monthly Labor Rev.* for March, 1947, or the January, 1947, report on the consumers' price index.

the precise significance of index numbers. As in the case of all averages, they are apt to cause misleading conclusions if incorrectly interpreted. Moreover, being relative, they express variations from a given year or average of years or from a given location arbitrarily selected as a base. They should, therefore, not be confused with other sets of index numbers having other units as a base. Again, often being a measure used to show the combined effect of several factors, index numbers are not applicable

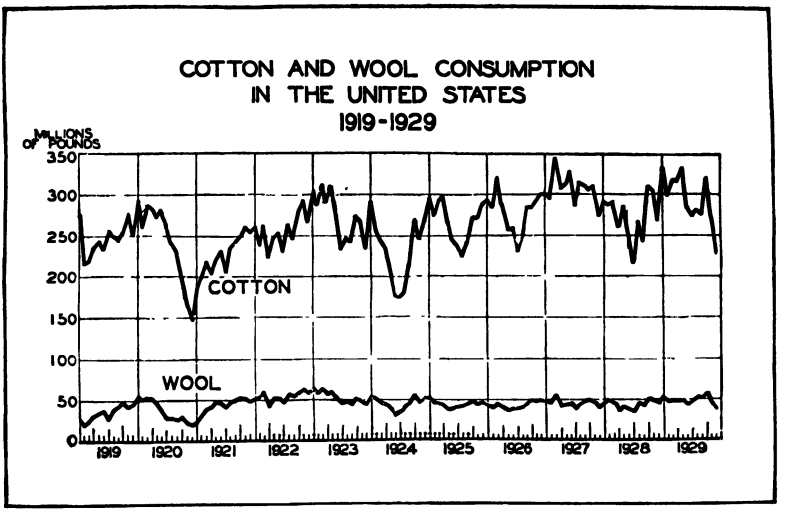
for use in all situations. An index number of public-utility stock prices, for example, would not serve as an index of all stock prices. An index number of factory employment in the United States is not a complete measure of employment conditions, as it leaves out clerical and white-collar workers. An index of retail sales will be quite different if based upon data prepared by small independents as compared with the large chains



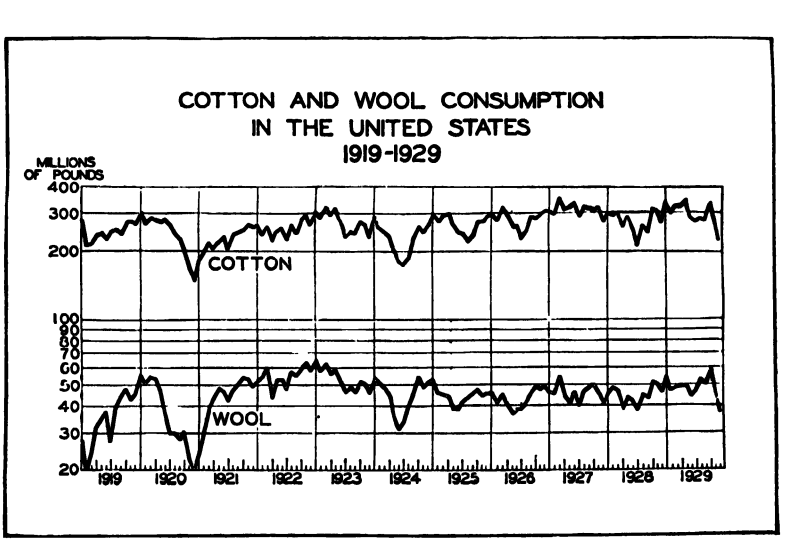
Ratio chart showing comparison of cotton and wool price movements.

and department stores. Relative terms and index numbers have come into wide use in the study of business problems. Because of their general convenience and simplicity of expression, these statistical tools are frequently preferred to the use of absolute terms.

Ratio Charts. Sometimes it is desirable to study absolute data and their percentage changes on a chart. This is done with greatest accuracy on a ratio chart—a chart on which the rulings have been made on a logarithmic scale (see above). Proportionate changes rather than absolute changes receive equal spacing. The differences between a ratio chart and a natural scale diagram are seen by comparing the two figures given on page 151. In the upper diagram, cotton and wool consumption in the decade following the First World War are plotted on a scale using equal



Natural scale showing equal spacing for absolute variations of similar magnitude. (*From Riggleman and Frisbee, "Business Statistics."*)



Semilogarithmic scale, showing relative variation in consumption of the two commodities. (*From Riggleman and Frisbee, "Business Statistics."*)

vertical distances to represent 50 million pounds. Whereas cotton consumption is fairly erratic, wool consumption appears relatively uniform in volume. In the lower figure, the same data have been plotted on a ratio chart. The similarity in fluctuation in the rate of consumption of the two commodities is now more clearly seen.

Time Series. Purchases, production, prices, sales, and profits all fluctuate over a period of time. Among the most serious problems that confront business management are those of planning production to meet the needs of the market and of avoiding losses arising from fluctuating prices. It is therefore important to obtain data relating to changes in these variables over a period of time. Such data are called *time series*. An intelligent appreciation of the frequency, magnitude, and duration of their movements,

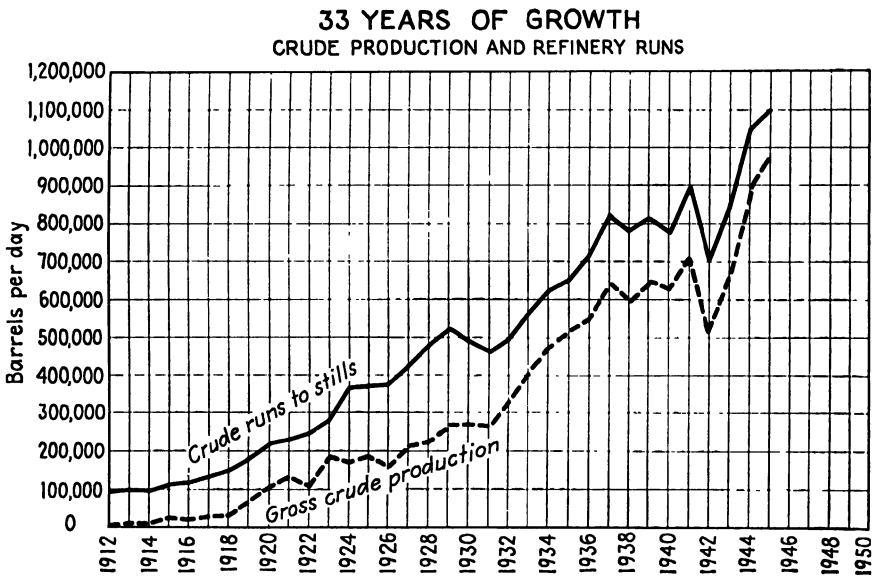


Chart showing secular trend of gross crude oil production and crude runs to stills. [*Courtesy of Standard Oil Co. (N. J.).*]

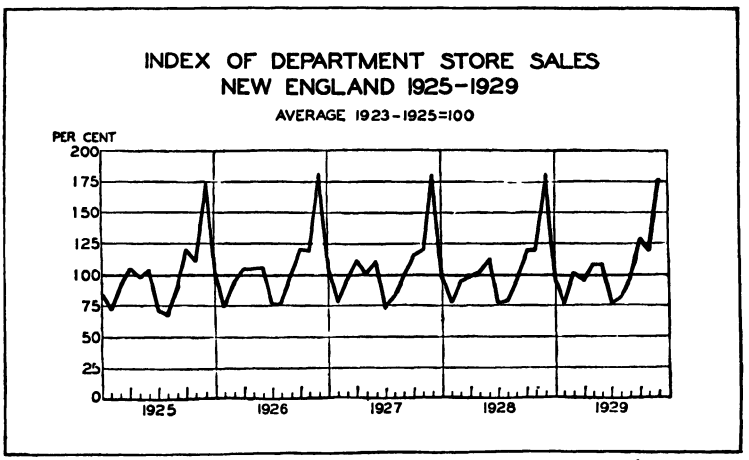
though not offering protection against all of the risks of variation, will at least enable executives to modify their policies so as to meet changing tendencies.

There are three major components that have come to be recognized as being present in a time series. The first and most obvious variety is that which consists of a long-run increase or growth or of a similar long-run downward tendency. This movement is clearly pictured on a chart by a curve moving steadily upward or downward over a period of time. This is called a *secular trend* and is illustrated by the above chart showing crude oil production and refinery runs of the Standard Oil Company (New Jersey) for both domestic and foreign affiliates over a period of 33 years.

The secular-trend line or curve enables companies to judge with a fair degree of accuracy the rate at which they might expect the demand for

their products to increase over a period of years—disregarding intermediate fluctuations that might occur. It is calculated on the basis of the statistical data relating to a fairly extended prior period of time and is intended to reflect as closely as possible an average upward or downward movement about which fluctuate the more erratic deviations.

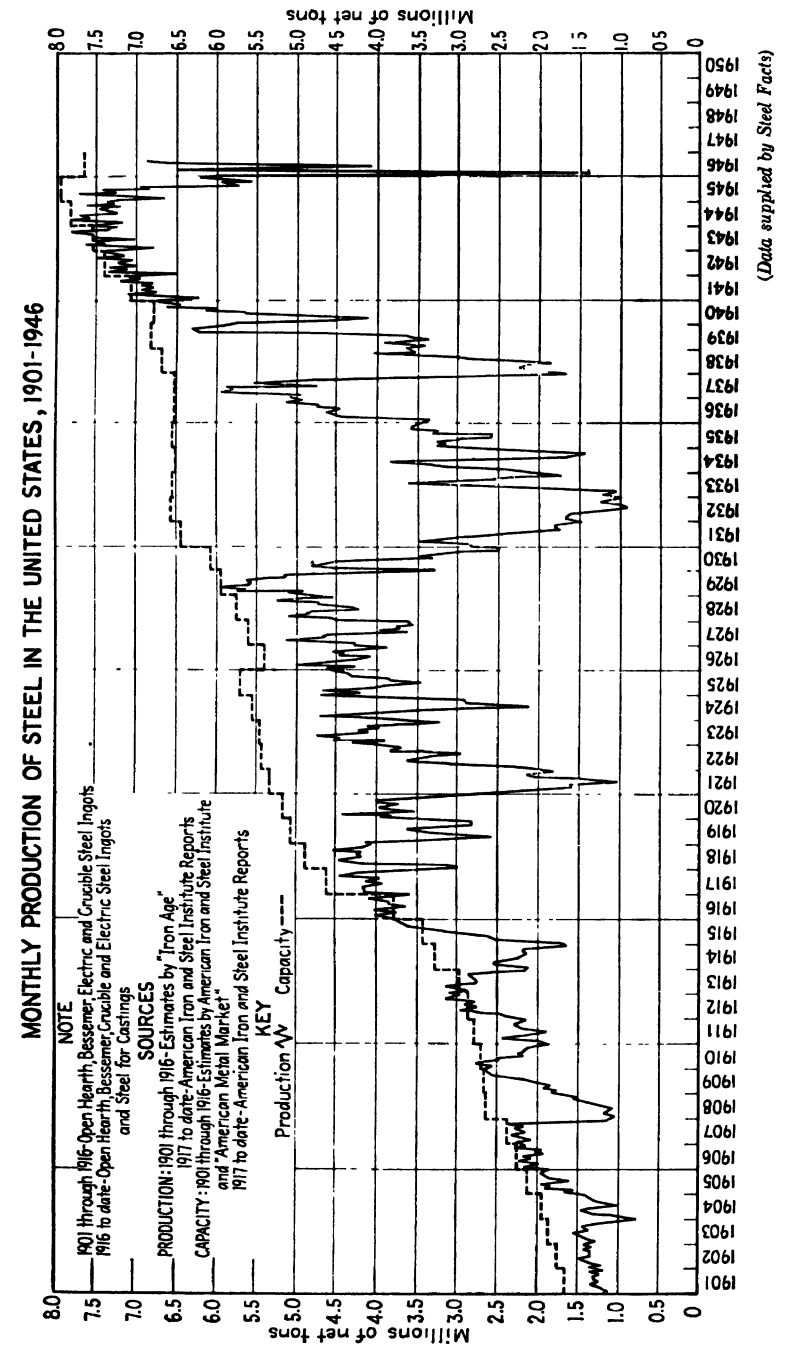
A second important movement often revealed for individual companies or industries by statistical data is the so-called *seasonal fluctuation.* This is common to many types of business, but it is seldom the same for one



(*From Riggleman and Frisbee, "Business Statistics."*)

industry as compared with another. In certain cases, such seasonal movements are directly opposite in character. Knitting mills, for example, sell swim suits in the summer months and heavy sweaters in the winter months. Sales of domestic fuel oil reach their peak during the winter, whereas gasoline consumption is highest in the summer. Department stores experience pronounced seasonal variations as indicated in the chart shown above.

An accurate knowledge of the seasonal variation that might be expected in the sales of a business is of value to that business in the planning of production. In automobiles, for example, it was estimated some years ago that approximately 38 per cent of annual sales of cars were made in the months of March, April, and May and 42 per cent in June to October. From November through February, only 20 per cent of total sales were made. A knowledge of this fact enabled the producers to adjust their production and delivery arrangements so that a greater number of cars were available for delivery to retail purchasers at certain times of the year than at others. This enabled an automobile manufacturer to produce at

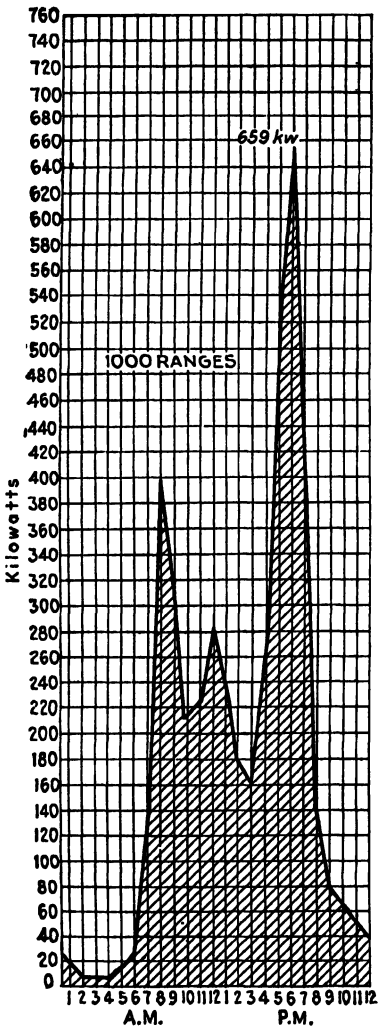

MONTHLY PRODUCTION OF STEEL IN THE UNITED STATES, 1901-1946
NOTE
1901 through 1916-Open Hearth, Bessemer, Electric and Crucible Steel Ingots
1916 to date-Open Hearth, Bessemer, Crucible and Electric Steel Ingots and Steel for Castings
SOURCES
PRODUCTION: 1901 through 1916-Estimates by "Iron Age"
1917 to date-American Iron and Steel Institute Reports
CAPACITY: 1901 through 1916-Estimates by American Iron and Steel Institute and "American Metal Market"
1917 to date-American Iron and Steel Institute Reports
KEY
Production
Capacity
Millions of net tons
Millions of net tons
(Data supplied by Steel Facts)

more uniform levels of output during the year, in anticipation of certain peak months of sale. It also eliminated the necessity of having an excessively large plant equipped to meet peak-load requirements, which would remain idle the rest of the year. Production could be smoothed out to a more satisfactory level, and radical changes in production schedules were thereby avoided. The change in date of the automobile shows later altered this sales experience, but it had the effect of shifting rather than eliminating the seasonal variations in this business.

A third type of fluctuation—the least controllable and the one most difficult to anticipate—is the *cyclical fluctuation*, popularly known as the business cycle. It is characterized by the successive recurrence, over a number of years, of periods of prosperity and of depression. While every year reflects seasonal variations, some periods are clearly better or worse than others, from a business viewpoint. The cyclical movement therefore represents the fluctuations above and below "normal," the normal meaning the secular trend together with the regular or usual seasonal variations. Unlike seasonal and secular movements which are typical of individual lines of business, the cyclical movement usually grips all industries in its upward and downward swings. Because of its widespread effects, the attempts on the part of a single company to escape from its influences are usually futile. It has been possible, however, in the case of those concerns which carefully charted their courses, to avoid the disastrous results that sudden cyclical changes frequently entail. The chart on page 154 showing steel production over a number of years presents graphically the idea of these "ups and downs" of business which occur more or less periodically. During periods of prosperity, unguided businessmen are apt to become too enthusiastic over the rapid growth in sales, orders, and profits. Unaware of the marked departure in rate of growth from the ordinary secular trend for that industry, such companies will assume that a "new era" of booming times has been ushered in. Overexpansion and excessive production follow, and heavy losses or bankruptcy are too frequently the aftermath.

During periods of depression, concerns are likely to err in either of two directions. First, they may regard the decline as temporary and seize upon the first indications of an upturn as a signal to buy heavily such materials as may look cheap, compared with previous prices, or to expand output close to capacity. This is usually followed by great disappointment and additional losses. The second mistake is later to regard the business situation with extreme caution and refuse to recognize that the corner has been turned. Competitors who are more quickly able to recognize such changes have the advantage of an early start in regaining the business that they temporarily lost.

Another danger often faced by businessmen is that they may be "right" too soon. For example, they anticipate a change for the worse and prepare for it; but before the change occurs, additional rises may cause considerable loss.



Variations in daily demand for electric power. (*From Cabot and Malott "Problems in Public Utility Management."*)

How can it be known when a cyclical movement is definitely headed in one direction or another? Owing to the sensitivity of cyclical fluctuations to all kinds of unsettling factors in the business community, it is often difficult to make a definite decision with respect to this question. Yet there are certain signals that, if they are consistent for several weeks or months at a time, will fairly clearly indicate the general direction of the cyclical movement. Electric-power output, freight-car loadings, steel-ingot production, wholesale commodity prices, factory payrolls, stock prices, imports and exports are frequently accepted as reliable indicators of general business movements. A slow but steady rise in index numbers representing these economic processes would give reasonable justification for the conclusion, in a period of depression, that a period of revival was well under way.

Systematic planning of the future in any business must, then, take into consideration these three general elements of change in time series which are likely to be found: (1) long-time growth, which is based upon a steady increase in the population or wealth of the nation or upon some unquestionable tendency in the habits of the people, or long-time decline for opposite reasons; (2) seasonal variation, which is caused primarily by climatic factors but also by religion, custom, or other mass influences upon the behavior of individuals; (3) cyclical fluctuations, which are variations bringing about alternate periods of depression, revival, prosperity, and recession. To these might be added

so-called *random* disturbances which are highly unpredictable. These are of the nature of wars, floods, and other catastrophes, not directly connected with the business process.

In addition, there are such problems as daily fluctuation in demand, as is seen in the case of public utilities, where their services are demanded at peak periods during the day, tapering off considerably at other times. Fluctuations of this variety are illustrated in the chart shown on page 156.

The facts revealed by a recognition of these elements of change will then serve as guides in determining such vital matters as policy regarding price offers, profit margins to be sought, and volume of production to be handled.

Correlation. Another application of the statistical method to the problems of modern business is found in the scientific determination of certain significant relationships. For example, it may be discovered that a drop of from 10 to 12 per cent in the acreage yield of cotton is almost invariably accompanied by a rise of from 25 to 50 per cent in the price of this staple on the cotton exchange. Or it may be found that physical output in a plant is regularly higher in a 40-hour week of five days than in a 40-hour week spread over six days. Annual sweater sales of a knitting mill may show a pronounced inverse relationship to the average mean temperature for each of these years in the geographical sales areas. Such information does not prove any causal dependence of the one factor upon the other. Many other elements that might exert a considerable influence upon the results being studied may enter into the situation. If the data are carefully computed, however, and statistically calculated to have a high degree of reliability, the knowledge of this relationship is often useful to the management of a firm in directing the policies and production schedules of the business.

The discovery and measurement of these relationships or repetitive association of certain occurrences are known in statistics as *correlation*. The methods of measuring these relationships are too involved to allow for their discussion here. Suffice it to say, however, that for forecasting purposes this branch of statistics has been found to have considerable value.

Collection of Data. In addition to his tasks of organizing, analyzing, and interpreting quantitative facts, the statistician is frequently called upon to collect the original data. In some problems, neither company records nor published data will suffice to provide all the facts necessary to work out an adequate solution to a given problem. There is no alternative but to collect new raw data either because the desired materials have never before been assembled or perhaps because the information that is available is inaccurate, inadequate, or insufficiently up to date. This may involve

personal interviews, correspondence, or an ambitious program of direct canvassing—depending upon the nature and scope of the investigation.

In the collection of firsthand data several important rules must be followed. In the first place, it is essential to know exactly what information is needed. A most careful study should be made of the entire problem and of all pertinent data required. A refinement of this process is to define clearly all terms upon which data are being sought, so that the information collected will be homogeneous and not open to question because of variant interpretations. The next step is to become familiar with all available sources of the desired facts. If a complete survey is to be made, all possible sources of information must be tapped and 100 per cent of the returns recorded. Unless the field of investigation is small, this technique can rarely be employed. An electric refrigerator corporation might want to ascertain how many of its employees own electric refrigerators and how many live in apartments in which such equipment is provided. Obviously, if properly handled, this questionnaire should offer few problems in obtaining answers from all employees. On the other hand, if this concern were more ambitious and wished to learn how many people in each of several states now enjoy the use of equipment of this kind, the answers would not be obtained so readily. In fact, the practical difficulties of securing replies from all residents even of one city are so great that the company would have to be satisfied with a sample—representing a certain percentage of the population.

By a process of sampling, an attempt is made to obtain only a fraction of all the information available, but a fraction so typical of all data that it can be taken as a very close approximation of the results that would have been attained had the entire number of cases been included in the study. Two tests must be applied to such samples. (1) They must be *adequate; i.e.*, they must include a sufficiently large percentage of the total number of cases so that any variations due to the chance sampling that is made will not be sufficiently great to destroy the validity of the conclusions based upon the samples. In other words, to be adequate, the samples must not be so scanty as to exclude the influences of certain very significant data in the group. Especially is this of vital importance when the materials studied are not homogeneous. (2) The data must be *representative; i.e.*, not only must the size of the sample be considered but also its contents. Preferably, a survey to be representative should utilize a process of sampling that involves, first, a careful investigation of all factors that might be included as bearing on the problem and then an attempt so to scatter the samples that each of these factors has an even chance of being included. This method of collection of such samples, of course, presents another problem, which in part is determined by the nature of the data being sought. Direct personal canvass or investigation, inquiry by mail, the

circulation of questionnaires, and the preparation of estimates after careful examination and study of conditions are some of the most commonly employed systems of obtaining these factual materials. In an investigation, each of these alternatives is usually given careful consideration. This may involve many hours of planning and preparation before any steps are finally taken in the actual collection of data.

Not all firms are in a position to undertake research of this kind; instead, they avail themselves of the services of professional investigators. A well-known organization of this type is the American Institute of Public Opinion of Princeton, N. J. (popularly known as the *Gallup service*), whose reports are used by industrial and commercial houses.

Questions and Problems

1. Why is the median of a series *not* always the best measure of central tendency? Why is the arithmetic average *not* always an adequate substitute?

2. Illustrate the use of the frequency polygon or histogram in analyzing certain types of sales or production data.

3. The following data show prices per quart of a specified grade of oil quoted by service stations:

Price per Quart	Number of Stations Quoting Price
$0.40	2
0.38	4
0.34	6
0.31	8
0.32	10

Find the mean, median, and mode, and explain which average you would consider most satisfactory under the circumstances.

4. Using the price of $0.40 per quart in the foregoing list of figures as the base, compute the other prices quoted as simple relatives. Criticize this procedure in terms of the problem of correct weighting.

5. Account for the fact that relatives or index numbers are often considered more satisfactory than original data in making comparative studies of output in several industries.

6. The semilogarithmic scale is sometimes more useful than the natural scale diagram in statistical computations. Why? For what data, in particular, would a ratio chart be appropriate?

7. What two different classes of charts are used to show percentage parts of a whole? For what type of business data would they be used?

8. Sketch two charts: one showing hypothetical seasonal fluctuations and one showing cyclical and secular variations in a business. Label your work. Explain the significance of time series analysis in business.

9. Explain what is meant by the statement that the existence of a high degree of correlation between two factors does not prove any causal dependence of one factor on the other. How may correlation be employed in the examination of business facts?

10. In the collection of original data, what is meant by the system of "sampling"? What are its advantages? Mention two tests commonly applied to statistical sampling.

CHAPTER VIII

SOURCES OF INFORMATION

The Use of Source Materials. Neither business leaders nor the specialists who assist them are capable of remembering the great variety of business facts with which they come in contact. Moreover, there is little value to be attached to such feats of memory, except perhaps in cases where immediate decisions and quick judgments permitting little time for reflection are needed. In most business relations, an interval of time is allowed for the study and analysis of the problem or question under consideration. It is under these circumstances that knowing "what to look for" and "where to look" become most important.

Most of the information that is needed pertains specifically to matters within a company or to its business relations with other firms. The required data, under the circumstances, are usually readily available and are drawn from the accounting books, reports of branches and subsidiaries, departmental files, and numerous other intracompany records which are prepared periodically or to which current data are regularly added.

In a number of business problems, however, it becomes necessary to reach beyond the records of a company in order to obtain the requisite data. Outside sources are sought for this purpose and are important aids in providing supplementary materials of this kind.

Primary and Secondary Sources. When published records will suffice to supply the desired facts, a distinction must be drawn between primary and secondary sources of data. Primary sources are the original published or unpublished reports of the individual or group who conducted the investigation in the first instance. Secondary sources are such collections or preparations of facts as have later been compiled by someone else from the original findings previously reported. For example, a field investigation is made of the practices and attitudes of retail storekeepers on the subject of existing retail sales taxes. Several thousand interviews are held, and the data that have been collected are reported in a published set of findings. Various tables show the numerical or quantitative facts ascertained in the survey. Such a book is a primary source of statistical data on this subject. Soon after, an association of retailers may wish to prepare a brief against the sales tax and, as part of its argument, builds up a series

of tables and statistical exhibits based upon the materials presented in the former work. The latter report would be considered a secondary source for data on this subject inasmuch as there is divided responsibility in the collection and final presentation of the information.

The chief significance in the distinction between primary and secondary sources is the question of reliability. The greater the number of hands through which the data must pass before they are presented the greater is the risk that errors will creep into the work. Moreover, a person other than the one originally collecting the facts is very likely to misinterpret the true significance of certain items and to make combinations of data that are in reality of unlike character. A certain amount of checking and critical examination is therefore desirable in using data prepared by others, especially when they are derived from secondary sources. Moreover, care must be taken in utilizing materials of this description to see that they are applicable to the problem in hand.

Statistics are gathered for many different purposes, and information on a subject relating to one problem may not be desirable for use in connection with some other problem. For example, the U. S. Department of Commerce collects figures on the importation of leather from different parts of the world. These figures are of interest in studying the relative importance of leather as an import and in making a comparison of domestic production and foreign trade in the product. However, in connection with a tariff hearing, a number of manufacturers in the shoe industry may wish to prepare data relating to the imports of leather for shoes. This is an entirely different matter. Imported leathers are used by many industries. Unless these data have been broken down into imports of shoe leathers and imports of other leathers and hides, they are valueless for the shoe manufacturers' purpose.

Periodic reports relating to production, price movements, factory payrolls, and other data for a given industry published by various trade associations and trade papers are usually drawn upon freely as primary sources of pertinent statistical materials used in that trade. The most important primary source of data for any concern is, of course, the information drawn from its own records.

Governmental Sources of Information—Federal. Perhaps the best single source of information from the standpoint of quantity, variety, and reliability of data is the federal government. Through several federal departments and governmental commissions, businessmen find it possible to obtain valuable services, advice, and guidance in the conduct of their affairs. In addition, governmental publications dealing in great profusion with the technical, statistical, business, and legal aspects of American industry are of inestimable value.

Departments and Bureaus. Practically every division of government directly or indirectly affects the affairs of some classes of business. To the extent that this is true, businessmen naturally look to the government for information concerning these relationships. The Treasury Department, for example, in administering the tax laws, must maintain conveniently situated internal-revenue offices, where businessmen can secure expert advice relating to their peculiar tax problems. Construction companies frequently find it necessary to consult with the engineering division of the Department of the Army because of the federal regulations governing the building of bridges and tunnels across navigable waterways. Similarly the Interstate Commerce Commission, the Federal Trade Commission, and other regulatory bodies are besieged with requests for information bearing upon individual business problems in the light of the decisions or rulings that they have made in the past.

From the viewpoint of businessmen, the Post Office Department has a service to sell, and it is naturally called upon to supply information pertaining to classes of mail, sizes and weights of parcels carried, rates and charges, and time schedules of collection and delivery.

In each of these cases, the information is made available in order to clarify the position of business in its relations with the government. Some departments, however, have gone further in the preparation and distribution of materials for the use of different classes of industries in the administration of their private affairs. Chief among those providing these facilities are the Departments of Commerce, Agriculture, and Labor.

The *Department of Commerce* is designed to serve the needs of business in a variety of ways. Its Bureau of Foreign and Domestic Commerce, which maintains district offices in different parts of the country, offers a valuable consulting service to businessmen.

For example, a manufacturer of hardware specialties wishes to establish an export department. The bureau will give him all data regarding possible foreign markets and will supply him with the names of reputable agents and dealers abroad. Information regarding laws, customs, climatic conditions, buying power, and anything else that might affect the sale of American goods can also be procured.

In addition to this advisory service, the bureau provides library facilities in its district offices. Here can be obtained not only its own publications but many other published source materials. Directories, trade magazines, and printed reports are kept on hand for consultation by those who need them.

The Bureau of Standards, another division of the Department of Commerce, is a valuable source of information to industries requiring facts concerning the testing and grading of goods. The Civil Aeronautics Ad-

ministration, on the basis of its extensive research work in this field, supplies technical information to the aviation industry. The Census Bureau, also within the Commerce Department, is responsible for the preparation of a large part of the statistical data published by the United States government.

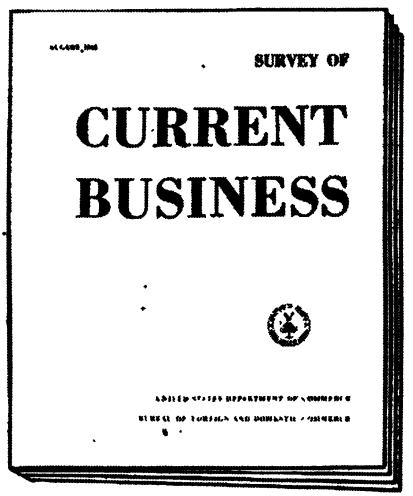
The *Department of Agriculture* carries on a vast program of scientific work intended to be of help to American farmers. Its researches in animal husbandry, plant life, and chemistry of the soils have enabled it to give practical aid to farmers seeking to improve their agricultural methods. Through its division of plant quarantine and control, it has sought to rid the country of insect pests and plant diseases and to teach the farmers how to grapple with these risks which threaten their crops. It disseminates information regarding the formation and administration of cooperative associations. Its experiment stations give farmers or industrialists the benefits of their scientific discoveries. The Bureau of Agricultural Economics maintains branch offices that make available daily reports concerning shipments of fruits, vegetables, poultry, and dairy products and the quotations of current prices in the consumers' markets. Expert advice relating to problems such as farm management and marketing and financing of agricultural products can also be obtained.

The *Department of Labor* supplies a large variety of data, particularly on subjects dealing with employment and occupations, wages, hours, and labor legislation. The Bureau of Labor Statistics compiles current price indexes, makes detailed studies of wage rates in specific industries, keeps records of industrial disputes and methods of their settlement, and in many other ways contributes to the work of fact finding and record keeping on the part of the government.

All American foreign representatives—ambassadors, ministers, consuls, and vice-consuls—are under the jurisdiction of the *State Department.* From them, directly or through the department at Washington, advice and information can be had concerning conditions in foreign countries which might be of use to the importer, to the exporter, or to the American manufacturer who desires to secure cost figures of his foreign competitors. Reports are also obtainable on the activities of the United Nations and the participation of the United States in its activities and programs.

Publications. The various federal departments and bureaus make their studies available through numerous publications. Some of these, printed daily, weekly, monthly, or annually, contain current statistics; others summarize the information previously given. In addition, the governmental publications include special studies on important phases of specific industries.

Current Data. Businessmen of all descriptions, from farmer to manufacturer and from mine operator to banker, are interested in obtaining reports relating to general business and economic conditions. To be of value, such material must be current and should possess a high degree of reliability. The quarterly summary *Crops and Markets*, issued by the Bureau of Agricultural Economics of the U. S. Department of Agriculture, provides data relating to the production, movement, and prices of farm products. It also presents forecasts of crop prospects—of vital interest to farmers and merchants. *The Agricultural Situation*, published monthly by the Department of Agriculture, carries brief summaries and tables showing the prices and production for the more important farm products.



The *Federal Reserve Bulletin* and the *Survey of Current Business* contain general summary data pertaining to the trend of economic conditions. The former is issued monthly by the board of governors of the Federal Reserve System and contains not only a wealth of detail with respect to domestic and foreign banking and financial developments but also much information relating to general business. The latter, published each month by the U. S. Department of Commerce, presents a picture of the business situation by setting forth the principal facts regarding various lines of trade and industry. At intervals, detailed tables are published, giving monthly figures for the past years. The data reported are largely those already in existence but brought together in convenient form from hundreds of different publications of governmental departments, technical journals, and reports by trade associations. Monthly statistics are given on hundreds of items covering every phase of American trade and industry. They show, among other things, the seasonal, cyclical, and secular movements in business; wholesale price comparisons; costs; volume of production; employment conditions in various industries; and imports, exports, and shipments by selected lines of business. Advance summary figures are made available to subscribers by means of a weekly supplement.

In addition, the Department of Commerce prepares its *Foreign Commerce Weekly* which presents facts about world happenings in many commodity

fields including metals, textiles, chemicals, machinery, lumber, and oils; gives details of export controls, new commercial laws, tariff changes, and other regulations; lists foreign buyers visiting the United States; and summarizes important developments in world economic conditions, exchange, and finance.

The monthly publication *Domestic Commerce* presents up-to-the-minute, brief reviews about new products and patents and the latest information on marketing prepared by government and nongovernment organizations. Such data as new census releases, important legislation affecting markets and prices, and reports on Federal Trade Commission activities are summarized. Useful tables and charts showing sales trends and business indexes are also included.

The *Comparative Law Series*, monthly world review, is a publication of the Division of Commercial Laws of the U. S. Department of Commerce. It deals with information on laws in foreign countries that affect American business and commercial interests, including notices of important court decisions, tax regulations, and developments in the field of patents and copyrights.

A *Business Service Check List* is also issued. This is a weekly guide which itemizes and briefs all material issued the previous week by the bureaus and offices of the Department of Commerce. An attached form permits the subscriber to order his choice of press releases, publications, speeches, pamphlets, and books.

The *Monthly Labor Review*, published by the Bureau of Labor Statistics of the U. S. Department of Labor, is the source of current information on retail and wholesale prices, construction activity, and the general economic outlook, as well as trends of employment, earnings and hours, labor laws, and matters in general relating to labor.

Current data of a more specific variety are needed by certain industries. For example, the weekly and monthly reports and press releases issued by the U. S. Geological Survey, showing coal production and movement of coal shipments, are of value to the coal industry. To the aviation and steamship lines, the daily weather reports compiled by the U. S. Weather

Bureau are indispensable. Persons interested in finance and money find useful the *Daily Statement* of the United States Treasury.

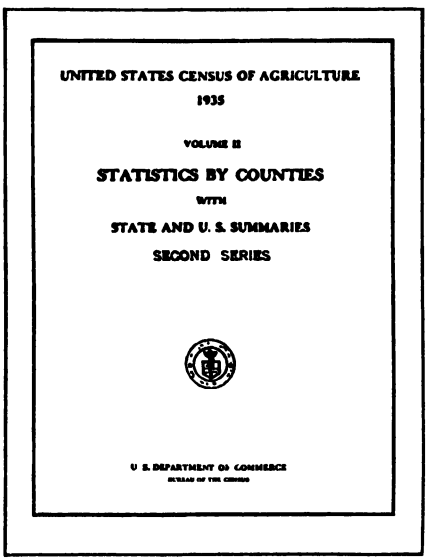
General Summaries. On the other hand, there is often need for information of a more general summary character than that relating to current business activity. Occasionally, the need for summary data expresses itself in the demand for certain facts—the precise time element relating to these data being of secondary importance. In this category are found dozens of governmental publications which present year-to-year totals and nonquantitative observations concerning given phenomena and a variety of census records and periodic reports resulting from the collection of factual data. Although referring to a specific time, the latter information is used as a basis for making generally accepted statements of fact within a fairly long period from the time when the data were originally collected.

Important questions of a general factual nature continually arise. How many people live in the United States? How many are men; how many women; how many children? In which states do most people reside? What percentage of the population lives here? What is the racial composition of these states, of certain cities? In preparing marketing and advertising campaigns or in selecting appropriate centers for the distribution of retail products, ready access to U. S. Census compilations of these facts is most helpful. The reliability of these data is generally accepted, particularly in cases where relative values rather than precise figures are sought.

Other valuable information is found in the general decennial census reports. Life insurance companies find the reports on age of the population, births, and deaths an interesting check on their own tabulations. Real estate interests and mortgage and investment companies are especially concerned with the facts revealing transitions from rural to urban areas, growth and decay of districts in terms of population concentration, and the extent of home ownership and of mortgage indebtedness. Book, magazine, and newspaper publishers and educational supply houses obtain valuable guidance from these reports with respect to prevailing conditions

of literacy in sections of the country, the geographical concentration of certain racial and language groups, and the relative degree of school attendance. For some of these data, annual supplementary reports are issued as estimates by the Census Bureau in an effort to bring them up to date.

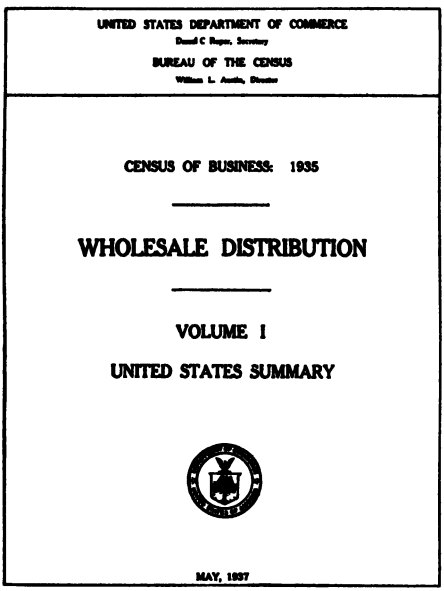
Aside from this general information relating primarily to population, the U. S. Census contains compilations and detailed analyses of industrial data. Separate volumes are devoted to agriculture, manufactures, and wholesale and retail trade, and important sections cover such subjects as unemployment, salaries and wages of workers, age and physical condition of dwellings, and value of real estate. In some instances, the decennial reports are supplemented by special surveys undertaken at more frequent intervals. For those interested in facts relating to agriculture, for instance, the census, prepared every five years, reveals the number of farms, farm acreage, value of farm property, tenure of operators, agricultural expenses, position of indebtedness, farm facilities, extension of irrigation and drainage, crop production and yields, and methods of marketing. Similarly, detailed reports cover other extractive industries such as mines and quarries, timberlands, and fisheries. For the manufacturing group, a separate report is now compiled.


UNITED STATES CENSUS OF AGRICULTURE
1935
VOLUME II
STATISTICS BY COUNTIES
WITH
STATE AND U. S. SUMMARIES
SECOND SERIES
U. S. DEPARTMENT OF COMMERCE

The *Census of Manufactures* is a report that presents, in great detail, pertinent information derived from all manufacturing establishments in the United States whose gross outputs are $5,000 or more in value. Manufacturing industries are classified and subclassified into hundreds of individual groups. Data relating to these specific classes are assembled not only for each state but in some instances for important cities and counties. For purposes of affording ready comparison and contrast, numerous tables are provided, showing various combinations of facts pertaining to size and number of establishments, numbers and salaries of employees, costs of materials and supplies, fuel and power, value of products, and estimated value added by the manufacturing process.

A *Census of Business* is also prepared at frequent intervals on *Retail*

Distribution and *Wholesale Distribution.* These reports classify on a geographical basis all retail, wholesale, and other distributive channels in the marketing process. These, in turn, are classified into types of outlets, classes of business, or kinds of products sold. With this information available, it is possible to determine the number of hardware stores located in Peoria, Ill., and how many of these have annual sales in excess of $50,000. A drug wholesaler can discover how many potential sales outlets in the retail drug field he can tap in New York, New Jersey, and Pennsylvania and what percentage of these are independents.


UNITED STATES DEPARTMENT OF COMMERCE
Daniel C. Roper, Secretary
BUREAU OF THE CENSUS
William L. Austin, Director

CENSUS OF BUSINESS: 1935

WHOLESALE DISTRIBUTION

VOLUME I

UNITED STATES SUMMARY

MAY, 1937

Agricultural Statistics is the leading annual reference book relating to that important industry. It is published by the U. S. Department of Agriculture and, in addition to a series of reports and discussions of agricultural developments, problems, and newer trends that it contains, there is much statistical material relating in detail to the output and value of all classes of crops, acreage planted and harvested, and comparisons of crop forecasts with actual yield. Tabulations are also given of estimated livestock on American farms, annual meat production, imports and exports of agricultural products, and prices of farm products.

For convenience in referring to census materials, a single book known as the *Abstract of the Census* is published. This book summarizes, in a single volume, the most significant facts relating to the specific major branches of census investigation. In addition, a *Statistical Abstract of the United States* is published each year. This volume brings together the important summary statistics on population, trade, production, finance, and numerous other subjects. It is a selection of the statistics most widely used by businessmen, public officials, professional workers, and many other persons to meet day-to-day needs for factual information. The source of each statistical table is shown, and a bibliography of sources of statistical data is included. Thus, in addition to furnishing tabulations, this reference book also serves as an effective guide to available data. *Foreign Commerce Yearbook* and *Foreign Commerce and Navigation of the United States* are

reference books that review for the previous year the foreign trade of the United States and the business situations in foreign countries. They are valuable guides for both quantitative and qualitative studies of principal industries in the United States and abroad. The *Statistical Atlas* presents many of the findings of the census in the form of maps and diagrams.

Other general works of a summary character, valuable as references for numerous facts concerning American resources, industries, and economic relationships, include the *Annual Report* of the U. S. Geological Survey, *Statistics of Railways in the United States*, published by the Interstate Commerce Commission, *Minerals Yearbook* prepared by the Bureau of Mines, bulletins on wholesale prices and on retail prices, issued by the Bureau of Labor Statistics, and the *Annual Report* of the Secretary of the Treasury.

Research Reports and Special Monographs. Besides these periodic reports prepared by the various branches of the national government, thousands of special studies and research findings have been put into print and made available to the general public under governmental sponsorship. The Bureau of Labor Statistics, for example, publishes a series of pamphlets on the subject of wages and hours in American industries. A separate booklet is issued on each industry and is replaced from time to time by another pamphlet giving more up-to-date information. Special bulletins are also prepared on such subjects as collective bargaining, industrial accidents, child labor, and occupational adjustment. Similarly, the Bureau of Agricultural Economics has issued separate circulars dealing with topics ranging from crop insurance to rural electrification and relating to methods of growing and caring for practically every crop grown commercially or passing through a stage of experimentation in the United States. The Bureau of Mines lists several thousand bulletins, technical papers, reports, and information circulars. The Treasury Department publishes studies of federal revenues, bonded indebtedness, and fiscal policies. The Department of Commerce prepares a series of brief digests providing information on the organization and operation of small business and another series of small-business aids pertaining to specific management problems. It also issues leaflets giving typical operating and merchandise ratios for retail stores. Special technical studies of industries, industrial materials, and production processes and broad surveys of developments in trade and transportation are also published from time to time.

The various executive commissions and independent establishments of the federal government have also contributed important monographs and special studies. Because of their complete surveys of specific American industries, the findings of the Tariff Commission and the Federal Trade Commission are of special interest to businessmen. Publications by other

commissions include the decisions, reports, and orders of the Federal Communications Commission; rate surveys, rules of practice, and regulations of the Federal Power Commission; manuals, technical maps, and studies of the Civil Aeronautics Authority; and recommendations and reports of such agencies as the International Fisheries Commission, the Maritime Commission, the Reconstruction Finance Corporation, and the Tennessee Valley Authority. Another valuable source of data is the group of publications of the various control boards such as the War Production Board, the Office of Price Administration, and other governmental bodies which controlled and collected facts from special industries during the war years.

Court Records. Although the records of all cases of the various federal, district, and circuit courts and the United States Supreme Court are of interest mainly to lawyers, the student or businessman occasionally consults them for needed information. These records are generally found in law libraries or in the larger public libraries. References to such cases show the volume, the court, and the page thus: 221 U.S. 191 (1911). This refers to Vol. 221 of the United States reports of 1911 (covering Supreme Court cases), page 191. The records of cases in the district courts are kept separately and are referred to in a similar manner: 64 Fed. 747 (1894), *i.e.*, Vol. 64, page 747, of the Court Records of 1894. Other published court decisions include those of the Court of Claims, Court of Customs and Patent Appeals, Customs Court, and Commerce Court. Special compilations have been issued containing all decisions on a particular topic, *e.g.*, federal antitrust law decisions, Federal Trade Commission cases, Food and Drugs Act judgments, etc.

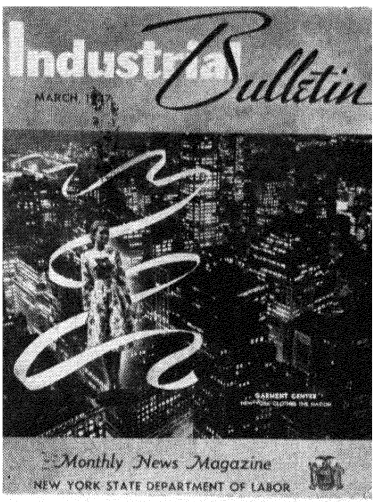
Congressional Documents. The legislative branch of the federal government has also made material contributions to the printed data available to the general public. The *Annals of Congress*, the *Register of Debates*, *Congressional Globe*, and *Congressional Record* have recorded all the proceedings of Congress [1] since the inception of the government. Somewhat less cumbersome are the *House Journal* and the *Senate Journal*, which include all motions, all action taken, and the votes on roll calls or divisions but do not include any speeches or explanatory matter. Special reprints have been published of individual speeches, committee reports, and state papers.

Of particular value to business executives, on occasion, are the reports of the hearings conducted by Senate committees on such problems as the tariff, taxation, banking, speculation, combinations, and working conditions. Illustrative of reports of this type was the elaborate series, popularly known as the TNEC reports. These were prepared by experts in

[1] *Annals of Congress*, 1789–1824; *Register of Debates*, 1824–1837; *Congressional Globe*, 1833–1873; *Congressional Record*, 1873 to date.

various fields just prior to the Second World War under authority of a Senate resolution directing a select committee to make a full investigation with respect to the concentration of economic power.

Administrative Orders. Large numbers of executive orders, special messages, proclamations, and regulations issued from the President's office or through executive agencies are printed and circulated for public use. Most of these regulations, having general applicability, are assembled and arranged according to titles in the *Federal Register.* Other presidential papers are available in special compilations of *Presidential Messages* and *American State Papers* or else appear in the *Statutes at Large* or in the *Congressional Record.*



Catalogues and Price Lists. Price lists, issued from time to time by the U. S. Government Printing Office, classify these publications by subjects. Subject guides compiled by individual departments and establishments list the publications that they have prepared. No single catalogue is issued showing all government publications, as it would be too voluminous for practical use. For ready reference there is a series of catalogues covering publications over a number of years and a monthly catalogue entitled *United States Government Publications.* These are available and may be consulted in the large public libraries.

Governmental Sources of Information—State and Local. Although by no means so important as the federal government in terms of numerical output of publications, the state and local governments have contributed a fair share of the total list of governmental source materials.

Some states maintain their own census bureaus and make periodic reports which might be used as a check upon or as a supplement to the federal data. Many states have departments or bureaus that study local conditions and issue reports, monographs, and bulletins relating to their findings. In particular, such data are usually made available through agricultural bureaus and commerce bureaus or commissions of mines, forestry, labor, public utilities, banking, insurance, and taxation.

In the local governments, in addition, there are commissioners or superintendents of highways, sanitation, transit, plants and structures, etc.

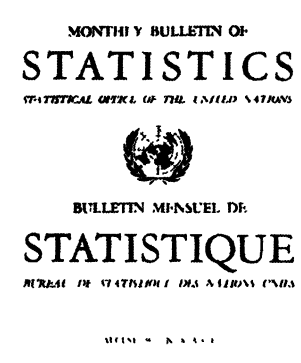
Many of these governmental branches issue annual reports which contain summaries valuable to firms directly or indirectly concerned with the subject matter covered. Special banking, insurance, labor-law, or tax-revision committees may be appointed for the study of certain evils and for the purpose of recommending legislative action for reform. Such bodies usually publish research reports upon the completion of their studies. Many of these reports are studied carefully by business executives, particularly if the recommendations embodied in them involve added tax burdens, new insurance rates, more drastic credit regulation, or more liberal provisions relating to the rights of laborers. Officers of corporations realize the need for thorough familiarity with any proposed steps for new legislation if they would contest such legislation. Furthermore, once a law is passed, executives make haste to obtain copies of the law and any special regulations for its interpretation, so as to lose no time in ascertaining the extent of influence of the new legislation on their business. For ready reference the Library of Congress prepares a *Monthly Checklist of State Publications*. Although not a complete list of all state documents, this guide provides a convenient clue to most publications of states, territories, and insular possessions of the United States as well as to reports and studies of associations of state officials.

Because of the great distances frequently separating the executive offices of a concern and the national and state capitols, access to public records is difficult and entails loss of time and money. Hence, where possible, all information in the government records that can be set in type and circulated is so prepared, thus obviating the need for frequent trips of this kind. Of course, when special problems arise and conferences with governmental officials are necessary, companies usually find it to their advantage to arrange for such visits regardless of the expense. When recorded facts only are sought, the printed circular is preferred. In local government, however, this problem does not frequently arise. The ease of access to city and county offices on the part of local establishments makes it possible for these governments to supply necessary information by maintaining single copies of public records, open for inspection to all people who need these data. Especially is this the usual practice with respect to current assessed valuations of real estate, tax liabilities, records of deeds, mortgages, leases, and liens upon real estate, probated wills, and judgments. Some of these data are tabulated and summarized on an annual basis and published as such. Most of these facts, however, are never published.

There is no fixed location in the many local governments throughout the country where these records are kept, but usually they are found in the comptroller's or treasurer's office, the tax office, the city hall, municipal building, or a hall of records. Some municipalities publish certain types

of statistics at regular intervals. One of the most important of these is monthly data on the issue of building permits.

United Nations. The reports and regular publications of the United Nations are valuable sources of information. As time goes on, the activities of the important committees and departments of the General Assembly and the Security Council will supply data and statistics concerning international affairs and individual countries. This will be an important primary source of information. The *Monthly Bulletin of Statistics* of the United Nations supplies current statistical data. The bulletin is prepared by the Statistical Office of the United Nations in collaboration with departments of the specialized agencies of national governments. It presents in summary form statistics showing the changing economic and social conditions in different countries and includes such items as estimates of national income, foreign exchange reserves, production of basic crops, and other factors of timely interest and importance.



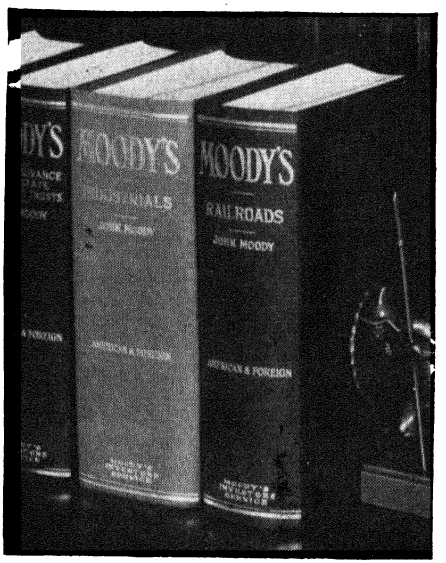
Financial and Business Manuals and Services. Many private organizations supplement the several levels of government as sources of information to businessmen. The following cases illustrate the varieties of such services.

The proposal is made by one of the directors at the board meeting of a railroad company to acquire the common stock of a small midwestern carrier. A motion is carried to investigate the soundness of this suggestion. Where can the necessary data be obtained? Where is it possible to secure financial statements of the concern, the records of past earnings or losses, the dividend history, the description of the scope of its business, its affiliated properties, any recent news concerning the line? Furthermore, how can all this information be made available without directly acquainting the concern or a circle of brokerage houses with the reasons for the investigation?

A glass manufacturer in Corning, N. Y., receives an order from a retail store in Brooklyn. Should the shipment be made on open-book account? How good is the credit of this dealer? What is the size of his investment? How much working capital has he? Does he pay his bills promptly?

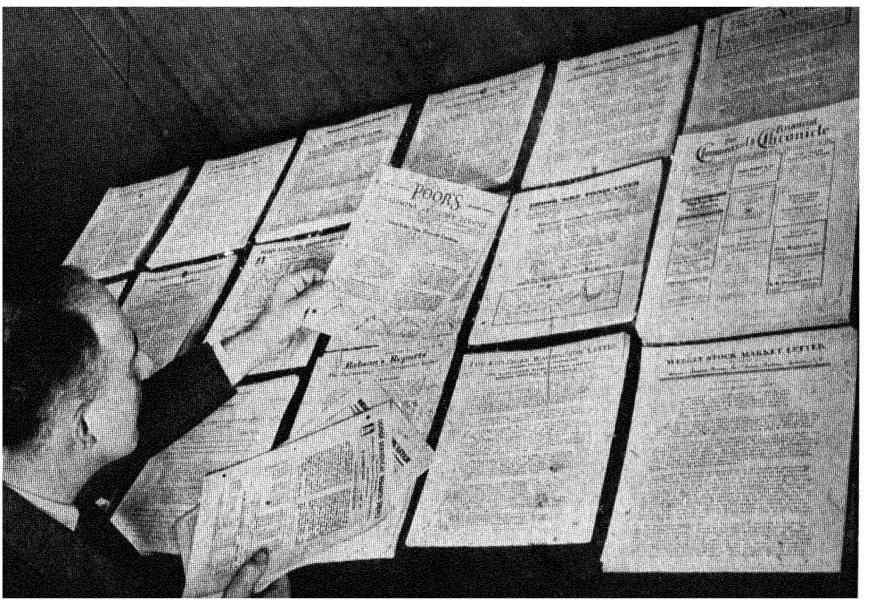
A producer of women's cotton dresses and pajamas discovers that he is being underbid by his competitors and attempts to ascertain the cause. Are his investments in plant and equipment too great as compared with those of his competitors? What is the ratio of their working capital to total investment? What percentage of their gross revenue must cover taxes, interest, and depreciation?

Most of these questions and thousands of similar ones relating to other industries and to individual firms may be answered from information available in the business and financial manuals, guide books, and commercial service bureau reports. *Moody's Manuals* and *Poor's Manuals* are the best known services of this type. They supply materials relating to individual corporate records of those firms whose securities are sold to the public or are listed on the principal exchanges. Together with other information, they report the place and date of incorporation, the principal offices, a full description of the character and scope of business, the authorized and outstanding securities, and the names and extent of control of various subsidiaries. They also furnish the names of executives, comparative financial reports, the records of earnings over a period of years, and the dividend policy. The financial position of the firm is reviewed—the condition of the working capital, the dates of debt maturities, any defaults in interest payments, accumulated dividends payable, application for receivership, or petitions in bankruptcy. These reports are published annually and are kept up to date by supplementary service reports throughout the year.



Several forecasting and current business services such as Brookmire Economic Service, Inc., United Business Service, Kiplinger Washington Letter, and Babson's Reports, Inc., as well as the Harvard Economic Service, supply the latest news summaries relating to the trend of business in general and to specific developments in certain lines of activity. With all these specialized fact-finding and reporting services, the modern business executive should be able to check any important decisions with the best available or known facts on the subject.

There is scarcely a businessman who is not familiar with the services offered by Dun & Bradstreet, Inc. This concern, an amalgamation of the two companies that formerly operated as separate firms, supplies its subscribers with credit information. The fees charged vary with the number of reports required annually. Each subscriber receives a rating book in which are listed most of the manufacturers, wholesalers, and retailers in



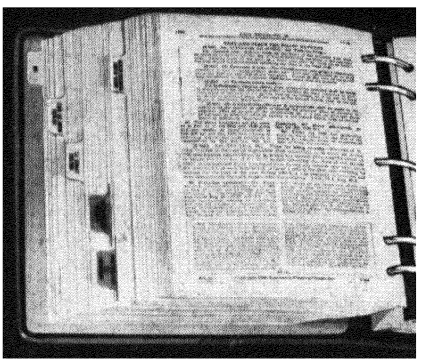
There is a large variety of forecasting and current business services. (*Courtesy of United Business Service.*)

the United States. The names are listed alphabetically and are arranged according to city and state. Next to each firm there is a symbol representing the classification and the rating, which may be high, fair, or poor. Subscribers desiring more detailed information request a report on the customer. The report gives the complete business history of the firm and its members. Such details as the fire record, insurance carried, lawsuits, age and marital status of the partners or officers appear in the report. In addition, there is a copy of the firm's latest financial statement, opinions of creditors and bankers regarding the reliability of the firm, and its past record in meeting its obligations.

Legal and Corporation Matters. A large corporation maintaining branches in several states must constantly be on the alert for legal changes in these states which might influence its business. Hence the chief execu-

tive and his legal and accounting advisers find it advisable to subscribe for one or more legal digests or loose-leaf law-reporting services. These services cover federal and state taxation and business regulation, such as labor, trade regulation, social security, securities, utilities, carriers, and allied laws. They organize and keep up to date by current reports, the statute laws, regulations, court decisions, rulings, releases, etc., that govern business.

Companies such as Commerce Clearing House, Inc., and Prentice-Hall, Inc., specialize in compiling business and tax laws of special interest to corporations; The Corporation Trust Company assists attorneys in organizing, qualifying, and representing companies in the various states.



Real Estate. In real estate circles, there is need for information relating to the last date of sale of a piece of property, the name of the present owner, the weekly record of properties that have been foreclosed, and other pertinent details relating to given properties. If the local government does not adequately supply these data, private services that supplement the official records are much in demand. Maps are available showing physical details of improvements in urban real estate; voluminous files may also be consulted in the offices of title companies. Data on building-construction costs, trends in the issuance of building permits, and information pertaining to building and engineering projects are obtainable from the F. W. Dodge Corporation which specializes in compiling construction indexes.

Marketing. Marketing information is a daily necessity in some distributing houses. The *Market Data Handbook of the United States* and *Market Research Sources* issued by the U. S. Bureau of Foreign and Domestic Commerce are of value in this connection. In addition, privately prepared manuals, such as the *Market Guide* [1] and the *Study of All American Markets* [2] may be needed.

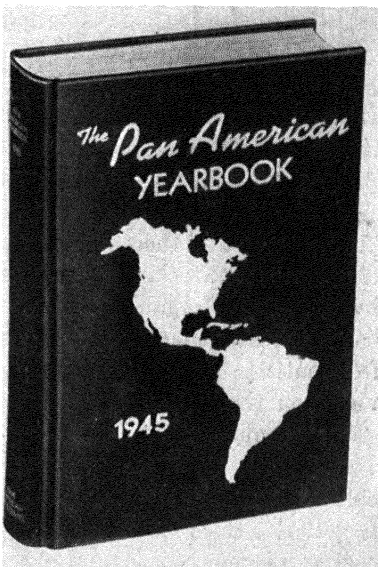
Directories and Mailing Lists. Firms interested in direct advertising or selling through the mails obtain their mailing lists from several sources. The Thomas Directory lists manufacturers by cities and industries and is, therefore, particularly useful for the exporter or the importer.

[1] *Market Guide*, Editor and Publisher Company, New York (annual publication).

[2] *A Study of All American Markets*, Major Market Newspapers, Inc.

A publishing house wishes to sell by mail a book for recording marriages and births. In addition to the usual marketing channels, like stationery stores, it wants a list of clergymen and justices of the peace. Such lists of classified names are sold by Boyd's City Dispatch, the Reuben H. Donnelley Corporation, The Dartnell Corporation, and others.

Bank Publications. Many of the larger banks publish weekly, monthly, or occasional business reviews that are of value. In New York, the Federal Reserve Bank for the second district, the National City Bank of New York, the Chase National Bank, the Irving Trust Company, and the Guaranty Trust Company of New York supply such periodicals to businessmen without charge.



The Bank of Commerce and Trust Company of Boston and the Cleveland Trust Company publish valuable charts and indexes of business activity.

Yearbooks. Finally, certain books of ready facts are found to be extremely valuable when there is immediate need for verification of some statement that has been made. The *Pan American Yearbook,* for example, supplies important information about the Western Hemisphere countries. *Harper's* and the *Century Book of Facts* and the *Statesman's Yearbook* contain a wide variety of up-to-date information. The various almanacs, standard encyclopedias, and their annual supplements also serve this purpose.

Chambers of Commerce; Trade Association Reports. Chambers of commerce are found in almost every city and state in the country. They are federations of the business interests within a given geographical area and are supported by dues collected from the members. Frequently they are called merchants' and manufacturers' associations. In the attempt to promote the growth of its community, one of the leading functions of a chamber of commerce is to make known the advantages of the locality. This usually involves the compilation of data that will serve to attract industrial and commercial interests. This information is then published and advertised in various ways. Central offices maintained by the chambers answer all inquiries and conduct surveys for interested groups who

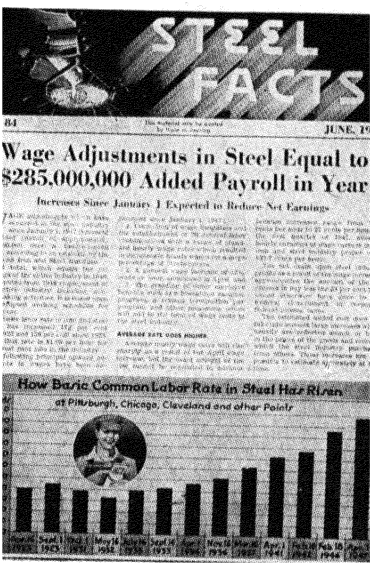
are considering the question of locating their plants, offices, or stores within the community. The Chamber of Commerce of Galveston, Tex., publishes a semimonthly *Shippers Digest* which contains shipping news and quotes sailing dates of vessels to foreign and domestic ports. Other valuable services and specific studies are undertaken by other chambers of commerce on such subjects as civic development, industrial promotion, transportation improvements, foreign-trade service, commercial and industrial arbitration, taxation, finance, and insurance.

Many of the local chambers of commerce are members, as a group, in the state chambers of commerce; and in turn, both of these classes may be members of the Chamber of Commerce of the United States. This is a national federation established as a central association with which individuals as well as various business organizations are affiliated. It aims to express national business opinion on matters of an economic or political character, and it provides an important contact for the government with businessmen and their associations throughout the country. Many service departments covering the main divisions of business activity are maintained by the central organization for the benefit of its members. It also publishes the magazine *Nation's Business*, which, in addition to the chamber's frequent reports on economic topics, carries the latest business facts and views on timely issues relating to American industrial, commercial, and governmental activity.

Industries themselves, through their own trade associations, frequently collect from one another valuable data which are made available to the members. Such information relates to production schedules, shipments, cost and price records, and other matters of a confidential nature. It also includes technical data. For example, technical research reports are published from time to time, summarizing the findings of studies conducted by such associations as the Cotton-Textile Institute and the Silk Association of America with reference to the perfection of yarns, the effect of dyes on textile fabrics, etc. Several large food, bottling, and canning associations also maintain research laboratories for testing the purity of foods, their dietary values, and their preservation. The American Gas Association maintains laboratories for the purpose of studying gas utilization and for testing and approving stoves and other devices using gas. The National Retail Dry Goods Association maintains a special bureau that handles all details of insurance information in the trade. Other data supplied by trade associations include periodic market analyses, studies relating to price practices in the trade, legal advice to protect trade-marks and patent privileges of its members, and credit information relating to affiliated companies. Many of these associations publish their own trade papers or periodicals. Typical of these are the publications *Steel Facts*

and *Steelways,* both of which are issued by the American Iron and Steel Institute.

The National Association of Manufacturers is another source of business data. Founded in 1895 by a small group of manufacturers, it has since grown to a membership of over 16,000 manufacturing businesses of all types and sizes. It is pledged to serve as spokesman for the business interests of the nation and to provide active leadership and constructive assistance to manufacturing groups. In the furtherance of these aims, it has organized a large staff which collects data, prepares statements of policy, and publishes studies on such issues as the tariff, cartels, prices, and collective bargaining.


STEEL FACTS

84 JUNE, 19

Wage Adjustments in Steel Equal to $285,000,000 Added Payroll in Year

Increases Since January 1 Expected to Reduce Net Earnings

How Basic Common Labor Rate in Steel Has Risen at Pittsburgh, Chicago, Cleveland and other Points

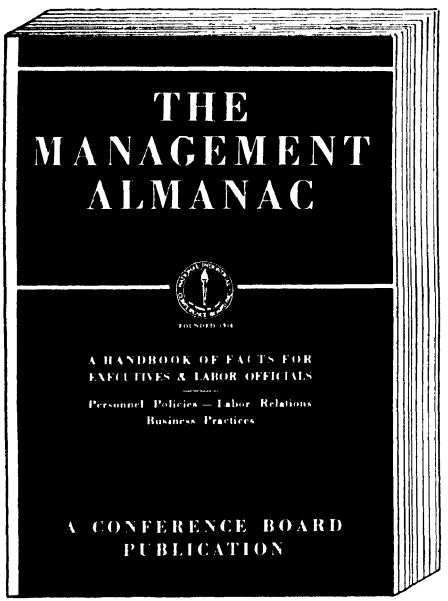
Other pressure groups, including labor unions, tariff leagues, grange associations, and various political organizations, also compile information and publish reports that prove to be useful to business executives.

Although obviously colored by the particular bias associated with each of the various blocs or special interests that they represent, this collection of publications is often helpful in providing statements of viewpoint, facts used to support a given position, and data that can be employed on a comparative basis with other information known to represent contrasting attitudes.

Research Agencies. The services of various research agencies are also helpful in preparing important statistical compilations and economic studies. The National Industrial Conference Board, for example, is devoted to practical research in the problems of industrial economics and management. It is a source of facts and figures bearing on all aspects of economic life and business operation. Its subscribing associates receive weekly summaries of changes in business indicators; multicolored graphs, called "Road Maps of Industry," which cover important business developments; monthly and quarterly publications containing data on production trends, wages and hours, employer-employee relations, and other vital material condensed for easy reference and use. Periodic reports on per-

sonnel policy and business policy are also issued, based on the collective experience of hundreds of managements. Its annual handbooks *Management Almanac* and *Economic Almanac* serve as reference volumes for statistical and other data covering industrial relations, management practices, and current economic affairs.

Other privately supported research groups include the Committee for Economic Development, the Tax Institute, and endowed organizations like the Twentieth Century Fund and the National Bureau of Economic Research. The staffs of these organizations prepare scholarly studies on major economic and business topics. Leading colleges and universities also sponsor research activities in their science and engineering laboratories and in their social-science and business departments. Occasionally these undertakings are partially subsidized by large corporations interested in these findings.



Current Periodicals and Trade Papers. Besides the reports of trade associations, there are various independent publications that cater to the interests of a particular trade or industry. Such magazines as the *Chain Store Age, Coal Age, Electrical World, Engineering News-Record, Iron Age, Oil, Paint and Drug Reporter,* and *Railway Age* are of this type. General business and financial magazines like *Modern Industry, Business Week, Commercial and Financial Chronicle,* and *The Annalist* and daily newspapers and special papers such as the *Journal of Commerce* and the *Wall Street Journal* enjoy a wide circulation among businessmen because of the current business and financial news that they carry.

Guides to Periodical Literature. Frequently, newspaper and magazine articles present facts or contain editorial comment of a character that will aid in negotiating a particular business transaction. Advantageous as this may be, it would be impossible for companies to maintain files of all such periodical literature for that purpose. Moreover, should access be had to library facilities that offered accumulated stocks of these papers, it would still be difficult to find in this maze the particular topic sought.

To meet this need, guides to periodical literature have been prepared. The *New York Times Index*, published annually, classifies by subject matter all articles that have appeared in the daily issues of that newspaper during the preceding year and makes possible quick reference to all issues, pages, and columns in which comments on these subjects have been made. In the same fashion, *Poole's Index*, the *Reader's Guide to Periodical Literature*, the *Industrial Arts Index*, the *Industrial Digest*, and the *Public Affairs Information Service* are ready guides to periodical literature of all descriptions.

Library Facilities. A brief word should be added concerning the availability of the sources of information to which reference has been made. Most of the larger business organizations equip their executive offices with standard source books and guides and are regular subscribers to business services, periodicals, and government publications that are considered pertinent to their activities. In a number of instances, companies maintain elaborate library facilities for the use of their employees. In the majority of cases, however, firms cannot afford the luxury of purchasing complete sets of source materials to which occasional reference might be made. Instead, they obtain a number of regularly needed fact books and guides and rely upon outside library facilities for other data that are required. Usually the best sources for such materials are the large central libraries, especially those which have special business, economics, or technical departments. Other sources of reference include the library collections of the local chambers of commerce, the banks, and the securities exchanges, as well as the law libraries or the libraries of a near-by college or university. The field offices of such governmental departments as the U. S. Department of Labor or the Department of Commerce are also very helpful. Finally, membership in various trade associations or subscription to membership in an organization like the National Industrial Conference Board will often enable relatively small concerns to obtain the desired information through these agencies.

Questions and Problems

1. "Outside sources are essential in providing supplementary data." What data are provided the executive from the records of the business itself? What data would have to be obtained from other sources? List briefly the important outside sources of information that are used by businessmen generally.

2. Evaluate the reliability of each of the following as sources of information: (*a*) A student reports that more than 50 per cent of our female population is gainfully employed. (*b*) A newspaper headline states that steel production is operating at 95 per cent of capacity. (*c*) Dun & Bradstreet reports a decline in business failures. (*d*) The *World Almanac* gives the figures for union membership. (*e*) A trade journal prints

charts showing loss in production caused by strikes. Differentiate between primary and secondary sources of information. Draw a list of important primary sources and secondary sources of information.

3. You have the problem of determining the probable trend in the demand for children's shoes, hosiery, and clothing. How would you go about collecting data? What information do you need? Where would you obtain it? To what extent will you consider these factors: wages, education, food prices, rents and housing, exports, steel production?

4. Where is it possible to obtain reliable tabulations showing the number of retail dry goods stores in Columbus, Ohio? The number of individual farms in the state of Kansas?

5. A college graduate, dissatisfied with his prospects and with city life, would like to go into the business of poultry farming. He would like to study long-time trends, scientific methods, future prospects for growth, etc. Suggest government and private sources that would provide him with information and guidance.

6. A large mail-order house discovers that orders are dwindling. Where would the management determine whether this is a temporary trend or a permanent condition? If they wished to compare sales with other retail outlets such as unit stores, chain stores, department stores, where would they obtain data?

7. You would like information from the original records of such famous court cases as the Danbury Hatters, the Schechter Case, the *Wabash Railroad v. Illinois*. What information do you need for a complete reference? Give a typical reference to a United States Supreme Court decision, a lower federal court; explain the significance of each part of the reference.

8. What references should be consulted in order to ascertain names and page numbers of periodicals that have published recent articles on specified subjects? What book gives similar data concerning newspaper articles?

9. You are a credit manager and want information about a new customer. Where would you obtain the data? What would be the nature of the information? What sources of information would you suggest for obtaining the following data:

a. State of incorporation of a given company.

b. Approximate number of wage earners in an industry.

c. Assets, liabilities, and capital investments of several large companies.

10. If you were asked to recommend books and materials for a business library, what would you recommend for an export firm, an agricultural college, an advertising agency, a manufacturer of athletic equipment, a retail florist?

Part III

INDUSTRIAL MANAGEMENT

CHAPTER IX

CHOICE OF LOCATION

Problems of Industrial Location. A technical problem that arises a the very inception of a business is the choice of a site. The solution, super ficially, is to select that site which will yield the greatest revenues over a period of time at the least cost. But to the industrial manager that is no answer at all—it is merely a statement of the problem. He will naturally try to choose a location that will make possible the most satisfactory yield from the enterprise. Countless elements will influence such a selection and advice must be sought on both technical and economic grounds.

The primary factors to be considered in the choice of an industrial site are raw materials, markets, labor, transportation, and power facilities A much greater number of secondary elements must be analyzed, however and as is quite frequently the case, one or more of these may assume a position of primary importance for any specific industry.

The problems of choosing a location can be divided into several categories. First arises the necessity of determining the broad territory in which the business is to be conducted, then the selection of a local area, and finally, the choice of a specific site. The first two questions relate primarily to the comparison of general technical and economic advantages of one locality with another; the last problem includes a consideration of important real estate factors.

The selection of a site is not a problem limited entirely to a new enterprise. Year after year the map of industry in the United States is changing. Old firms are moving to new locations or are branching out into other lines or into new areas. Many firms are setting themselves up in places different from those regularly recognized as the centers for that variety of production. Shifts in population and markets, increased competition, and the deliberate attempts on the part of communities to attract industries to their immediate environs have emphasized the need for careful analysis of the relative strategic importance of one industrial location over another.

Many of the larger corporations that are continually branching out in new lines and extending established business find it profitable to maintain a permanent staff of location specialists, paying the members of these staffs large fees and salaries. These location staffs conduct extensive

investigations, going into minute details in their quest for facts before any move is made by the principals. This research is frequently supplemented by work of the real estate department and the legal staff which negotiates in the final settlement of any leases, deeds, or other contracts in real estate that might be involved.

Geographical Limitations. In some industries, one or more major factors materially limit the area of selection. Soil and climate considerations in agriculture, for example, cause fairly definite boundary lines to be drawn for certain potential crop areas. Neither Michigan nor Maine need be contemplated as a site for a cotton farm, nor would Florida or Colorado be best suited for wheat. Citrus-fruit production is restricted to a few states, and certain tropical crops cannot be produced on a successful commercial basis anywhere in the United States.

Extractive industries are obviously limited in location by the presence of natural deposits or resources. An iron mine cannot be developed where there is no ore, nor could a lumber industry be established on the plains. The anthracite-coal industry is localized in Pennsylvania because that is the only remaining area in the United States in which workable deposits of this mineral are known to exist. Petroleum and natural gas wells, hydroelectric plants, lumber camps, quarries, mines, and fisheries are rigidly restricted by the physical location of the known resources of the nation. Death Valley would not be favored as the most desirable site for borax production were it not for the fact that one of the most valuable deposits of this salt is found there. In like manner, steamship and dock companies are limited to available water-front properties.

This does not imply that for these several industries the selection of a site is of slight significance; for within the broad geographical areas where most of these industries can be established, there is much variation between production costs, relative marketing advantages, and other elements that emphasize the importance of choosing a location. The western states, for example, which are now regarded as the best wheat-growing section of the country, were unsatisfactory to the early settlers from the commercial standpoint; for despite the suitable soil and climatic features, these states were so far removed from the eastern markets that the existing transportation costs made it impossible to ship the crops at a profit. Consequently, the eastern states were found more favorable for cereal production at that time. Steamship companies are restricted, it is true, to the nation's water front, but they have almost 5,000 miles of coast line along which to seek a favorable site.

Primary Factors. *Raw Materials.* The importance of the cost of raw materials in most manufacturing industries is appreciated when it is remembered that more than half of the value of the finished product, on

the average, is made up of the material used in the manufacturing process. Anything that serves to increase or reduce these costs will therefore have a significant influence upon profits. Materials are of three kinds: those entering directly into the finished product, such as cotton, wood, and copper; those used as fuels, such as coal, coke, and fuel oil; and those serving as supplies and auxiliary goods, as mill supplies, refining flux, and packing materials. It is seldom that a plant can be ideally located so that it is equidistant from the sources of production of all three types of raw products, nor is it always to the advantage of the plant to be so located.

The relative drawing power of these classes of goods in the localization of industry depends largely upon their individual characteristics. An estimate should be made of the relative importance of the cost of the raw materials in the price of the finished product. This should be followed by a study of the difference in freight costs between raw-material shipments and shipments of finished products made of the raw materials. It should be remembered that the great significance of raw materials in influencing a choice of location is the cost element, and it is in terms of relative costs that this factor is studied. This problem becomes especially intensified in an industry like automobile manufacturing where many varieties of goods must be assembled in order to make the finished product.

Another important consideration is the nature or structure of the raw materials used. Products like lumber or clay are bulky and heavy in relation to their value, and it becomes costly to transport them any great distances. Occasionally it happens that part of a bulky raw product such as iron ore is made up largely of waste matter. For this reason, it does not usually pay to ship ore very far from the mine. Perishable materials are frequently instrumental in drawing a factory much closer to their source of production than would be justified in terms of transportation costs. Irregular freight facilities coupled with high storage costs help to produce the same effect. Improvements in transportation, the use of preservatives, and refrigeration methods act as counter influences against these factors. Fruit canneries can now be located at some distance from the farm, and liquid latex may be shipped thousands of miles before a plant in New York or Akron converts it into commercial rubber.

Markets. Proximity to markets is perhaps the first consideration of most industrialists engaged in selecting the site for a plant. Nearness is expressed in terms of time and transportation charges rather than in statute miles. The ability of a producer to compete successfully with others depends in no slight degree upon the dispatch with which he can deliver and upon the delivered prices that he is able to quote. Dozens of other advantages that a given location possesses might be outweighed by the lack of contact with the markets.

Costs and service are the two essential considerations in studying the question of industrial marketing. High distributing costs place the producer at a distinct competitive disadvantage and may nullify all the advantages of low rentals, cheap labor, or accessible raw materials at a site located at some distance from the market.

Frequently prompt-service requirements exceed cost considerations. Paper producers must be ready to give 24-hour delivery to newspaper plants; soap, washing soda, and other supplies flow in a steady stream to laundry concerns; bronze-casting works require immediate shipments of models and dies. No time can be lost in making elevator, dynamo, and machine repairs and replacements. Daily coal and oil needs must be met in the large industrial city. The time factor is just as essential to consumers. Daily demands for food, pharmaceutical products, fuel, news, and clean laundry, on the part of the general public, make it necessary for producers to be located advantageously in order to meet these needs. In the consumers' markets, further factors must be considered if a representative measure of potential sales volume is to be obtained. These include the size of the population to be served and the standard of living of the people. The latter is revealed by such indexes as the size of bank deposits, payroll data, automobile registration, and types of residences.

Some manufacturing processes entail the use of raw products containing so much waste material that it would be too costly to bring the production operation to the market. Moreover, aside from this cost factor is the problem of disposing of the refuse. Should a manufacturer's industrial wastes be like those found in some of the metal industries in Utah (where solid refuse, not susceptible to further treatment, results from their operation), it is wise to provide plenty of ground space for depositing them. Residues from gigantic ore-treatment plants in Utah have spread out in endless waves. Mile after mile is completely inundated by a never-ending muddy flood. Space is plentiful and cheap; that is one reason the plants are there. Objectionable fumes such as those occasioned by sulphuric acid-production plants would also prevent a corporation from selecting a site too close to a concentrated industrial marketing area, in view of the local health laws.

There is thus a constant struggle between markets, on the one hand, and raw materials, on the other, as localization factors. The outcome is a series of compromises based in part upon the results of marketing studies and in part upon technical and production-cost considerations. Petroleum refineries are located in great numbers along the Atlantic coast, at some distance from the oil fields that supply them. It is found by many of these companies to be cheaper to ship the crude oil to the refinery in bulk than it is to send the bottles, boxes, and barrels of dozens of finished prod-

ucts into which the petroleum is made. However, hundreds of refining plants are established directly at the oil fields for other equally attractive reasons.

Transportation. The dependence of a company upon a specific area, either because of its importance as a market or because of its proximity to necessary raw materials, has been somewhat lessened through the development of modern transportation facilities. Distance and time have been largely eliminated through modern conveniences; and as a result, markets have expanded. Transportation costs are still to be reckoned with, however; and in some lines of business, they distinctly limit the areas of competition. It would be unfortunate for a company to select a site that, though otherwise attractive, could not stand up against the competition of other producers who enjoyed cheaper freight rates. Careful attention must be given to comparative transportation rates on raw materials and on finished products, as has already been suggested, but the subject should be studied, not only from the standpoint of a choice between available sites, but also from the angle of the relative marketing position as compared with other competitors. Moreover, alternative freight costs must be considered by making a comparative analysis of interior and ocean shipments where possible and by comparing rail, motor, canal, river, lake, and air routes.

Labor. In not a few instances, the choice of location has been largely affected by the differences in labor costs between areas. A good part of the textile-mill migration to the South was accounted for in these terms. The available supply, the proper skill, the size of the wage, the length of the working week, and the degree of union organization are the prime subjects that arise when an industrialist thinks of a new site in terms of labor. The problem of an adequate supply seldom arises in a large city. It usually occurs where a big plant is erected in an undeveloped area. This virtually necessitates, at times, the construction of a complete mill town, in order to obtain a permanent resident working force. This added expense is justified only when other advantages more than compensate for these outlays. The problem of an adequate labor supply also becomes important in the agricultural industry at harvest time. Because of the seasonal demand for labor of this kind, it is necessary to draw upon a transient labor force. Care should be taken that a floating supply of labor is available when needed and that the farm is not located in a distant area where such labor supply is found wanting.

Even though a large supply of labor is usually found in the industrial centers, it is sometimes difficult to get the proper skill. In the making of pottery, fine silk goods, collars, and gloves, the required skilled workers are not found everywhere. This may limit the area of choice.

Wages and working hours vary considerably from one part of the country to another. A northern farm hand gets low pay as compared with a factory worker, perhaps, but a southern farm hand gets even lower pay, and a Mexican probably gets less pay than a colored helper. Mills in New York pay higher wages, as a rule, than those in Mississippi. A carpenter in Colorado may get higher pay than one doing the same work in California. These wage differences are also accompanied by differences in the prevailing schedules of working hours. Although federal legislation concerning wages and hours has resulted in a greater uniformity in working time and in pay, significant differences still persist.

When a site is thought of in terms of available labor supply, these differentials are important. In some industries, the biggest item of production cost is the labor cost; differences in wage rates and length of hours are of particular significance in such lines of business. It should be recognized, however, that wages and hours are subject to mutation and that wide variations gradually tend to be adjusted over a period of time. Such adjustment may come through competitive situations, through legislation, through alterations in industrial codes, or through the organized efforts of the workmen.

In the past, this last influence has been given considerable weight by industrialists when choosing a new site. Anxious to escape from the relationships with labor unions, they have often selected a new location that, they were assured, was free from union control. In evaluating a location in terms of dollars and cents on these grounds, they credited it with a gain equal to their average annual losses from strikes and other labor difficulties. Although the present attitude of all businessmen is by no means uniformly sympathetic toward organized labor, there is nevertheless a broader acceptance of the principles of collective bargaining. Within recent years, there has been less emphasis upon the advantages of an industrial location that could boast of "cheap labor" or "nonunion" labor and more attention given to such questions as favorable industrial relations, labor productivity, and ability to learn new technical skills.

Power. Where companies require considerable quantities of fuel or power for operation, the location of their plant will often be influenced by the costs of obtaining such power. Coal, perhaps more than any other fuel, has led the way for much industrial expansion. Gas, oil, water power, and electricity have gradually made inroads in industry in a bid to supply power. Where carbon content has been necessary, coke and coal have retained their position, as in the steel industry, although natural gas has invaded even this field. The sales of industrial fuel oil have increased rapidly as a source of heat and power. Electricity has made its greatest advances in industries desiring cool, clean, and quiet operation with power on tap

whenever needed. Whatever fuel is used, however, it is the relative differences in power costs that, in the last analysis, hold out advantages to the industrialist in one way or another.

Secondary Factors. Certain other aspects of the location problem frequently exceed in importance one or more of the five basic factors just cited. For example, the local banking facilities, their stability, and the services offered are important to firms operating extensively on a credit basis. From the standpoint of marketing, warehousing and storage facilities are significant supplementary features to consider. Water supply and its chemical content, elevation above sea level, and the atmospheric pressure may be deciding factors in the choice of a given area in view of technological considerations. Climatic conditions from the health viewpoint, residential characteristics, educational and recreational facilities, and living costs are generally studied.

Artificial advantages of one region over another are also to be recognized. Chief among them are variations in legislation relating to taxation. Differences in tax laws mean differences of hundreds of thousands of dollars to a company and may turn out to be the governing factor in the choice of a certain state. Special subsidies or inducements are sometimes worth while—such as the willingness of a state to provide an exemption from taxes in order to induce a company to open a plant. Similar in nature are the offers of some communities to give free factory sites to companies willing to establish themselves there.

Land and building costs are ordinarily considered to be secondary factors in the choice of a geographical region, although they are not to be so construed when a specific site in that region is selected. In fact, even when a general area is under consideration, these costs must not be allowed to run out of proportion to other advantages; otherwise all such calculations will have been in vain.

Typical Industrial Requirements. The significance of these many factors influencing the choice of a site is not really appreciated, however, until the problem is studied as a whole and these elements are all weighed in the balance.

Some years ago,[1] an important implement-manufacturing company decided to locate its plant in a distant and unfamiliar farming section. What the ruling factor in such a choice might be none of the officials knew. A specialist on industrial sites was given the problem. To the four plants of the concern the specialist sent blanks for the tabulation of conditions, rates, and costs at each plant. On a master sheet, he arranged columns and headings for comparison of present and prospective locations, point by

[1] Data taken from "Finding the Facts," Lehigh and New England Railroad Co., pp. 8–10.

point. He sent other blanks to the managers of sales in the district in which location was desired, requesting reports on land developments, present and probable; acreage and crops; implements likely to be bought within two years; and, finally, factory sites or plants on the market.

He was constantly on the lookout for manufacturers whose plants he could inspect and with whom he might consult on transportation, fuel, ore, building costs, equipment, etc. The situation was complex, and he tabulated a few choice locations in great detail. Moreover, the sales reports and forecasts that reached him suggested a change in demand, so he directed an investigation into the value of tractors for use on big ranches. In three great districts hundreds of miles apart, he inspected supply mills and mines and plants similar to the one for which he wished to find a location.

One of these plants was located near the central metropolis of the new section. General conditions and costs for that locality marked it as a favorable site. As he went through the plant, he mentally checked off the advantages that it offered. Upon meeting his principal soon afterward, he recommended acquiring it at once.

"What—buy an engine plant to make farm implements?" the noted manufacturer exclaimed. "Why not?" was the reply. "Not only do we get foundries and machine shops and a force all easily fitted to our work, but within five years this territory will be demanding farm engines in quantity." The specialist drew out his reports and established his point.

"But what about metal—the ore beds are 500 miles south," said the manufacturer. "You would not give that section a second thought after touring it," said the specialist. He then told how he had found success in manufacturing within the southern district to be a rare exception because certain classes of its inhabitants were quarrelsome, making a labor supply unwilling to cooperate and constantly embroiled with its employers over some grievances. On a slip of paper he added the triple freighting costs, made up of incoming ore and fuel and outgoing product, for both centers. The chief markets far to the north and west just balanced the southern ore supply, making the central location equally efficient with the other. Going still further, he revealed the emergency source of iron and steel that he had found conveniently placed for the central location.

On this evidence, the plant was purchased. Within three years, it was operating at a good profit, having been extended in the form of an H, with one-half devoted to implements and the other half to farm engines.

This indicates not only the detailed work that must be attended to in wisely selecting a location but also the necessity of a knowledge of fundamental policies, future opportunities, and dangers.

Typical advertising appeals by various chambers of commerce.

Sources of Information. Where is the executive to obtain the necessary data on which to base his decisions with reference to the location of a new plant or the choice of a site for a branch distributing center? In the illustration just cited, the services of an industrial engineer were engaged for this purpose. In some of the very largest companies, these problems arise with sufficient frequency to justify the establishment of a special research department devoted to location studies. A number of the railroads maintain such departments for the purpose of rendering services to clients whose freight they haul. By far the most prolific sources of such data are the various boards of trade or chambers of commerce throughout the country. Although somewhat biased, much of this information, when collected from various parts of the country, can be used to advantage in drawing impartial conclusions concerning the merits of any particular area.

Some of the data compiled in the brochures prepared by the various chambers are complete in every detail that is ordinarily considered in connection with plant location. In addition, various services are usually offered. The following is typical: [1]

> There are at least three ways in which you can learn all you want to know about the Philadelphia Area with our cooperation: (1) An analysis to fit your individual problem can be prepared by your engineers and ours working in cooperation; or (2) you can send your engineers to us to secure the data which they need; or (3) we will do the whole job for you thoroughly and accurately. We accentuate especially the value of an individual analysis to suit the needs of your particular firm. . . . We wish to emphasize the fact that this service is available to responsible concerns without any cost or obligation either present or prospective; also that your dealings with us are entirely confidential. In many cases, surveys have been made and facts compiled without the name of the interested company being known to any of our staff.

Detailed Analysis of Alternative Sites. With detailed facts available, the executive should be able to determine, primarily on the basis of comparative costs, the desirability of one general area over another. Qualitative elements naturally play a part, but the major consideration is the influence of location upon profit-making capacity. Frequently, industrial engineers have sought to express such calculations quantitatively by assigning percentage values to the leading elements to be included in a location survey for a given industry. Such percentages are approximations based upon a general familiarity with the relative importance of these location factors and upon past experience with similar problems in the same industry. If applied with the intention of using it as a rigid yardstick, or measuring device, this technique is dangerous. When, however, it is used as a

[1] "A Dollar-and-cents Viewpoint on Plant Location," Philadelphia Business Progress Association, Philadelphia.

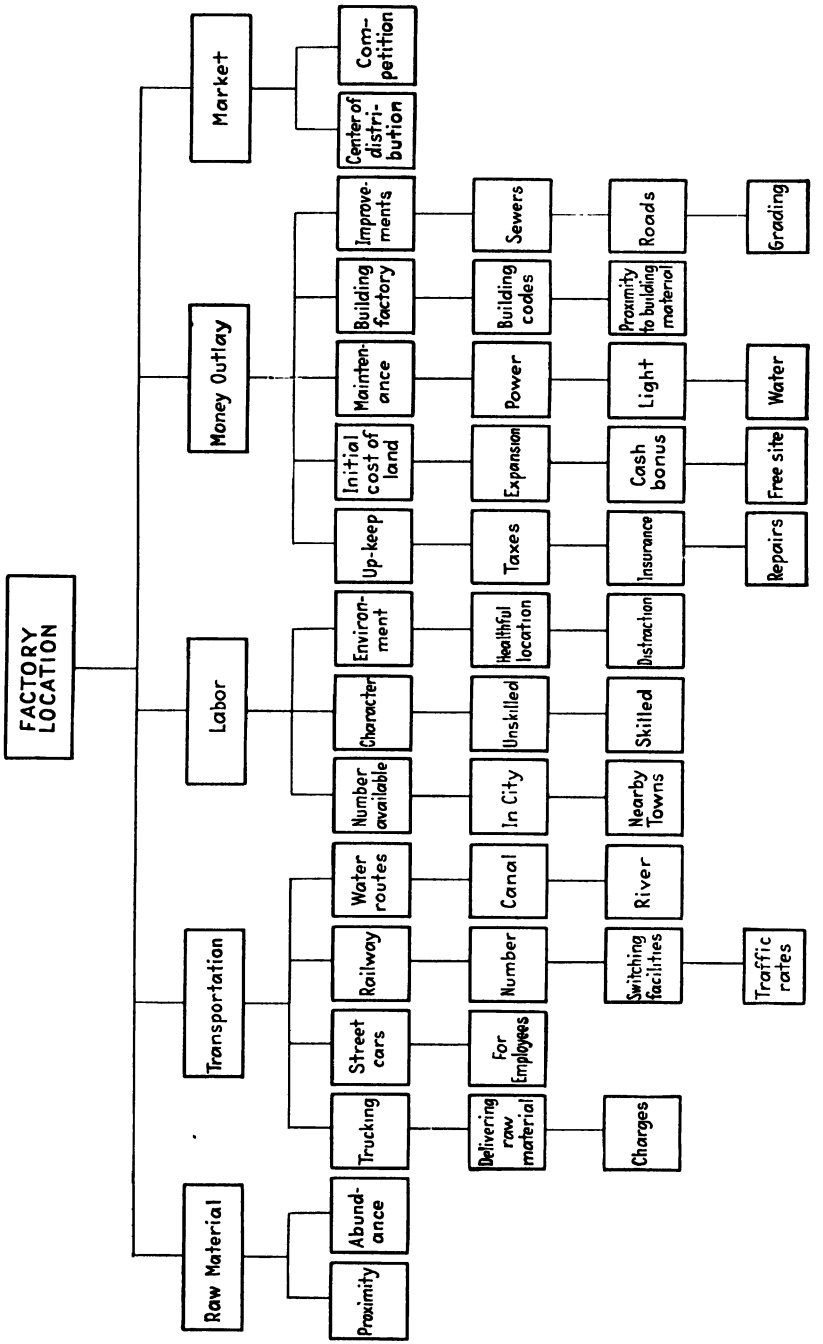
guide for purposes of expressing numerically the sum total of a series of heterogeneous elements, it is frequently a valuable tool to employ. In such instances, it is just one stage in a more comprehensive analysis rather than a final and accurate summary of the case. The tabular presentation in Table 10 illustrates the use of this method. Ten factors considered of particular importance in the selection of a site for a woolen mill are listed. In the first column are presented the ideal percentage values assigned to each factor. *A*, *B*, and *C* are specific localities offered for choice, and the percentages listed under each represent the industrial engineers' appraisals of the ratio of actual conditions to ideal conditions with respect to each of the 10 localization factors. The totals are the sums of the percentages in each column. Under the circumstances, on a strict mathematical basis, location *A* appears to be out of the running and location *C* seems to carry off the honors as shown in Table 10.

TABLE 10.—COMPARISON OF ALTERNATIVE SITES FOR A WOOLEN MILL *

	Ideal percentage	Site *A*, per cent	Site *B*, per cent	Site *C*, per cent
1. Market	25	12	18	18
2. Raw materials	15	12	14	13
3. Labor	25	15	23	24
4. Transportation	8	6	8	8
5. Fuel and power	5	2	5	5
6. Climate and health	2	1	2	2
7. Water supply and sewage disposal	8	2	2	7
8. Banking and finance	5	4	4	5
9. Civic standards and education	5	2	3	5
10. Taxes and insurance	2	2	2	2
Total	100	58	81	89

* From BOOTH, WILLIAM M. (professional engineer), Paper 4, *Location*.

The specific types of data on which such estimates are based are expressed in terms of pounds of local production of wool, wool trade, and wool prices; fabric and yarn production; labor conditions, wages, and hours; temperature and humidity; water supply and chemical analysis; market analyses in terms of manufacturing establishments, wholesale and retail outlets, population, purchasing power, etc., power facilities and costs, fuel costs; transportation facilities and freight costs; construction costs; credit facilities; and interest rates, tax rates, and assessments (see chart on page 196).



Leading considerations in plant location.

Aerial view of Gary Works, U. S. Steel's Carnegie-Illinois Steel Corporation. Mills occupy 1,440 acres along a mile and a half of lakefront and have the advantages of large space, proximity to raw materials, and excellent rail and water transportation. (*Courtesy of U. S. Steel Corp.*)

It would be beyond the scope of this volume to discuss the many different real estate problems associated with the choice of industrial property. A partial list follows showing the various elements that, under certain circumstances, might have to be considered:

A. Physical character of property.
   1. Specific location.
   2. Size and shape of land.
   3. Proximity to transportation facilities.
   4. Types of improvements (if any).

B. Maintenance costs.
   1. Taxes.
   2. Water supply.
   3. Insurance.
   4. Power and light rates.
   5. Fuel.
   6. Average repairs.
   7. Mortgage interest.
   8. Wages of maintenance crew.

C. Financial considerations.
1. Selling price.
2. Assessed valuation.
3. Mortgage indebtedness.

D. Legal considerations.
1. Zoning ordinances relating to use.
2. Zoning ordinances relating to height of buildings.
3. Health-department regulations.
4. Fire-department regulations.
5. Contemplated local improvements involving special levies.
6. Clarity of title to property; existence of liens and encumbrances.

E. Environment.
1. Character of industrial surroundings.
2. Character of residential community near the plant.
3. Educational and recreational facilities.
4. Available space for expansion.
5. Local warehouse or storage facilities.
6. Level of real estate values of abutting properties.
7. Whether the area is a growing or decaying neighborhood.

F. Tenancy rights and obligations.

If the property is not purchased but leased, there are many additional real estate questions that must be settled. For example:
1. Length of lease and privilege of renewal.
2. Rights of tenant to make improvements and alterations.
3. Rights of tenant to sublet premises.
4. Terms and dates of rental payment.
5. Tax obligations of the tenant.
6. Restrictions relating to use of premises.
7. Conditions under which tenant may be ejected.
8. Other conditions defining rights and responsibilities of landlord and tenant.

Types of Improvement. The real estate advertisements illustrated on page 199 are typical listings of industrial properties. Except in new, undeveloped areas, these parcels have been improved with buildings of all descriptions. Some have been designed and equipped for specific purposes, which makes conversion to new uses difficult. A weaving mill, for example, would probably not serve well as an automobile-assembling plant. On the other hand, standardized loft buildings are sufficiently flexible in use so that dozens of different types of production can be housed in them without involving serious problems of physical reconstruction.

Whether an old plant is used or a new one is to be erected, there are certain fundamental structural characteristics that must be considered. To begin with, attention should be centered on the nature of the production process. The normal flow of operations and the space requirements, because of weight and bulk, will determine the general character of building or buildings that are needed. Special studies of alternative schemes for

NEWSPAPER ADVERTISEMENTS OF INDUSTRIAL SITES

FOR SALE
Plants and Factories

CORSET FACTORY, WEST COAST, operated as popular-priced plant past nine years, gross sales as high as $85,000; modern building, 40 by 150 feet, 4 years old, completely equipped, 35 machines, modern attachments, first-class order; finest corset factory west of Chicago; business suspended account of illness; will offer the above at an attractive cash price for immediate sale; the above includes building, property, equipment, records of customers, data, &c.; full investigation invited; particulars, data, photos to principals only. Moore Elastic Products Co., P. O. Box 995, Glendale, Calif.

FOR SALE—ALEXANDRIA, VIRginia. Factory building 13,760 sq. ft. of floor space on 3.88 acres; one-story, adjacent to Union Station; price $35,000; terms; factory building containing 4,800 sq. ft. and room for one-half dozen trucks or autos; lot 12,500 sq. ft.; located heart of city; price $11,000, terms; eight railroads; water transportation; American labor; six miles south Washington, D. C. For information address, Alexandria Chamber of Commerce, Inc.

FOR SALE—SILK OR RAYON
Weaving mill for 38 to 41 inch materials; ready to run; 284 Crompton & Knowles plain looms; 25% individually motored, 75% powered in 4 groups. Also other factories, foundries and plants. Apply Delaware County Chamber of Commerce, 511 Welsh St., Chester, Pa.

New Jersey
CUT YOUR OVERHEAD

Will lease or sell modern daylight one-story factory building and grounds; 50,000 square feet; private siding on Pennsylvania main line; sprinklered building; low taxes and insurance; abundant labor supply; may assist in financing. Address P. O. Box 751, Trenton, N. J.

FOR SALE
Plants and Factories

MANUFACTURING PLANT FOR Sale—Main building 60'x150', hollow tile, one-story, boiler room and power plant 40'x35' attached; operating floor lighted by windows one half of wall space; cement floored cellar; railroad siding 40 yards from building; plant located in small Pennsylvania town within 100 miles of both Philadelphia and New York City, population 7,000, labor conditions favorable. Write Z 2332 Times.

BREWERY FOR SALE, OPERATING
10,000-barrel capacity, can be increased to double; our own water on premises; 200 miles from New York City; a good proposition for the right party; price $30,000, will take back $15,000 mortgage; act quick. George La Pasta, 163–18 Jamaica Av., Jamaica, N. Y.

RURAL INDUSTRIAL SITE;
Southeast Pennsylvania; concrete and brick buildings; sidings; owns large supply pure spring water; power and light turbines and generators; power savings will pay for plant in eight years. Z 2346 Time Annex.

Lofts—Manhattan & Bronx

1ST AV., 542—Lofts for manufacturing purposes; all improvements; units from 1,500 square feet up; reasonable rentals.

36TH ST. (475 10th Av.)—Former McGraw-Hill Building; adapted for offices, printers, textile trades and others requiring unusual light; high-class 14-story heavy type corner office building, 100x175, light 3 sides, ceiling height 14 to 25 feet, windows 12 feet high, 12 feet wide, sprinklered; possession; 300-pound live load; units 1,000 to 10,000 feet; plans, photos from owner on premises or your broker.

plant layout [1] will then reveal what specifications should be made concerning size, shape, height, and other features of the structures to be used.

There are two basic building types, *i.e.*, the single-story and the multistory buildings, each offering certain advantages. The construction of one-story buildings is popular because

1. They usually cost less to construct.
2. They necessitate fewer columns, shafts, and stairs for upper floors, thus avoiding obstructions and wasted space on the ground floor.
3. They reduce power costs involved in the use of elevators, hoists, and ramps.
4. They make possible the use of overhead cranes and conveyer systems in the movements of materials from one part of the plant to another.
5. They facilitate the movement of goods in and out of the plant, since wharfs, roadways, or railroad sidings are on a level with the whole plant.
6. They permit the use of heavy equipment and materials because of their greater floor-bearing capacity and less vibration.

On the other hand, multistory plants are often favored for the following reasons:

1. Where the cost of a site is high or where space is limited, they make more efficient use of the land.
2. The use of chutes permits economical gravity flow of materials from upper to lower floors.
3. Upper floors are freer from street noises, odors, and dirt.
4. Unrelated operations are readily separated into individual floors and rooms.
5. Economies in heating and lighting are sometimes possible in the taller structures.

Where possible, a one-story structure permitting a logical sequence of operations in a large open area appears to be preferred. This is especially true in cases where it is necessary or desirable to have operations follow one another along a horizontal plane, and it applies in particular to production processes using heavy, bulky materials or to those in which the time or speed factor is important. Continuous steel-strip mills, heavy-machine industry, and airplane manufacturing are of this type.

Meat-packing plants are usually long, low structures, especially built for the industry, to suit its needs for a continuous flow of operations from the time the animals are led into the slaughtering pens to the stages of chilling, packing, and shipping of the meat cuts. Yet the desire to ship fresh meats immediately into a local market causes many packing houses to establish their plants in congested industrial urban areas, where space limitations and real estate costs frequently necessitate the use of narrow loft buildings several stories in height. Production technique has been altered within such confines, so that the slaughtering process is frequently conducted on the upper floor, and the force of gravity is employed in trans-

[1] See Chap. X.

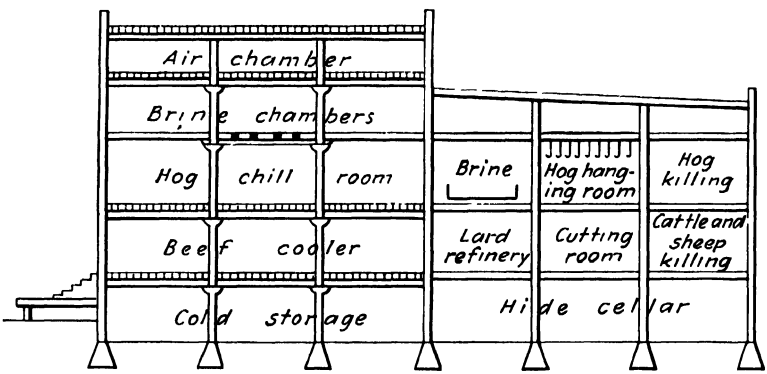
ferring the various parts of the animals through chutes for further operations on the lower floors. Thus there is no interruption in the production process, and heavy costs of elevator or conveyer operation are avoided. The cross-section diagram on page 202 shows a typical arrangement of this latter variety.

Heavy industry requires large ground-floor space. Molten steel from an open-hearth furnace being poured into ingot molds at South Chicago plant of U. S. Steel's Carnegie-Illinois Steel Corporation. (*Courtesy of U. S. Steel Corp.*)

Many lines of production are handled satisfactorily in vertical structures. In the breadmaking industry, for example, flour and other ingredients are frequently taken to a storage room on the top floor of a building that is from three to as many as eight stories in height. Here the ingredients are tested, prepared, and sifted. They are usually placed in hoppers connected by pipes to the mixing room on the floor below. Consecutive operations in this industry can be handled with ease through vertical chutes and conveyer arrangements. Specialized operations such as mixing, baking, and

packing are separated, and each is conducted under the most suitable temperature conditions.

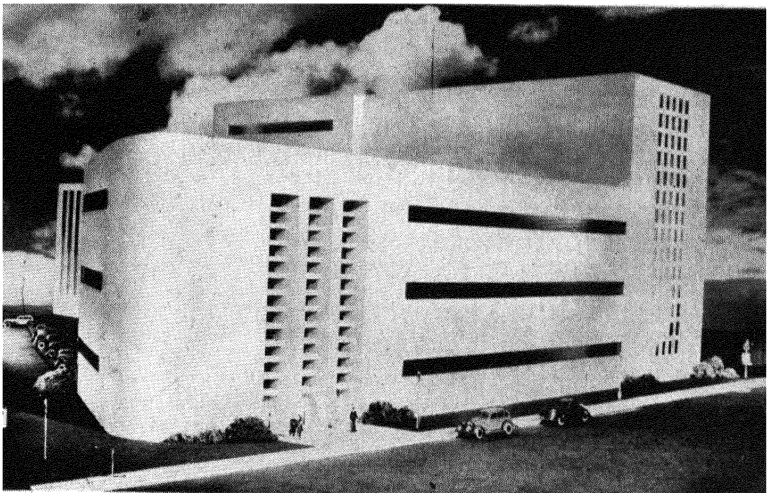
In other industries such as cottonseed-oil production, soap manufacturing, and sugar refining, it is also found that vertical structures or several buildings four or more stories high are, in some respects, superior to a low, horizontally constructed plant. Various processes necessitate controlled conditions, and it is desired to keep each function separated from the rest. Multistory structures are also typically used for light manufacturing and by producers who prefer to remain on relatively costly land,



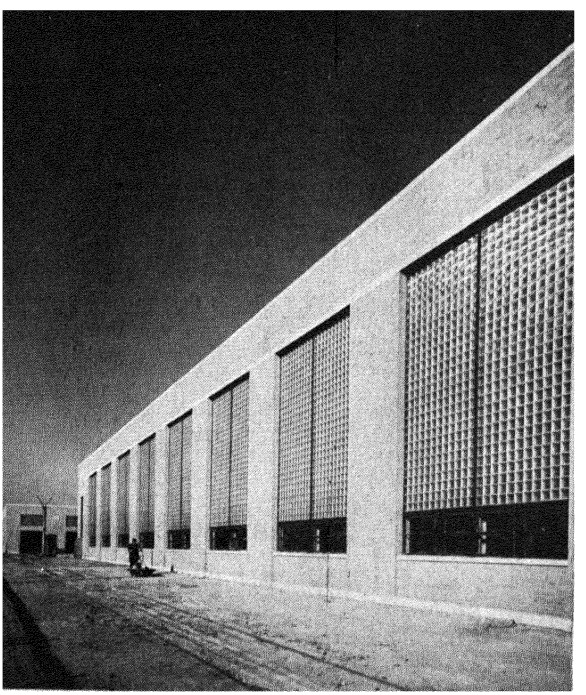
Cross section of hog- and cattle-killing plant, showing separation of functions into special floors and rooms of the plant.

close to city market areas. In general, however, the trend in modern plants is toward lower and more expansive buildings accompanied by a noticeable shift of industrial location to the suburbs and border areas of the cities.

Other important questions that arise in considering the adaptability of a given type of building to production needs relate to the shape of the building (*i.e.*, whether arranged in the form of an L, T, H, U, E, or other pattern); height of the ceilings; the clearance of doors, windows, and shafts; the weight capacities of floors and foundations; the materials of construction (wood, masonry, and steel); and the degree of fireproofing and sprinkler-system protection. The type of power available, whether involving the use of overhead pulleys, belting, and shafting or permitting the employment of unit-powered drive machines, is a matter of further concern. Adequacy of the heating and power equipment, the type of fuel used, and the economy of operation must be studied. Increasing attention is also being given to air conditioning and ventilation and its advantages in the factory. Efficiency of operation is affected to a large degree by the character of the lighting that is provided. Workbenches, tables, machines, and racks should be as close as possible to natural lighting facilities. The newer trend is to obtain adequate daylight by means of large windows, by



Modernistic factory building equipped with air conditioning and indirect-lighting system.

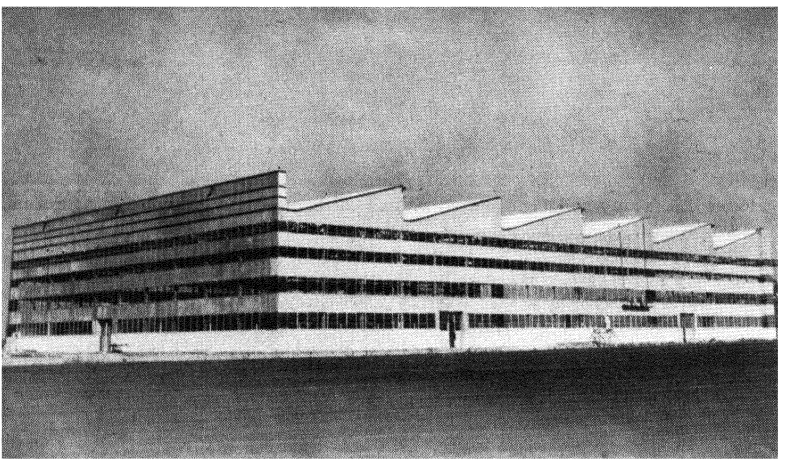


(Hedrich-Blessing Photo)

The use of glass brick in factory construction results in better lighting for daytime operations.
(Courtesy of Owens-Illinois Glass Company.)

more ample saw-toothed roofs with wide strips of glass, and through the increased use of heavy plate glass and glass brick. Further aids to illumination are found in the form of overhead indirect lighting and in the coating of interiors with light-colored paints.

Proper sanitation and plumbing facilities must be provided. If manufacturing processes involve the use and disposal of considerable quantities of water and steam, the construction of mains and pipes must be designed accordingly. The plant must also be designed to house dangerous appa-



Plant with saw-toothed skylight roofing.

ratus and to isolate processes that result in dust, dirt, noxious fumes, fire, or explosion.

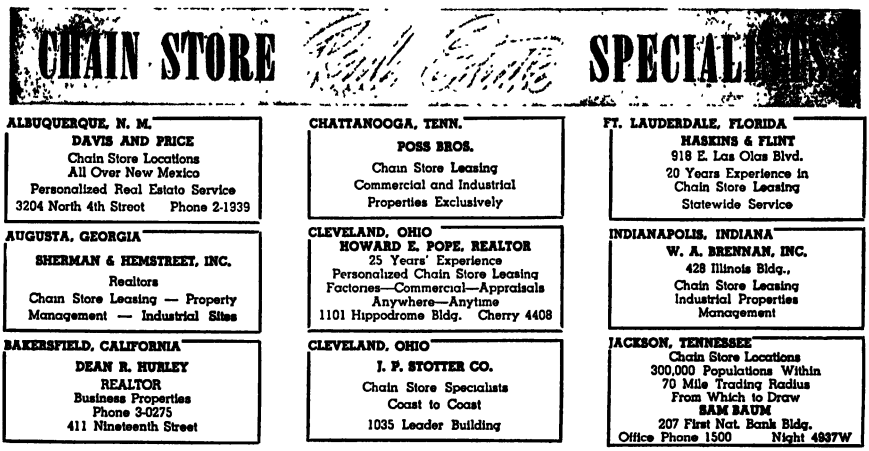
Finally, adequate space must be available for rest and locker rooms, storage facilities, and administrative quarters. With respect to the last consideration, there is an increasing tendency toward the separate construction of office and recreational buildings, thus removing them from the general scene of industrial operations.

Commercial Sites. The discussion thus far has been restricted to sites of an industrial character. Additional problems arise in connection with the choice of a site for such commercial purposes as wholesale, retail, or financial and office use.

To the wholesaler, ready accessibility of buyers to his showrooms, ease of shipment of commodities to retail or industrial outlets, good hauling and transportation facilities, and sufficient storage area would be salient questions to consider. The retailer would, in addition, need greater display

room, a more populated thoroughfare, good street frontage, and a desirable environment. Office buildings, as a rule, are best situated in areas easily accessible from other sections of the city and devoted in general to similar commercial use, so that compactness and ease of intercommunication of administrative and financial groups in the business community might result.

Wholesalers sometimes make use of facilities offered by large warehousing and terminal companies which provide water-front warehouses and railroad sidings, somewhat removed from the center of the city, yet



Examples of advertisements for chain store sites.

most conveniently placed for the economical receipt and distribution of goods. Some of these terminal companies, in conjunction with their warehousing and terminal facilities, also operate office and showroom buildings. A firm can then keep its physical supply of goods in the warehouses while its offices and showrooms are in the heart of the city.

The selection of some of these commercial sites, especially for retail use among the chain stores, has also become the subject of specialized study involving statistical compilations of pedestrian traffic, percentages of pedestrians entering stores, their sex, approximate age, and economic status. From these data, sales managers have been better able to decide upon a desirable location for a new store.

In choosing among comparable locations, successful chains use the following methods:[1]

1. Where traffic is a factor, they take traffic counts.
2. In some cases, they make house-to-house investigations to determine the probable reaction of potential consumers to the opening of new stores.

[1] FLINT, L. S., How Chains Are Selecting Locations, *Chain Store Age, special release.*

3. They compare population figures and buying power in the immediate shopping areas and in the potential trading area.

4. They interview noncompetitive business houses in these areas to learn the extent of supporting business and its success.

5. They learn from real estate men how rapidly both business and residential property is moving in each area and at what prices.

6. They check availability of adequate parking space, either on the curb or in parking lots.

7. They look at the local employment picture to determine if desirable help will be available.

8. They compare asked rental or sale prices against those paid by adjoining or near-by businesses.

9. They estimate available volume and determine if the asked price for a location is in line with the business that can be done. Percentages allotted for rental vary widely in different lines. Most companies agree that volume estimates should not include revenue from nonprofit or low-profit departments.

10. If the desired property is not available at a justified price, they renew negotiations on another basis—perhaps with the offer of a longer lease, a percentage deal, or outright purchase.

While most chains are concerned primarily with immediate expansion needs, the larger organizations are also giving continued attention to long-range planning. A national grocery chain, for example, has developed an elaborate location-research department whose sole function is to maintain a constantly current picture of business development and location possibilities in every city, town, and village in the United States. The department is equipped with an estimated $200,000 worth of maps and employs a large staff of both office and traveling research men.[1]

Cities where the facts seem to indicate desirability of expansion in the near future are studied carefully by both local and national checking agencies. Traffic counts are taken regularly on all important streets. Reports are obtained from chambers of commerce, banks, real estate boards, and other sources as to population shifts, industrial development, and business activity. Through local agencies, reports on availability of desirable locations are obtained.

All significant data are classified and filed and are promptly recorded on the proper map and accompanying charts. When indications are that the time has arrived for expansion into a new area, the company knows immediately which locations are best and what they should cost. The constant location-research method is an expensive operation, but its value is evident from the fact that this company has made almost no poor selections since

[1] *Ibid.*

the department was established. Prior to that time, a great deal of money had been lost in paying off unsatisfactory leases.[1]

So detailed a survey is out of the question for most retail organizations, but they can follow on a smaller scale the same principles used by the larger retail stores. Keen competition for limited markets and the intensification of this competition by improvements in transportation and communication facilities have made necessary a policy of careful investigation and scientific analysis to take the place of a hit-or-miss method of setting up an establishment. In the small enterprises, the latter policy still prevails to some degree. Even here, however, there is a gradual awakening to the fact that production costs will be vitally influenced by location, and greater attention is being given to the proper handling of this important executive function.

Questions and Problems

1. The Gold Medal flour mills are located in Minneapolis; the Pillsbury Flour Company built a new plant in Buffalo; the Hecker flour plant is located on the New York water front in Jersey City. Discuss the factors that led to the choice of each of these locations. What other general considerations determine locations of enterprises?

2. During the decade of the 1930's, most of the old established cotton textile mills of New England migrated to southern states. Suggest what you consider to have been some of the most important reasons for this shift in industrial location. What are New England's strong points in appealing to industries?

3. A large dairy company and a hydroelectric corporation are both seeking plant sites. Point out probable differences in emphasis that will arise in the selection of these two sites.

4. Why do oil refineries sometimes prefer locations adjacent to market centers to sites in the region of crude production? What conditions determine the relative importance of raw materials as factors to be considered in the localization of industry?

5. Chambers of commerce, cities, and state publicity departments advertise the advantages of their communities to many types of industries. Select one of these advertisements, and show the applicability of the area for a specific business. Justify your choice by listing all the favorable factors as against any possible disadvantages of the area.

6. A manufacturer located in New York City plans to expand his production facilities. Make a list of all factors, both natural and artificial, that would determine whether a new site in New York City, additions to the present plant, or a new location in a small town would best serve his needs.

7. Evaluate the effect of huge projects such as the TVA on the future developments of industrial areas and the possible abandonment of old established industrial centers. What effects might come from the rapid development of atomic energy for industrial use?

8. A manufacturer of dolls seeks a new location in your city. Select several real estate advertisements, and determine the most suitable site for his purpose. Make a list of the important items that determine the choice of a specific industrial location.

[1] *Ibid.*

9. A veteran desires to open a retail business. What general factors arise in choosing a retail site? What specific considerations are important for each of the following businesses: food shop, radio repair, stationery store, automobile repairs, bicycle sales and repairs, novelties?

10. A chain-store organization wishes to open branches in your community. Make a survey of available spots, and justify your choices. Would you recommend purchase, long leases, or rentals? Give reasons.

CHAPTER X

PRODUCTION CONTROL

Production Planning. The initial task in the management of production is that of planning; the functions that follow involve the direction and control of operations in working out the plan. At the outset, in all fields of organized industry, some attention must be given to the preparation of well-arranged programs of work calling for the distribution of given tasks to be performed with certain tools or machines by specified individuals and at definitely assigned time intervals.

In the agricultural industries, policies with respect to the variety and size of crops to be planted, the fields that will be used, and the time of the first plowing are determined at the beginning of each season. Decisions must also be made concerning the selection of seed, the spacing of rows, and the depth of planting. As the season advances, suitable programs of cultivation, fertilization, and spraying must be worked out. In the extractive industries, such as mining and lumbering, well-devised plans of operation are likewise necessary in order to ensure smooth and efficient handling of the work.

The subject of production planning and control has been given most serious attention by students of manufacturing industries. Careful analyses of products, of machine capacities, and of sequences of operations are made in the plants of leading industrial firms in order to determine the most effective means of routing and scheduling production. Elaborate engineering designs, tests, and diagrams of manufacturing procedure frequently supplement these studies.

In a small industrial plant, the flow of work is relatively simple and logical. In a cabinetmaking shop, for example, the lumber is measured and cut to size. Special designs or patterns are laid out, and the wood is further cut or drilled and planed according to the requirements of the pattern. Moldings and carvings may be added. The gluing process follows, after which the finishing, varnishing, and painting operations take place. The time consumed in performing each of these functions can be estimated fairly accurately on the basis of past performance and the tasks scheduled accordingly. Five or six men might be working in a shop of this kind, and the foreman is personally familiar with the progress of every stage of the

work. In a large automobile-manufacturing plant, on the other hand, many activities are being conducted simultaneously and at varying degrees of speed. Some parts must pass through many operations; others need very little processing. The final assembly of the car in an uninterrupted flow depends upon the proper planning of dozens of different operations so that the requisite number of parts and of workmen will be on hand exactly where and when needed. As the productive unit increases in complexity, the necessity of devising effective means of coordination of operations becomes more apparent.

Types of Industrial Processes. *Technical Processes.* The first step in planning is to make a careful analysis of the nature of the production processes involved. In some industries, such as those engaged in the preparation of beet sugar, commercial salts, or aluminum, the technique of manufacturing is described as an *extractive process.* By the application of pressure, heat, or electrical energy, the desired product is isolated from the vegetable or mineral substances drawn from nature.

Petroleum refining and meat packing illustrate a second class of fabrication closely related to the first. This consists of the disintegration or decomposition of a basic material into several different products. By a series of further steps in the application of energy in various forms, this *analytical process* results in the production of dozens and, in some instances, hundreds of different by-products from the original raw commodity.

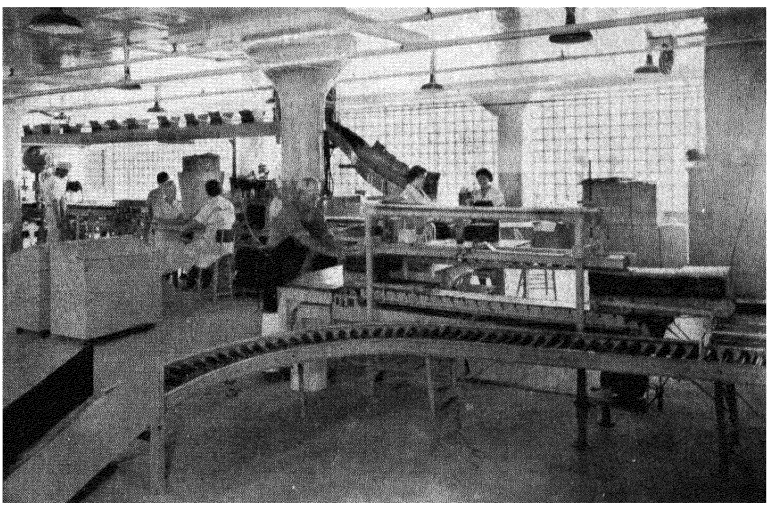
The *synthetic* or *assembly process* is a familiar type of industrial production in which several materials are used to make a single product. By combining several elements or compounds in solution, a product such as industrial rayon or cellophane is made. The manufacture of shoes, clothing, and watches consists in joining together various materials and parts to form a new article.

A further series of operations that result in changes in shape, texture, form, or size may be grouped into the general category of *conditioning* or *converting processes.* A sawmill that cuts rough timber to desired lengths, a rolling mill that produces sheet steel from ingots, a dairy that churns cream into butter are examples of the many manufacturing activities that would fall into this classification.

In practice, these several processes are frequently found associated in many different combinations. In an analytical process, like the distillation of soft coal, for example, it is necessary to introduce the use of a number of chemicals to dissolve out some of the by-products that are being isolated. This stage is in itself a synthetic process. The subsequent recovery of the end product from the solvent is an extractive process, and the grinding and pulverizing of the precipitate is a conditioning process. As the number and variety of these production stages increase, the responsibility of planning

and regulating all elements in the process naturally becomes more burdensome and involved.

Standard vs. Custom Production. Apart from the technical processes, another factor that enters into the problem of production is the question of the degree of uniformity or standardization of output. When viewed from this angle, production is classified as either a standardized business or a custom business. The first type involves a repetitive series of operations,



Repetitive or serialized operations have been introduced in many branches of industry. Conveyor system in bottling works, Miles Laboratories, Elkhart, Ind. (*Courtesy of Owens-Illinois Glass Co.*)

resulting in quantity output of identical commodities. In this case, production is for the replenishment of stock, which is continually being reduced through sales effort. In custom work, each job is based upon a separate order with individual requirements or specifications.

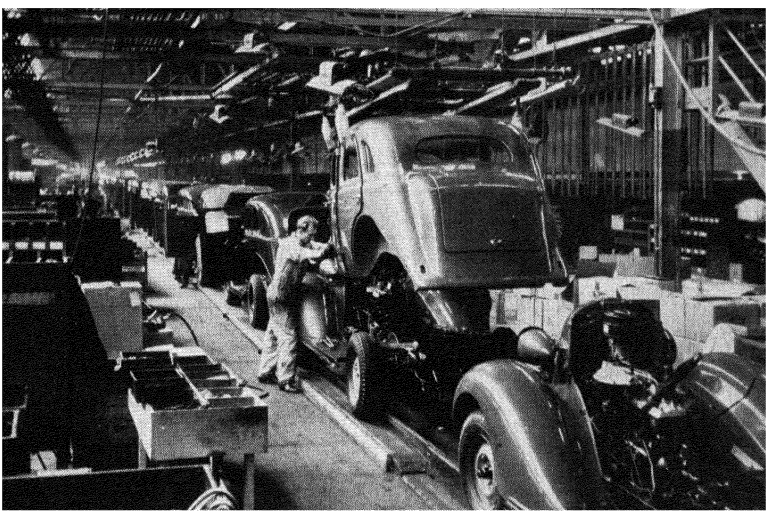
Mass production of the first variety naturally gives rise to a regular routine of continuous processes in which the materials flow steadily from one stage of operations to the next and where the work is interrupted only by such factors as falling sales volume, shortages of materials, breakdown of equipment or power, and labor troubles. The manufacture of bottled beverages, woolen yarn, cigarettes, and radios is a random illustration of the many branches of industry in which repetitive or serialized operations have been introduced. The spread in popularity of this system is occasioned, not only by the lowered costs of quantity output, but by the

advantages of stability and constancy arising out of relatively steady operations. The danger in this method lies in the fact that too much may be produced in advance for stock, with insufficient attention being given to the trend of ultimate market needs. Sales forecasts must therefore be studied carefully in order to achieve a stabilization and leveling off of production, with an optimum utilization of plant capacity.

Custom or job-order production seldom gives rise to this latter problem. Inasmuch as goods are made to order, there is little possibility of embarrassment from the accumulation of heavy inventories—unless the buyer of a firm makes unwarranted purchases of raw materials in anticipation of new orders. However, the production end of a business that depends exclusively upon custom work is usually more difficult to plan. A job-printing plant, for example, will run through a small brochure or magazine issue one day and billheads or advertising circulars the next. It will require the use of different paper stocks, cutting machines, printing frames, presses, and collating equipment for each job. Unless there is a continuous influx of orders, output varies considerably—resulting from demands for rush work at one time, followed by a lapse of orders in subsequent periods. Even when fairly steady operations are possible, the individual requirements of each order generally necessitate a more careful attention to the daily layout and routing of work than would be required in a plant that follows a standardized routine. Moreover, the problem arises of maintaining average production schedules of adequate proportions to justify the size of the capital investment.

When the manufacturing of standardized goods involves more than the simple, continuous production of a given commodity, it falls into the category of *complex* or *combination* processing. While continuous operations go forward, they are generally the final steps in a long series of *intermittent* or interrupted stages conducted elsewhere in the plant or in other plants. Articles are worked up to a semifinished state and are stored or held in reserve awaiting further processing. In the shoe industry, for example, a central continuous flow of shoe construction takes place, but simultaneously several individual operations are occurring. In the upper-leather department, the leather linings and trimmings are cut, counted, stamped, and assembled and are made ready for the stitching and gluing divisions. In the meantime, the sole-leather department is cutting the outer sole and the insole. It is also constructing the toe boxes and the heels. These parts are stored and, when needed, are sent to the lasting and the bottoming departments which, in turn, continue the process of shoe construction and finishing after the shoe leaves the stitching division. Automobile manufacturing offers one of the best examples of a complex-process, mass-production industry. Thousands of parts, ranging from ball bearings

to shatterproof windows are produced in individual plants which are units of a major group of factories extending over a large area. The final assembling processes are, however, closely situated. They are divided into the assembly of frames, of bodies, and of completed cars. The plants that produce the frames are in themselves complete machine shops. The actual assembling is handled in a frame-assembly plant. The parts are all trucked to the assembly line and deposited at convenient points. The work of

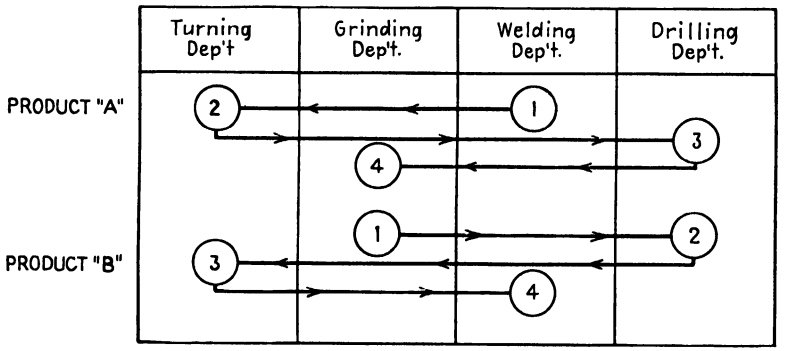


Section of assembly line showing how the automobile body is lowered on to the chassis.

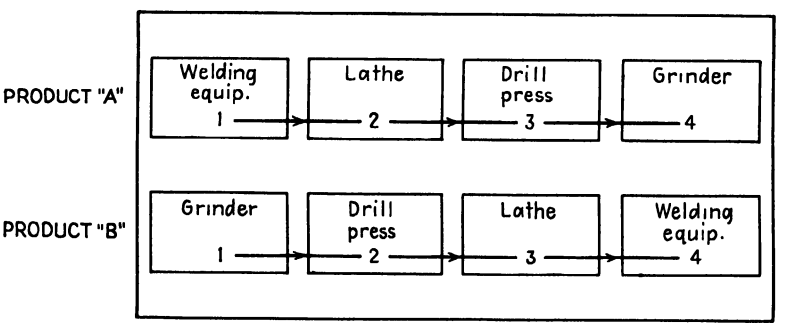
putting together the necessary parts that belong on the automobile frame, the riveting, welding, and painting are then conducted on a progressive- or moving-conveyer system. In the meantime, in another plant, a similar operation of body construction is going forward. The frames are introduced into a final-assembly line where all such previously assembled parts as the transmission, the housing and gears, motor, axles, wheels, battery, etc., have been brought together. Each product is attached to the frame in its proper position. At a certain point in the process, the body-assembly line meets this final-assembly line and the body is lowered onto the chassis (see illustration). The final steps of further installation of accessories then take place.

Plant Layout. Industrial plants are generally laid out in two different ways. The *process layout* (or *functional layout*) groups all similar machines in one area, according to the type of operation that they perform. Thus,

all lathe turning might be located in one department, grinding in another, welding in another, and all drilling in still another. *Product layout* (or *line production*), on the other hand, calls for the placing of equipment in the order in which it is to be used in the production of a given product or component. In this case, each department manufactures one product, the



SEQUENCE OF OPERATIONS WITH PROCESS LAYOUT

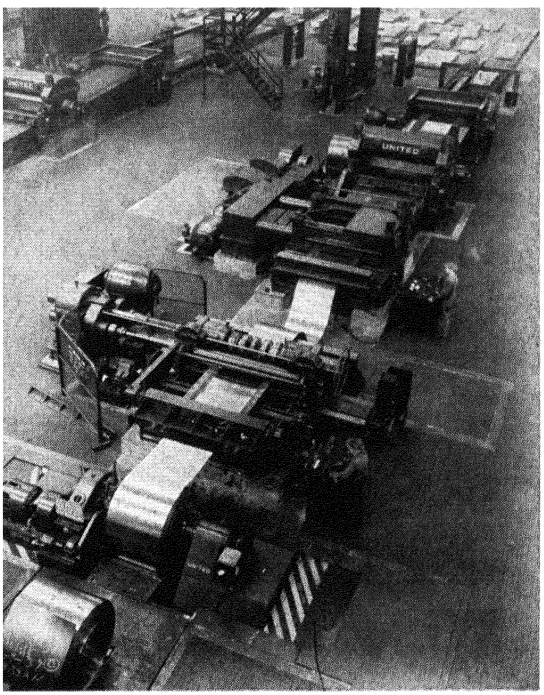


SEQUENCE OF OPERATIONS WITH PRODUCT LAYOUT

machines and fixtures being arranged according to the sequence of operations to be performed.

The diagrams shown above reveal the differences between the two methods of plant layout in the production of two items. In each case, the numerical sequence of steps is indicated. Process layout is most appropriate for job-order manufacture, where a variety of products, all processed differently, are produced in relatively small quantities and at irregular intervals. It offers flexibility of use of equipment; and because all similar operations are grouped together, it facilitates maintenance and reduces repair and servicing costs. The obvious disadvantage of this type of layout is that it involves a considerable amount of material handling and backtracking and the possibility of delays between operations.

Product layout is essential for low-cost, high-volume, steady production. It involves a smaller inventory of work in process, eliminates cross-hauling, and therefore reduces the nonproductive handling of work from operation to operation and usually conserves floor space because of a lessened demand



A feature of product layout is the continuous flow in the production of a standardized article. Coils of sheet steel are cut into measured lengths on the flying-shear line, shown here at the Irvin Works of U. S. Steel's Carnegie-Illinois Steel Corporation. At the same time, the sheet passes through a set of side shears which trim the edges to the desired width. The sheets are delivered and stacked at the end of the roller table. (*Courtesy of U. S. Steel Corp.*)

for aisles and storage areas. The chief limitation of this plan of work is that it depends upon a continuous flow in the production of a fairly standardized article. Delays in the movement of materials through the line result in idleness of subsequent operators. Reduced output causes some equipment to be assigned only a light machine load; yet makes it unavailable for other work. Substantial alterations in design and types of goods produced necessitate costly relayouts and change-over of equipment.

Where the bulk of a plant's output is on a job-order basis, the attempt is made to arrange the layout according to the most logical relationship of processes on the average order and to reduce cross-hauling and storage of goods in process to a minimum. The foundry, for example, is usually centrally located in a machine-manufacturing works, surrounded by the satellite modeling, stamping, cutting, turning, and assembling mills or departments. In a printing plant, the linotype, typesetting, and press-room divisions occupy the dominant position. Paper, ink, and printing-supplies storerooms; the cutting department; and collating, binding, and proofreading departments are so arranged that no matter what job is handled, there will be convenient access to all essential divisions of the business.

Since many of the functions in intermittent or interrupted production are independent processes, not fitting into any prescribed sequence, they can be segregated on a separate floor, in the wing of a building, or even in a separate structure. Ample room for the conduct of these tasks without confusion or mixing of specifications for one job with those of another, sufficient storage space, ease of access to needed materials and supplies, and ability to transfer processed goods to other production departments are the essentials to be considered in production of this type.

In most manufacturing operations in which a continuous series of tasks is performed without noticeable interruption, the most desirable plan of work would be to have raw materials enter at one end of a plant and move steadily toward the other end where they come out as finished products. However, many companies using some type of line production actually combine elements of both forms of plant layout. As soon as each operation requires several men working at a number of pieces of similar equipment, the layout becomes essentially one of a *flow of product* through *process areas.* Moreover, different products are frequently assembled on the same production line (*e.g.*, tractors and passenger cars), while machines in functional areas are often used exclusively for one product.

The decision concerning what type of plant layout to adopt rests with a firm's production manager or its industrial engineers. This is usually based upon a detailed *process-flow chart* which depicts graphically, through the use of symbols and short descriptions, the typical movement of material through the plant. The steps in the manufacturing process are listed, giving sequences of all operations, transportation, storage, and inspection. A process-flow chart is sometimes accompanied by a *process-flow diagram,* in the form of a floor-plan sketch or perspective drawing of the building, showing the location of the different operations. A study and analysis of these process sheets suggests the possibilities of eliminating movements, of reducing the storage of goods, and of combining, rearranging, or simpli-

ACME MANUFACTURING COMPANY
PROCESS FLOW CHART

NO. 247

NOMENCLATURE Separator plate

PART OR UNIT NO. S-17589

DATE May 1, 1948

DIVISION Flat metal

DISTANCE (feet)	MEANS OF TRANSPORT	DEP'T.	SYMBOL	PROCESS DESCRIPTION
300	TM	B-6	○	Obtain copper sheets from Warehouse No 28
		L-2	S	Store in racks
20	HT		○	Move to Machining unit
		M-1	1	Shear into 12"strips
15	C		○	To drill presses
		D-3	2	Drill and tap holes
5	C		○	To Inspection unit
		I-7	I	Inspect for accuracy of spacing
25	E		○	To Soldering department
		C-1	3	Solder flange
10	C		○	To Burnishing unit
		P-1	4	Smooth and polish
15	C		○	To final inspection
		I-5	I	Inspect for appearance and fit
75	E		○	To finished goods storage
		B-1	S	Store for future shipment
465 ft.	Total			

Key:

1 Operation

S Storage

I Inspection

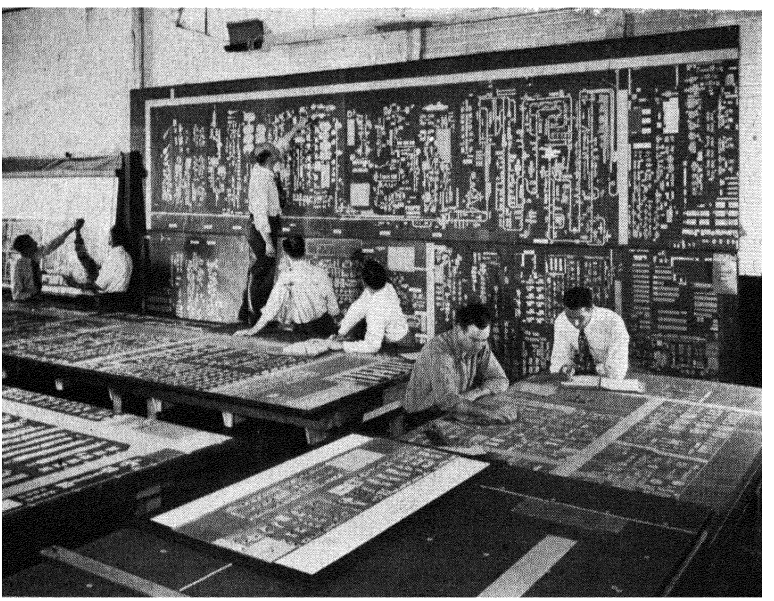
○ Transportation

Types of Transportation:

TM - Towmotor
HT - Hand truck
C - Conveyor
E - Elevator

A typical process-flow chart.

fying operations. Ideas for the improvement of existing facilities or for the development of new plant layouts are worked out on a *layout board* (see illustration below). This consists of a floor plan laid out to scale on a drawing board or heavy fiberboard. Templates or small-scale models denoting machines, benches, racks, and other equipment are shifted about



Coordination is a prime essential of volume production and this picture reveals a vital preliminary step. Plant layouts and work-flow charts are planned with the greatest care and attention by production management and engineering experts. Materials and parts must be at the right place at the right time and in the right quantities to ensure a smooth production flow. (*Courtesy of General Motors Corp.*)

on the layout board until a rough approximation of the desired positions of equipment, storage spaces, aisles, and conveyers is obtained. In devising these arrangements, efforts are made to obtain flexibility and balance so as to ensure maximum utilization of man power and maximum machine usage with a minimum of material or time in process. In most instances, the assumption is made that materials will move through the plant to the men and machines. However, the introduction of motorized machines and portable appliances sometimes makes it expedient to move men and machines to the materials. Comments and suggestions are frequently obtained from all interested parties, including plant superintendents, shop

foremen, and operators, before the final layout is adopted. Once approved, this layout forms the basis for the installation and arrangement of the actual plant equipment.

Production-control Procedure. *Routing.* Given the production facilities, the main steps of production-control procedure then involve routing, scheduling, dispatching, and inspection. Routing indicates the operations to be performed and their order or sequence and designates the proper tools and fixtures and the personnel to be utilized in performing specified functions. If a series of operations is involved, the routing must provide for the most convenient location of the several stages so that all parts will be stationed where needed in the final assembly line.

In a plant where operations are continuous, on a production-line basis, routing procedures become standardized. They are formulated when the product layout is originally set up and, once established, continue in force with minor variations until a new product design or improvements in production necessitate changes.

The multiproduct or job-lot plant, on the other hand, constantly faces the problem of new products and designs and of varying lot sizes. For this type of production, every new order is individually routed. Detailed drawings are made and a parts list is prepared, showing materials that will be needed and in what quantity. Routing sheets or cards are issued in duplicate for distribution to all departments concerned. They show the proper sequence of operations required for each item and the tools and machines assigned for the performance of the work.

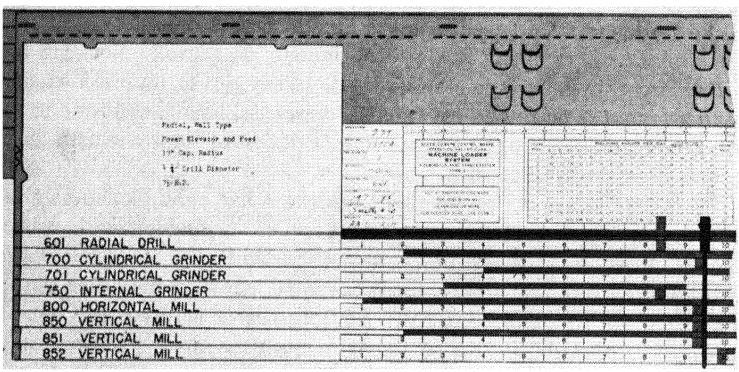
Scheduling. The purpose of scheduling is to determine suitable time allowances for the accomplishment of specific jobs. Estimates are figured out for the time required for the processing of each part or component, the production of subassemblies, and the final completion of main assemblies. Priorities are assigned to operations known to require more time or that are likely to involve breakdowns or excessive rejections. Machines and tools are earmarked for given assignments at specific days and hours. These careful checks and controls are devised in order to obtain a smooth flow of production and to avoid the wastes in machine- and man-hours caused by confusion and delay.

Production schedules are based either on customers' orders or on sales forecasts. Master schedules list the production requirements for each product on a monthly or weekly basis and show at a glance how current requirements compare with plant capacity. Manufacturing schedules or orders list stipulated quantities of parts or products to be produced within an allotted time period.

As aids in the formulation of production schedules, several types of control charts have been developed. Typical of these is the load chart, showing

the hourly or daily load of work scheduled for each piece of equipment. This chart enables the production manager to determine which machines are being fully utilized and which ones are still available for use during given time periods. Progress charts are also set up, showing scheduled outputs between two dates, against which are plotted actual production figures. A ready comparison is thus had between plan and achievement.

Special attention in the matter of time schedules is often given to the question of labor efficiency through what is known as *time and motion*



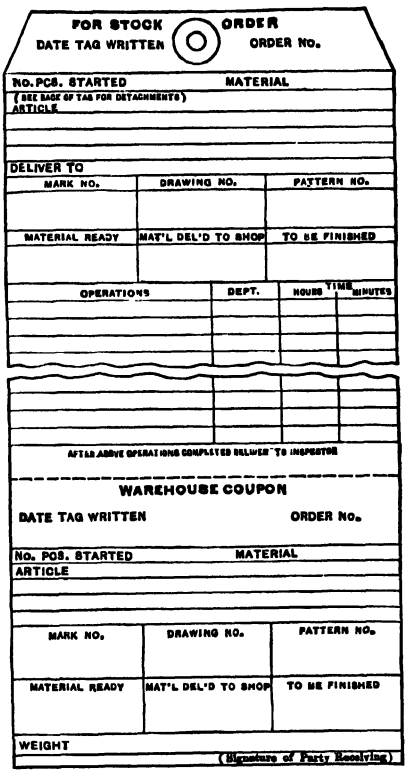
Sched-U-Graph Load Chart, showing number of machine hours per day required for different types of equipment employed in the production of a given commodity. (*Courtesy of Remington Rand, Inc.*)

studies. This involves the study of efforts expended in the conduct of work and the determination of normal standards of performance. A careful analysis is made of the number of motions in a given operation, and a stop watch used to record the speeds of performance by various workmen. Efforts are directed toward the possible elimination of unnecessary motions or energy-consuming activities. For example, if a man must stoop each time he repeats a given task, it may be found feasible to raise his materials or his workbench to a level that will eliminate these movements and so conserve his energies. In similar fashion, goods are moved in a regular flow to workmen stationed at definite posts in order to avoid needless walking to and fro on the part of employees from one section of the plant to another. Engineers have made further refinements in scientific management methods through the introduction of micromotion studies. By means of synchronized cameras or other devices employing the use of timed motion-picture film, they have made possible the detailed analysis of unit motions and the time required for their completion. The very slow pro-

jection of films taken of individual operations facilitates the examination of all fundamental movements and enables the observer to build up standards for ideal performance.

However, scientific studies lose their effectiveness if they overlook the fact that the worker is not a machine but a human being whose efficiency varies in the course of the day's work. At four o'clock in the afternoon the efficiency of the employee is not the same as at nine in the morning. A study of the individual worker might then show fast and accurate work in the early hours and a slowing down with an increasing frequency of errors as noon approaches. In the afternoon, the change is more marked; as fatigue sets in, production is slower, the worker is on edge, and mistakes grow more frequent. The provision of short intervals for rest or recreation frequently results in more and better work.

Allowances are therefore made for rest periods and other necessary cases of lost time; and on the basis of these studies, an average day's work is planned for each individual function. The attempt is made to standardize job performance at such a level that the typical worker can do the required tasks without injury to his health and without sacrifice in quality of output. The standard is not the result of guesswork, habit, custom, or a foreman's whims but comes after scientific study.


FOR STOCK ORDER
DATE TAG WRITTEN ORDER NO.
NO. PCS. STARTED MATERIAL
(SEE BACK OF TAG FOR DETACHMENTS)
ARTICLE
DELIVER TO
MARK NO. DRAWING NO. PATTERN NO.
MATERIAL READY MAT'L DEL'D TO SHOP TO BE FINISHED
OPERATIONS DEPT. TIME HOURS MINUTES
AFTER ABOVE OPERATIONS COMPLETED DELIVER TO INSPECTOR
WAREHOUSE COUPON
DATE TAG WRITTEN ORDER NO.
NO. PCS. STARTED MATERIAL
ARTICLE
MARK NO. DRAWING NO. PATTERN NO.
MATERIAL READY MAT'L DEL'D TO SHOP TO BE FINISHED
WEIGHT
(Signature of Party Receiving)

Shop tag accompanying work in process. On the reverse side provision is made for inspector's and storeroom reports. (*From H. Diemer's "Factory Organization and Administration," p.* 173.)

Dispatching. To give effect to the preliminary efforts of planning, routing, and scheduling, a definite series of orders and instructions must be issued, giving authority to perform stated operations. This is known as dispatching. Each assignment is usually given an identifying number, and instructions and diagrams are labeled accordingly. Work orders or job tickets are released as provided by the schedule. In the meantime, materials needed within each department are requisitioned and delivered

to the particular machine or workbench in time for scheduled execution. Requisitions for tools and gauges are similarly handled. Records are kept of the times of starting and finishing the work. As each assignment is completed, new orders are issued to move the goods along to the next stage and to provide new tasks for those who have just performed the

(*Graphic Arts Photo*)

A typical dispatch board is shown above. Work orders, productive time tickets, and other forms are conveniently filed according to order numbers, process, or sequence of operations. (*Courtesy of McCaskey Register Company.*)

previous operation. The dispatching of orders and reporting of work performed is accomplished through a plant messenger service or by means of mechanical contrivances such as pneumatic tube conveyers or teletype machines. Wall charts, dispatch boards, and visible-index files are used by dispatching clerks to keep regularly informed of the progress of work in a department or plant. A typical dispatch board is shown above. These devices facilitate the systematic filing of all work orders, productive time tickets, and other cards or forms pertaining to successive operations and provide a ready means for following up and expediting the flow of work.

It is an important function of the dispatcher to keep men and equipment regularly employed and to reduce the idle-time factor. He is responsible for controlling the progress of work as closely as possible in conformity with the routing sheets and time schedules so as to insure smooth and efficient performance and the avoidance of bottlenecks.

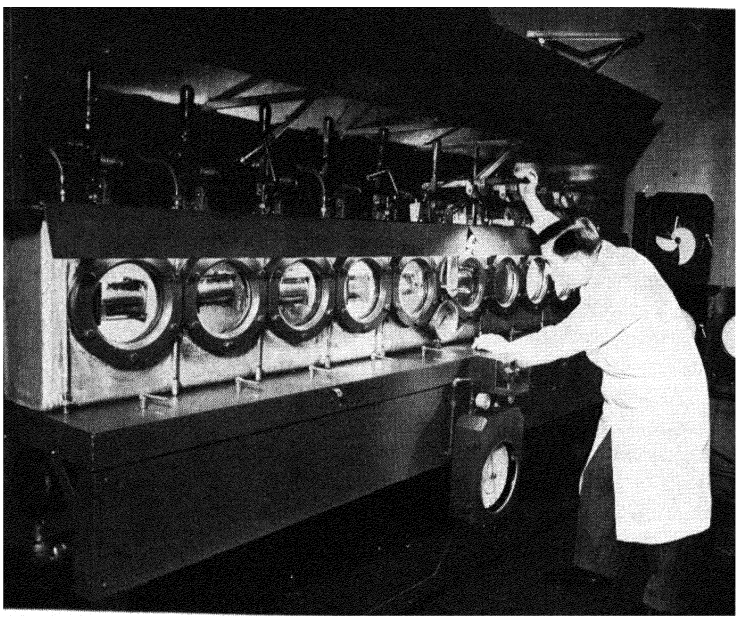
In continuous-process industries, this end is not so difficult to achieve if business is sufficiently active. The work is so routine in character that dispatching becomes almost automatic. Each operation is repetitive, and the main tasks are to keep materials moving at the proper paces, to see that tools and machines are in constant repair, and to keep an adequate and efficient working force available for each operation. In job-order manufacturing, however, the activities of the dispatcher become more complex. Orders of different size and with differing degrees of priority must be handled; some equipment becomes overloaded while other machinery stands idle; new tooling is often necessary for a particular job; detailed instructions and working drawings must be sent to the proper work stations in advance of each new work project.

Inspection and Quality Control. At various points along the line of production and upon completion of an order, provision is made for inspection. As a preventive measure, all materials and parts are examined before they are put into production, and machines and tools are tested. As the work proceeds, products are inspected for quality of material and workmanship or in order to ascertain whether or not they are meeting specifications. Occasionally these tests are applied to random samples rather than to each product. The thoroughness of this work and the precision with which it is done will be influenced by the nature of the product and the policy of the management. Delicate electrical apparatus and steam boilers, for example, are subjected to more rigid tests than would be required for door mats or paperweights.

Inspection is but one phase of a general program of quality control; it serves as a measure of the attainment of standards previously adopted. Standards of quality vary considerably from one line of production to another, being a function of the end uses of a product, its chemical and physical properties, acceptable tolerances, and the element of costs. A distinction must be drawn, for example, between the meaning of the term *high quality* when applied to a mousetrap and to interchangeable precision bearings made from through-hardened high-carbon chrome steel. The manufacturer of the mousetrap is given a wide latitude in the choice of materials, size and shape, and accuracy of design of his product. To be marketable it must merely conform reasonably closely to popular requirements of efficiency of performance relative to cost. The producer of the bearings, on the other hand, is rigidly bound to achieve a high order of

perfection in materials and workmanship to maintain a level of accuracy that will allow plus or minus variations in dimensions of not more than a few thousandths of an inch.

A company that aspires to quality standards approaching this latter level must adopt exacting control methods. Raw materials are purchased



A feature of the American Can Company's quality-control program is the apparatus pictured above which subjects the inside of a can to pressures or temperatures far beyond what it would meet in actual use. (*Courtesy of American Can Co.*)

according to detailed specifications and subjected to rigid tests and inspections. Skilled craftsmen and competent inspectors are selected with care. High-precision equipment and tools are regularly maintained and periodically checked for accuracy of performance. Tolerances are set well within the limits of acceptability but not so close as to result in excessively high rejection costs. Micrometers, comparators, and other precision gauges and scales are used for tests and measurements. Electronic devices are employed as automatic sorters or for the measurement and control of color, thickness, and other variables, and X-ray units and supersonic testing tools serve for the inspection of hidden flaws in metallic products. Careful inspection records are maintained and are regularly analyzed in

order to trace the causes of known defects and to reduce the number of rejections. Statistical techniques are also applied to reduce costs, improve quality, and secure a better coordination among design, production, and inspection.

Significance of Production Control. Behind the scenes of physical output, management is ever on the alert in planning, dispatching, and checking results. From the time that a product is proposed or an order is received to the date of shipment of the goods, executives and their assistants are confronted by problems that call for a succession of decisions. Occasionally, these tasks are so simple that their importance is completely overlooked. As the work becomes more intricate and involved and it is necessary to departmentalize the many duties of direction and control, the significance of managerial responsibility in this connection is better appreciated. Further tasks that properly fall within the broad scope of production control are the provision of required parts and raw materials and the maintenance of an adequate labor force. These subjects will be discussed in the following chapter and in Part IV.

Questions and Problems

1. In various industrial processes, such terms are used as analytical, synthetic, conditioning, or converting. Show the application of these terms in specific industries.

2. In the manufacture of either automobiles or women's clothing, show the desirability of and methods employed in standardization and mass output as against custom production.

3. Draw a diagram for a specific small factory showing the layout of the plant designed to ensure maximum efficiency.

4. Under what circumstances would a five- or six-story building be considered appropriate for use in continuous process manufacturing? Why are one-story structures usually preferred for this type of production?

5. Contrast plant-layout requirements in continuous-process manufacturing with those in intermittent-process manufacturing. What problems of layout arise in the case of manufacturing operations that involve more than one simple continuous production line for a given commodity?

6. Why are the tasks of routing and scheduling of such great importance in the modern automobile plant? Why, in some respects, is scheduling a more difficult task in a custom or job-order business?

7. "Production schedules are based on customers' orders or sales forecasts." Explain, and apply to specific industries. What steps are entailed in scheduling?

8. Illustrate the use of a dispatch board in issuing orders and instructions giving authority to perform stated operations. What are the functions of dispatching? Why is it necessary?

9. Give specific illustrations of quality control, either from your own experience or from advertising claims by manufacturing firms. Show that such constant vigil is necessary in most production.

10. Show that quality control is important in all production that employs a high degree of standardization.

CHAPTER XI

PURCHASING AND INVENTORY POLICIES

Importance of Materials. Except for those classes of business in which intangible services rather than physical commodities are offered for sale, the control of materials constitutes a problem of paramount importance. Billions of dollars' worth of raw materials, such as cotton, wheat, pig iron, and glass, flow each year into the plants of American manufacturers. Producers of these raw materials, in turn, must regularly renew their stocks of seed, fertilizer, ore, silica, or fuel. In addition, many completed wares or semifinished parts do not move directly into consumer markets but are bought by industries whose operations involve a further synthesis or assembly process. Lumber cut to size, steel forgings, rubber heels, copper wire, bottles, and packing cases are sold as finished goods by certain producers but serve as supplementary materials in some other branch of industry. Finally, there are many varieties of articles that, although they are not directly related to the preparation of a product, are necessary adjuncts to business and industrial techniques. These materials, known as supplies, range from machine oil and fuses to record cards and stationery.

In many lines of business, the expenditure for materials is the largest single item in the costs of production. In a very real sense, the purchase and control of materials are vital in the effective control of the quality of the product, the maintenance of operating efficiency, and the quotation of favorable prices in a competitive market.

Purchasing Functions. The buyer has the task of obtaining goods that will meet the requirements of both the production and the selling units of the concern. In certain lines of business, this involves unusual skill and ability. Several important considerations arise in connection with the problems of purchasing:

1. What to buy, *i.e.*, the specifications of materials that will be needed.
2. How much to buy, *i.e.*, maximum and minimum quantity estimates.
3. When to buy, *i.e.*, an understanding of the time elements involved.
4. Where to buy, *i.e.*, particularly with reference to geographical needs of a firm with scattered branches.
5. How much to pay, *i.e.*, with reference to quality of merchandise needed and markets in which the goods are intended to sell.

6. On what terms, *i.e.*, whether or not credit facilities are available and what discounts are granted for cash payment.

7. Reliability of the seller, *i.e.*, guarantees, return privileges, and allowances for defective goods that the seller will make.

In order to know what to buy, the purchaser must be intimately acquainted with the needs of the business. He should be familiar with the special features of the products to be bought, the quality or grades required, the uses to be made of them, and the tests that can be applied in determining their soundness or intrinsic worth. He must also be alert to developments and discoveries of new products or effective substitutes that can be used in his trade.

The determination of how much to buy is equally important. Uninterrupted supplies of materials, tools, or parts must be provided in order to avoid wasteful stoppages because of lack of necessary goods. Failure to deliver adequate quantities of asphalt when needed holds up the work of an entire road-building crew; a sudden shortage of paper supplies might prevent the issue of a morning newspaper. Careful attention to existing stocks and purchasing arrangements designed to supplement these inventories will avoid most losses of this description.

On the other hand, the maintenance of supplies of commodities that far exceed current needs is costly. Large stores of goods tie up working capital that could probably be put to more profitable use in other ways. Moreover, unless the stocks are protected by insurance or hedging, the risks of carrying such stocks are extremely great. Many of these risks, including market fluctuations, style changes, and depreciation, are not easily insured against. In any event, expenses such as warehousing or rental costs, interest, taxes, depreciation, and insurance indicate the wastefulness and extravagance of maintaining excessive inventories of materials. The advantages of an originally low purchase price may be completely offset by heavy carrying charges.

Closely linked with the question of how much to buy is the problem of when to buy. Large purchases may be made at infrequent intervals, or perhaps more frequent buying in small lots is relied upon. Here again the matter of undersupply or oversupply arises. The buyer must, therefore, make a nice adjustment of his purchases so as to maintain stores at a level slightly in excess of current needs. His outstanding orders for goods regularly required for stock should then be so planned as to result in deliveries at periodic intervals coordinated with the firm's production schedules.

The place of purchase or of delivery must also be considered with care. It would be foolish for a company, solely on a price basis, to buy all its requirements in one market and then assume the cost of freight shipments

to its branches in the several states. Due consideration must be given to the geographical needs of a company. It is therefore advisable to compare competing bids on a delivered basis in the quantities desired in different parts of the country.

With reference to cost of materials, the buyer's function is frequently the most vital point in a company's profit-making role. In manufacturing, this is particularly so, because so large a percentage of the costs of production consists of materials and parts that must be purchased. Consequently a saving in the cost of the purchases ordinarily involves a reduction in more than half of the total costs of production. The terms of sale frequently allow liberal cash discounts; if the buyer can take advantage of these, he may be able to procure especially low prices for the products used by his company.

The price factor must, of course, be considered only after a careful study has been made of the quality of the goods and of the responsibility of the supply house making the bid. Inferiority of product frequently goes hand in hand with low price, and the wary buyer has to be able to detect a *real* bargain. This is the point where individual skill and experience count. The buyer must be personally familiar with the needs of his business, thoroughly conversant with the requirements of the goods that he purchases, and capable of determining the worth of the merchandise offered to him within a given price range.

In judging the reliability of the seller, attention is given to the length of time that the firm has been in business, its financial standing, its proximity, and its reputation in the trade, especially with respect to such matters as quality of merchandise, promptness of delivery, return privileges, servicing, and adjustments. Two apparently identical contracts for the purchase of goods may differ considerably with respect to the many intangible elements included in the bids of the supply houses concerned. The expenses, delays, and innumerable difficulties arising from failure to live up to specifications, from breakdowns, from postponed shipments, etc., are hidden costs that the purchasing agent seeks to avoid by dealing with responsible vendors.

Responsibility and Authority in Purchasing. In most enterprises, the control of materials is a major task of management. The degree to which this function will become specialized and involve problems of delegated authority depends, in the main, upon the size of the venture and the nature of the materials used. In the firm whose purchases are insufficiently large, varied, or frequent to require the full-time attention of at least one person, the buying is usually handled as an added duty by a chief executive or some officer in charge of production or sales. Because of their knowledge of the general needs of the business and their close contact with the shop

or the market, these men are in a position to order the required materials and supplies. Frequently this work is distributed among several individuals. Each foreman purchases the regular stock needed in his shop; the sales manager may order specialty materials required by his customers; the maintenance engineer buys tools and parts; and the shipping department is in charge of replenishing packing supplies.

As business volume increases and the size of the unit expands, the amount of attention and time that must be given to these tasks requires the appointment of a purchasing agent or manager or the creation of a separate purchasing department. This results in greater centralization of authority. Requisitions for materials and supplies continue to flow from each division or unit of the firm, but contacts with vendors and the preparation and control of buying orders are functions of the central purchasing agent. Specialization may proceed still further within this department when it becomes necessary to put one man in charge of buying nothing but raw cotton, another dyes and chemicals, and still another coal or oil. Such specialists develop an intimate knowledge of the goods that are needed and of their sources of supply. They have a keen sense of values and quickly detect differences in price and quality. They become familiar with trade conditions and avail themselves of advantages such as timing the placement of orders.

Complete centralization of this control is frequently desirable in that it results in the establishment of a single general policy in the handling of all purchases. It prevents wasted effort in setting up duplicate buying organizations, avoids the purchase of identical commodities at varying prices by the same concern, affords a broader buying power, and fixes central responsibility. Decentralized control is often desirable, however, in the event that purchases are extremely heterogeneous or else local or petty in character. It would be expedient policy among firms whose subsidiaries handle a line of diversified products or in enterprises that have an extensive organization of branches with varied local needs. The interests of the company are best served in these last situations by permitting those individuals directly concerned with the use of these goods to make the purchases. Central limitations or supervision over such purchases are, however, usually retained.

Purchasing Policies. *Contacts with Sources of Supply.* In order to enjoy the greatest competitive advantage with respect to both quality and price, purchasing managers find it desirable to develop a number of supply sources for each class of goods needed. Quotations on identical merchandise obtained from a number of qualified sellers often show a considerable price spread. Substantial savings are effected through this policy of seeking out the lowest bidder.

There are, however, advantages to be obtained from the opposite policy of maintaining a single, relatively permanent source of supply. An exclusive supply house becomes familiar with the special needs of the buyer, notifies him of important market developments, frequently makes advantageous adjustments, and in many ways renders valuable service to its regular customers. This bond of good-will is absent in cases where business relations are only occasional or infrequent. The choice of policy to be followed depends upon whether or not price considerations outweigh the demands for reliability and service.

Long- vs. Short-term Commitments. The needs of business for materials and supplies vary with seasonal requirements, cyclical fluctuation in volume, and many other unpredictable factors. Consequently it is often difficult for the purchasing agent to decide upon the proper course to follow in making his commitments. Several alternative policies in buying may be noted.

The most cautious or conservative technique is the practice of restricting purchases to known current needs. This is called "hand-to-mouth" buying and has as its purpose the maintenance of stocks at a minimum in order to avoid the embarrassment of an overstocked condition, with its attendant risks of loss through possible future price fluctuations or spoilage. Another advantage is that it avoids the cost of tying up large quantities of capital in inventories. However, the drawbacks of this policy are that small quantity purchases usually result in greater unit costs and low inventories sometimes force producers to turn down rush-order business.

Speculative purchasing is the opposite of hand-to-mouth buying. It is the practice of buying large stocks of goods in advance of actual need on the theory that the market is going to rise. The purchasing manager who sees raw cotton selling at 6 cts. per pound knows that it cannot be produced for this sum by most cotton growers. At this rock-bottom level, it therefore appears to be good judgment to buy large stocks of this raw material for his company even though present orders for textiles would not warrant such action. Several months later when business begins to recover, the mill will reap not only its regular manufacturing profit but also an additional margin due to rapidly mounting raw-material prices. There are serious weaknesses in this policy in spite of the temptation to take what looks like a "sure gain." (1) It leads to a confusion of goals, making the company's profits more dependent upon a turn in the market than upon its legitimate production activities. (2) It exposes the company to serious losses, possibly complete financial ruin, since the purchaser cannot always guess correctly.

Forward buying, or advance buying for future requirements, may not always be speculative, however. In certain industries, in order to ensure

an adequate, continuous supply of materials, it is absolutely necessary to make commitments well in advance of need. In some instances, such as in the purchase of oil or metal products, a sliding-scale purchase agreement is drawn. Under the agreement, an estimate for the year's supply or for a specified number of weeks or months is set, and provision is made for delivery of required amounts at stated intervals. Prices at the time of delivery are quoted in terms of a base price adjusted in proportion to current quotations. Although orders are placed in advance, according to this method, emphasis is upon the flow of goods rather than upon speculative gains.

The threats of interruptions in supply lines by industrial or shipping strikes or the fear of more serious unsettlements caused by war sometimes result in advance buying for purposes of building up stock piles that will carry through the period of emergency. Where such policies become widespread, they often lead to acute shortages in the normal supply channels. During the Second World War, for example, rigid government controls had to be set up to establish priorities and otherwise to regulate the flow of essential materials.

Advance buying in raw-material markets which are characterized by dynamic price movements is frequently necessary in spite of the fact that the purchaser wishes to avoid losses due to price fluctuations. To accomplish this, *hedging* is resorted to as a regular policy. The effect of this practice is to make price gains in one transaction offset the losses in another. This subject will be discussed in further detail in Chap. XX. The advantage of hedging in connection with purchasing policy is that it permits buyers to make advance commitments without subjecting the firm to the hazards of speculative purchasing.

Buying to Specifications. In its more elementary form the buying order is simply an authorization to deliver 20 tons of coal or two loads of brick. Modern purchasing, however, is tending more and more to be marked by a greater degree of precision. Purchase orders are based upon quotations containing the required specifications. These are written descriptions of the commodities ordered, setting forth explicit requirements and details defining their composition, size, shape, and other features. Frequently they include chemical formulas and engineering diagrams. The advantage of this exact method of preparing buying orders is that the bidder knows exactly what is required. It thus promotes greater clarity and understanding.

There is a danger, however, that this policy will be carried to undesirable extremes. Occasionally arbitrary specifications are made as to form or materials that differ from standard stock produced in quantity for the trade. This requires the preparation of special orders, resulting in higher

FABRIC *Spun rayon and Wool Suiting*

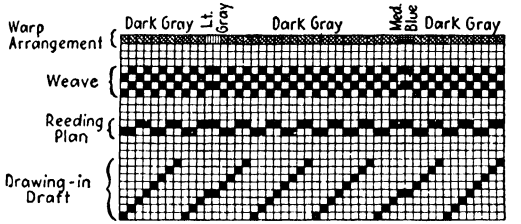
WIDTH 56 in WEIGHT 12½/13 oz REEDING 12½x2 REED WIDTH 67¼ in.
ENDS PER IN. 30 PICKS PER IN. 24 LOOM WEIGHT 14 oz.

WARP

COLOR	MATERIAL	SIZE	DETAIL			TOTALS
Dk Gray	Rayon-wool Blend	4/4pp	11	23	12	46
Lt Gray	Cotton	30/2	2			2
Med Blue	Cotton	30/2		2		2
						50

FILLING

COLOR	MATERIAL	SIZE	DETAIL			TOTALS
Dk Gray	Rayon-wool Blend	4/4pp	11	23	12	46
Lt Gray	Cotton	30/2	1			1
Med Blue	Cotton	30/2		1		1
						48



Technical details for manufacturing rayon cloth. (*Courtesy of Textile World.*)

ACME MANUFACTURING COMPANY
NEW HAVEN, CONN.
QUOTATION

NAME OF VENDOR General Fireproofing Co. DATE Nov. 3, 1947

Sir:

You are invited to submit a quotation to the undersigned not later than 10 A. M., on..... for furnishing supplies, equipment or services as described below. All deliveries are f.o.b. to location indicated. If immediate delivery cannot be made, give the earliest date of delivery in your quotation. When quotation is based on an alternative, the specifications must be changed to conform accordingly. Use this form for your reply. Inquiries should refer to the requisition number. Please SIGN and return to Acme Manufacturing Company, New Haven, Conn. THIS IS NOT AN ORDER

Very truly,

REQ. B17665

Item No.	ARTICLE	QUANTITY REQUIRED: Number of Units	QUANTITY REQUIRED: In Units of	UNIT PRICE		TOTAL	
	A G. F. Co. steel mail and package unit with an overall height of 6'3", width 36", 21" deep. The package compartment to contain a bottom, interior and top shelf and to be 39" x 36" x 21" with one pair of doors to lock. The mail compartment to be 36 x 36x 12, to contain six shelves, one open, five to be divided into six - 4" openings and one 7" and one 5" opening. The unit to contain sides and back. Green finish. As per G. F. HP 7923	1		45	24	45	24

NAME OF VENDOR General Fireproofing Co.

PER H. F. Hartman

DATE Nov. 3, 1947

ADDRESS 500 - 5th Ave., N. Y. C.

Quotation form on which prospective sellers submit their bids for specified materials.

costs. Unless circumstances prevent the use of standard merchandise, requirements should be simplified in terms of prevailing commercial standards, and purchases made on the basis of catalogue number or description. Furthermore, written specifications, because of their precise wording, occasionally lead to unnecessary commercial disputes. A certain amount of tolerance and the phrasing "or equivalent" are necessary if petty dis-

ACME MANUFACTURING COMPANY
NEW HAVEN, CONN.

PURCHASE ORDER

Messrs. Leland Gifford Company

Please furnish and deliver the following directly to the room indicated below

247 - A

Order No. 5374

Date Mar.6,1948

Requisition No. 1741

All goods are to be billed at the prices agreed, which include delivery charges to place designated. Invoices in customary commercial form must be transmitted to this office for the preparation of voucher. In case of partial delivery the payment voucher will not be prepared until completion of the entire order.

Line No.	Quantity	Unit	Description	Price Per Unit	Amount or Estimate		Exceptions	
1	1	only	No. 1-LMS Floor, Motor Spindle 3/8" drill capacity, 20" swing, 1 spindle	$ 168.	168	00	None	

Purchase order form.

putes over minute details are to be avoided. When the purchasing department is satisfied with a vendor's offer, a purchase order is issued (see illustration above). This form specifies quantity, description, and price of products desired and gives instructions for time and method of delivery.

Follow-up on Orders. After the purchase order is issued, the purchasing agent must ascertain if it will be promptly filled, how it will be shipped, and when it will be delivered. At the time of arrival, the merchandise is checked by the receiving department of the concern to see if it agrees with the amounts and specifications on the buying order. If necessary, laboratory tests are made before the goods are accepted. If acceptable, the materials are stored or are sent to the department that initiated the requisition. The order is then approved for payment. As a final step the

purchasing department may check to see that the shipment meets anticipated needs.

Inventory Policies. Closely associated with the responsibilities of purchasing materials and supplies are the problems of inventory control. These include the maintenance, storage, and issuance of stocks of materials and supplies, the periodic checking of inventories, and the provision of

A scientific testing laboratory like the one shown above is a valuable aid to the purchasing department in checking the quality of many of the materials purchased. (*Courtesy of Remington Rand, Inc.*)

suitable records. The purpose of a stock-control system is to avoid a shortage of necessary materials or merchandise and yet not have too much capital tied up in inventories.

In pursuit of this goal, the following steps are usually adopted:

1. Careful inspection of quality and quantity of all stores received and safe storage of each kind and grade in separate bins.
2. Maintenance of perpetual inventory records showing materials on hand, goods issued, and new shipments received.
3. Provision for periodic physical inventory count to check on perpetual inventory records.
4. Maintenance of requisition records showing issuance of supplies, date, amount, and to whom.

5. Determination of minimum and maximum quantities of each type of material required at different intervals and notification of the purchasing department whenever supplies are low or too high.

6. Analysis of varieties of goods kept in stock for the purpose of discovering similarities and duplications. The policy of eliminating countless minor differences and of standardizing certain materials and parts has led to substantial savings in many concerns because of the resulting reduction in number and variety of commodities that must be stored.

Attention should first be given to the installation of stockroom facilities that will provide adequate space for the receipt, storage, and issue of

ARTICLE Steel clasps- 3/4" STOCK No. P-459

WAREHOUSE LEDGER 5 B UNIT Box of 1 Dozen

VENDORS Universal MINIMUM

SHIPPED	RECEIVED	UNIT PRICE	TOTAL SHIPMENTS TO DATE	TOTAL RECEIPTS TO DATE	DATE	BALANCE ON HAND
	BALANCE FOR'D	.83	8515 CR	9500	OCT 1'38	985
150-			8665 CR		OCT 2'38	835
95-			8760 CR		OCT 4'38	740
270-			9030 CR		OCT 6'38	470
25-			9055 CR		OCT 9'38	445
	1000	.84		10500	OCT 9'38	1445
115-			9170 CR		OCT 11'38	1330
50-			9220 CR		OCT 14'38	1280
435-			9655 CR		OCT 15'38	845
65-			9720 CR		OCT 16'38	780
200-			9920 CR		OCT 18'38	580
	2500	.82		13000	OCT 19'38	3080

Inventory form. Records of receipts and withdrawals are entered on separate cards for each item kept in stock.

materials; for their orderly arrangement and identification; and for their protection against damage and deterioration. The variety of racks, bins, shelving, and compartments selected for this purpose will depend to a large extent upon the type of goods to be stored. The important consideration is that the materials be so stocked that they are readily accessible in ample supply and in good condition at all times.

To facilitate the sorting and the tabulation of thousands of parts, supplies, and materials, they are usually classified according to a system of numerical or letter symbols which serve as convenient abbreviations for a lengthier and more detailed nomenclature. Distinctive marks, colors, or tags are also used as aids in rapid identification.

The next steps involve careful record keeping. It is customary to maintain a record card or sheet for each item in stock, showing unit quantities (in pieces, pounds, quarts, etc.) received and issued and the amount on order. As deliveries are received and binned, the amounts are entered on these forms. Withdrawals from stocks are made against written stores

Storage space is a major problem in the maintenance of inventories in the steel industry. A variety of sizes must be kept on hand so that orders for various kinds of plate or sheet can be put through the mill without waiting for shipment of slabs. Here, in the storage yard of a hot strip and tin plate mill, the slabs are seen to vary in length, width, and thickness. They also vary in chemical analysis according to the requirements of the ultimate customer. (*Courtesy of U. S. Steel Corp.*)

requisitions (see illustration on page 237) and are recorded as shipments or issues. The balance reveals at any time the amount of stock on hand and should correspond with the physical quantity in storage. This method provides a *perpetual inventory* record of all items. The accuracy of this information depends upon the care and promptness with which all entries are made on the stores control cards. In order to test the reliability of these records, to correct any errors that might have arisen, and to verify the amounts of goods reported to be on hand, a *physical inventory* is taken periodically. This is an actual count of materials on hand and is usually

scheduled during a period when stocks are low, therefore involving a minimum of counting, or at a time that will least interfere with the normal operations of the plant. Separate inventory records are usually maintained for a variety of items including raw materials, goods in process (*i.e.*, goods in a partial state of completion), finished products, supplies (such as perishable tools, lubricating oil, emery cloth), and equipment and machine parts.

No. 653 **REQUISITION** Stock Order —

Date Feb. 6, 1948 Job Number 1788

Quantity	Unit	Item Description	Amount • Unit	Amount • Total
2	Doz.	Oil Caps	1.—	2.—
1	Gross	#22 Set Screws	2.50	2.50
4	Only	Armature Keys	.75	3.00

Charge to Account of Motor Assembly Dept.

J. B. Jackson
Signature of Foreman

Requisition form.

The ideal is to achieve a continuous feeding of raw materials into the plant and a steady flow of finished products to the market with a minimum accumulation of stock on either end of the process. Meanwhile, the float, or material in process, should be sufficient to maintain steady output but no larger than what the normal production cycle would require.

Coordination of Activities. The purchasing function and the maintenance of materials are related to virtually every division of a business. A shipment of goods involves immediate financing problems, presupposes production needs, and eventuates in selling activities. The interdependence of these departmental functions emphasizes the need for coordination in their administration. The study of market conditions makes possible a more carefully planned production program which in turn leads to better control of materials. Overstocked items, slow turnover, and inventory losses are thus reduced in their importance as production problems.

The coordination of production, purchase of materials, and employment of capital with sales requirements is usually achieved through a system of forecasting and planning. The prime requisite in any such arrangements is quick response or flexibility; *i.e.*, it must be possible to make comparatively rapid adjustments in the buying and production schedules whenever shifting market conditions appear to warrant this policy. Ideally, production should be so adjusted that it is in perfect harmony with ultimate consumer demands for character and volume of goods. In practice, the difficulty of measuring the unknown consumer needs, coupled with competition, and the remoteness of many classes of producers from the ultimate markets for their goods make the attainment of such an ideal almost impossible. Several firms have, however, attempted, within limits, to measure demand and to adjust supply to fit it. This has involved the application of statistical control policies.

An illustration of how one scheme works in forecasting and planning production and inventory policy in harmony with sales quotas is found in the General Motors policy relating to the control of automobile production:[1]

The first and controlling principle in the establishment of General Motors production schedules is that they shall be based absolutely upon the ability of its distributors and dealers to sell cars to the public. Each car division now receives from its dealers every ten days, the actual number of cars delivered to consumers, the number of new orders taken, the total orders on hand, and the number of new and used cars on hand. Each ten day period, the actual results are compared with the month's forecast, and each month, as these figures are received, the entire situation is carefully analyzed to see whether the original estimate was too high or too low. If it is decided that the estimate was too high, the production schedule is immediately reduced. If, on the other hand, it is found that the retail demand is greater than had been estimated, the production program is increased, provided the plant capacity permits. In this way, the production program is analyzed month by month; in fact, ten day period by ten day period, and the necessary adjustments in the production schedule and in the estimate of the year's volume are made. In other words, instead of attempting to lay down a hard and fast production program a year ahead, and to stick to it regardless of the retail demand, the Corporation now follows the policy of keeping production at all times under control and in correct alignment with the indicated annual retail demand and with the minimum accumulation of finished product in the hands of dealers for seasonal requirements, which the flexibility of production schedules permits.

Control measures and stabilization plans of this description are the exception in American business rather than the rule. In recent years, how-

[1] BRADLEY, ALBERT, assistant treasurer of General Motors, *Financial Control Policies of General Motors*, American Management Association.

ever, increased interest has been centered on the possibility of a further application of intelligent forecasting and planning policies.

Questions and Problems

1. In many industries, success is due to careful buying and low costs of materials rather than to successful selling methods. Illustrate by giving specific cases.

2. Discuss the position of the purchasing agent with reference to costs. Outline the functions and duties of the person charged with making purchases.

3. Discuss the relative advantages and disadvantages of centralized purchasing as against departmental controls in a large firm.

4. Periods of violently fluctuating prices, shortages, and disruptions in production or transportation create difficult problems for the purchasing department. Illustrate these problems by giving actual examples. Contrast forward buying with hand-to-mouth buying as purchasing policies. What are their relative advantages and drawbacks?

5. In such industries as public utilities, automobile manufacture, and food processing, the purchasing agent's duty is to keep the plant from shutting down because of the lack of essential items. What steps are taken to provide a steady flow of needed materials?

6. A purchasing agent is approached by salesmen eager to sell his firm products such as raw materials, corrugated boxes, stationery supplies, and hardware and tools. What considerations would influence his decisions in turning to new sources of supply? Under what conditions might he refuse offers at lower prices?

7. How are specifications in buying orders influenced by standards of quality and efficiency? What possible handicaps may this cause for the buyer of a firm?

8. Show the importance of such items as inventories, requisitions, and records. Outline a plan of procedure that would ensure efficiency and prevent loss from waste and pilferage.

9. The purchasing function and the maintenance of materials are closely related to virtually every division of a business. Explain.

10. Describe the method for forecasting and planning production and inventories in harmony with sales quotas such as that used by General Motors or by another large organization.

Part IV

LABOR RELATIONS

CHAPTER XII

PERSONNEL MANAGEMENT

The Labor Problem. In the one-man business there is no labor problem. As enterprises expand in scope and in volume of their activities, however, the efforts of the organizers or owners must be supplemented by the work of others who are paid for their services. An employer-employee relationship is thus set up; the most vital issues that arise in connection with it are the important questions of wages and hours.

Naturally, the difficulties usually associated with the satisfactory adjustment of these matters increase with the size of the working force employed. More than half of all American farms are 100 acres or less in size; about 75 per cent of the retail trade of the country is conducted by single-store independent proprietors; and about one-third of the manufacturers employ on the average fewer than three workers per establishment. In most of these ventures, the work is carried on by the owner of the business with the aid of his family. The collective result of their efforts serves to sustain or support the family group. Individual compensation is frequently made to members of the family, but the basis for such pay is usually an informal arrangement arising out of mutual agreement or consent. Any serious issues concerned with industrial labor relations are therefore nonexistent in more than half of all business establishments in the United States.

In firms in which there are considerable numbers of employees or in which there is little direct daily contact between the employer and the individual members of his staff, difficult managerial tasks arise in the efforts to give adequate consideration to employee interests. The problems of dealing with labor—the selection of workmen, their placement, training, promotion, transfer, and discharge; the problems of wages, hours, and working conditions; of collective bargaining and unionism; of strikes and other evidences of labor unrest—are sufficiently numerous and involved to require specialized attention. Labor or "personnel" administration has, in the larger companies at least, become an important function of industrial management.

Personnel management includes among its goals the reduction of labor turnover, the development and maintenance of interest and loyalty toward

the firm, and the creation of conditions that will lead to maximum efficiency. It consists in getting the right man for the job, training him for it, keeping him satisfied, and trying to get him to improve himself.

Employment: Selection and Placement. The task of getting the right man for the job involves, first of all, a knowledge of the sources of labor supply. The display of a sign "Men Wanted" at the factory gate usually results in an adequate supply of unskilled labor. During periods of widespread unemployment, the mere announcement of the existence of a vacancy will bring dozens of applicants. These methods are not, however, the most efficient ways in which to obtain certain types of specialized workers. Employment managers should develop contacts and cultivate adequate sources of labor supply so that they may draw freely upon eligible candidates for vacancies as they arise.

Public employment bureaus, reliable private agencies, schools, colleges, and labor unions are readily accessible organizations from which a company can select candidates for available positions. Many firms including General Electric, Goodyear, Eastman Kodak, and General Mills keep in touch with the deans of engineering schools and colleges for first-class technicians. Antioch College is noted for its system of alternating work and study, and several concerns have Antioch students in their plants, learning the work to which they later return.

The Chase National Bank of New York issues invitations to high-school and college seniors to call at its personnel department for interviews and information concerning employment opportunities with the bank. A pamphlet entitled "Banking as a Career" describes banking functions and refers to the broad activities of the Chase Bank. It outlines the training program and shows the opportunities open to its employees. Other advantages such as retirement and insurance benefits, medical service, and education are listed. The personnel director of the Filene Store of Boston visits a score of colleges each spring to recruit promising graduates for employment in that company's several departments.

In some firms, the personnel department maintains files that contain records of applicants for jobs, as well as of employees within the organization. If these records are properly kept, they contain a fairly complete summary of an applicant's previous training, experience, physical characteristics, and other qualifications, as well as any notations made by an interviewer at the time when the application was filed. Such data are extremely useful in the selection of employees for positions requiring special qualifications.

In the placement of workers, the personnel department should be familiar with the necessary physical and mental requirements for each task in the production process. Consequently, each job must be analyzed so as to

determine which types of workmen can best be fitted into it. The method of selection of employees will naturally vary with the position for which they qualify. In general, however, the process involves a personal interview, physical examination, and sometimes psychological and educational tests. When jobs require special knowledge or training, such as is found among machine operators, stenographers, and skilled craftsmen, the applicant is usually given a practical trade test to ascertain his or her fitness for the work.

The selection of employees and their placement at given tasks do not end when they are put on the job. It is the function of the personnel department to check up on their work from time to time in order to see if the appointment has been satisfactory and to arrange for transfers and promotions where this policy seems wise. This function requires the close cooperation of the production departments in which the men have been placed. The personnel department renders assistance in picking out the employees whom it deems qualified for certain varieties of work and in recommending those whom it believes capable of advancement. The foremen and managers are responsible for their performance and must decide whether or not the appointments have been commendable.

Training. With the growth in the scale of production and the expansion of welfare programs, concerns have developed schools and training laboratories. The experiences of the personnel departments in many of these companies have shown that in some mechanical tasks a small amount of apprenticeship training and preliminary instruction results in increased efficiency and in the reduction of waste. Schools and general educational courses have also been found to be of value to companies in improving the work of their employees.

In skilled crafts such as typesetting, the labor unions maintain trade schools in which their members are trained to become skilled operators. The period of apprenticeship is served within the union, and the expenses of training are borne by the members of the organization and by the novice learning the trade. With the development of laborsaving equipment, however, and the need for more semiskilled labor rather than expert craftsmen, the importance of the unions in this regard has diminished in most industries.

The burden of training new employees and of coaching older workmen so as to improve their technique has, for the most part, become a company function. Except for the temporary lull in such activities which occurred during the depression years, these company schools have been growing rapidly. Various kinds of instruction are provided. Many concerns maintain "vestibule schools," or apprenticeship schools, in which employees learn a particular task or, in a few instances, an entire trade. Men and

women are usually enrolled in these schools at the time that they are employed and pursue their course during working hours until they are proficient enough to work full time. In addition, companies also operate schools for junior executives or managers, offer bonuses and scholarships to employees who pursue advanced work in recognized schools and colleges after working hours, and maintain libraries and research laboratories for the encouragement of study or experimentation.

R. H. Macy & Company, Inc., in New York, divides its training into three parts: initial job training, follow-up job training, and promotional job training. In the first, the subjects covered are a general introduction to the store, instruction in the use of the salesbook, demonstration sales, and merchandising training. The scope of the training naturally varies with the job—different subjects being covered for sales clerks than for section managers or parcel wrappers.

Follow-up job training includes tests, correction of performance, and further individual instruction.

Promotional job training offers the employee a means of preparing for promotion. This includes lectures and courses, some given in conjunction with the Board of Education and others (color and design) in cooperation with the Metropolitan Museum of Art in New York City. In addition, the firm has a training squad course open to men and women of college or university grade. The last is a full-time course of six months and prepares its members for junior executive positions in the store.

The New York Stock Exchange maintains an institute that offers courses without cost to its employees. Republic Steel conducts an observational program designed to give technically trained men a practical education leading to possible qualification for supervisory positions. In addition, it has a sales school. Armour & Company, International Business Machines, and Shell Petroleum also sponsor complete training courses. The list of companies that undertake to build executive and technical staffs through the maintenance of their own schools and institutes is a long one.

Labor Turnover. In view of the costs of selection, placement, and training of employees, it is sound business policy to retain the services of desirable workers and to prevent unnecessary dismissals. Labor turnover means the rate of change in a working force made necessary by employees' leaving the service of a company.

Labor turnover is expensive, whether or not it is the policy of a company to hire trained or untrained help. For example, in a certain textile mill,[1]

> . . . where it is estimated that it costs from $50 to $200 to convert a green employee into a competent worker, it was ascertained that 31.2 per cent of the total separations were trained in that mill. At a minimum cost of $50 per employee,

[1] *Textile World*, February, 1939, p. 40.

this mill is spending $2,870 annually training workers who remain with the organization only a short length of time. In fact, 46.3 per cent of the separations took place within six months or less after employment. In addition to the sum expended training completely unskilled workers, even so-called "experienced" help from outside must go through a "breaking-in" period which costs money. Incidentally, as high as the percentage turnover is in this particular mill, it is only about one-third the average rate for the cotton-textile industry during the last eight years.

There are many causes of labor turnover. Some of these, such as fluctuating markets, cyclical disturbances, the nature of the industrial process, and the character of the workers, are beyond the range of control of the personnel department. On the other hand, a considerable amount of preventable labor turnover arises because of poor working conditions, inadequate wages, improper training, personal prejudices, petty frictions, and inattention to individual effort. Careful hiring policies, wise transfers, close attention to promotion, training, and advancement on the basis of excellence of performance, coupled with a cautious and considerate dismissal policy would materially reduce labor turnover.

A certain amount of labor turnover is desirable, especially in cases where there is a tendency to accumulate deadwood among the personnel. On the other hand, a turnover of several hundred per cent usually reflects poor labor administration policy and involves losses to both employees and management.

The sum either of the accessions to the working force or of the separations or dismissals over a period of time divided by the average number on the payroll measures the rate of labor turnover. It is usually expressed as a monthly rate per 100 or 1,000 employees. The following table shows the monthly average rates of labor turnover in manufacturing establishments in the United States for a number of years. Separation rates are further broken down to reveal rates of discharge, layoffs, and quits.

TABLE 11.—LABOR TURNOVER IN MANUFACTURING ESTABLISHMENTS *

(Monthly average rate per 100 employees)

	1929	1932	1933	1937	1939	1941	1942	1944	1945	1946
Accession rate	5.7	3.3	5.4	3.6	4.1	5.4	7.6	6.1	6.3	7.0
Separation rate	6.3	4.3	3.8	4.4	3.1	3.9	6.5	6.8	8.3	6.3
Discharges	0.8	0.2	0.2	0.2	0.1	0.3	0.4	0.6	0.6	0.4
Layoffs	2.1	3.5	2.7	3.0	2.2	1.3	1.1	0.6	2.3	1.6
Quits	3.4	0.7	0.9	1.3	0.8	2.4	4.9	5.7	5.4	4.3

* U. S. Bureau of Labor Statistics.

During years of depression and unemployment, the number of voluntary quits on the part of workmen is small by comparison with the number of layoffs. On the other hand, in periods of active business and labor shortages, the greatest cause for separation is the fact that workers are lured away from their jobs by offers of better pay and lower hours elsewhere. Because of the importance of wages and hours in all employer-employee relationships, these two vital topics are discussed in greater detail in the following pages.

Hours of Work. American industries may be classified into two major groups from the standpoint of working or operating time. The first class includes those industries which start and stop their productive operations at certain set hours each day or at intermittent intervals. Most lines of business are in this category. In the second class are the "continuous-process industries" such as the iron and steel works, cement plants, sugar refineries, railroads, and public utilities, which continue to function 24 hours per day.

In a measure, the hours of work in an industry are thus controlled by the nature of the industrial process. However, in the majority of productive enterprises, the length of time that individual employees must serve is a rather flexible item which is adjusted if necessary by the arrangement of a series of working shifts, so that one set of workers may be relieved by another group who take their place at certain intervals.

Within recent years, there has been a steady tendency toward a decrease in hours of work. In certain plants, two 12-hour shifts were replaced by three 8-hour shifts and in some companies such as the plant of the Kellogg Company of Battle Creek, Mich., four 6-hour shifts were found to work successfully.

The problem of satisfactorily adjusting the number of working hours is not so much a matter of physically adjusting the productive process as it is a question of establishing new wage scales. In most instances, workmen demanding shorter hours desire substantially the same pay as they were receiving while serving on the longer shifts. This, employers generally are not prepared to grant. Occasionally, however, it is found that the reduction of working hours brings with it an increased productivity per worker during the working time. When employers at first abandoned the 10-hour day for the 8-hour day, they discovered that no material reduction in output resulted. In fact, in some few instances, unit labor costs actually decreased. The experiences of the Kellogg Company with its 6-hour day reveal some of the advantages that may result from a reduction in working time:

1. There was no interruption for meals—each shift running through without a stop.
2. Daily plant output increased, owing in part to the fact that the daily energies of four people instead of three were tapped.

3. Minimum wages of $4 per day for male workers were retained without loss.
4. Workmen could go home for all meals, thus reducing living costs slightly.
5. Leisure time gave workmen greater opportunity for recreation and reduced the number of applicants on the sick-benefit list.

It is doubtful if a plan of this kind would work with equal success in all lines of business. In production processes that are largely mechanical and in which the worker performs routine tasks of starting and stopping machinery, the reduction of working hours does not show any very perceptible increase in output because of greater efficiency on the part of workmen. In such cases, a very real *increase* in production costs is likely to arise unless daily or weekly wages are reduced.

Determination of Wages. No fixed value can be attached to the productive abilities of men and women. Compensation may range from a few cents to several thousand dollars per hour. It would therefore be misleading to refer to "average" wages of labor without considering important gradations in status of certain classes of employees. They do not form a homogeneous group with uniform abilities. Nor do people with the same qualifications necessarily receive identical salaries or wages.

Wages are costs that are determined in somewhat the same way as are the prices of commodities. The levels at which they are established for individual workmen depend upon a large number of variables. Education, skill, experience, judgment, initiative, reliability, originality, strength, and fearlessness are some of the qualifications of men that cause differentials to be set up between workers.

Bargaining Relationship. However, wages are not usually fixed in any direct ratio to these factors. They are paid at such levels as will enable producers to employ their workmen profitably. If, for any protracted period, it appears that payrolls exceed the revenue-producing abilities of those employed, every effort will be made to reduce labor costs. On the other hand, if profits are very high, there will be a tendency to compensate the labor force more generously—particularly if the employees are in a position to bargain for a better return for their services. The amount of payment to individual workers will be governed, as far as can be calculated, by an estimate of what the business can afford to pay them in view of gross revenues received. When business falls off, nonessential workers are weeded out and payrolls are reduced.

In the main, therefore, the conditions under which the terms of employment are set up are the result of a bargain between workers and employers or their representatives. In some instances, legal limitations set minimum levels of compensation below which this bargaining process must not go. The bargaining power of employees differs greatly under various circumstances, depending upon the character of the work, the relative scarcity of individuals capable of performing such services, and the profitability

of the fruits of their efforts. General conditions of the market have much to do with compensation levels. High prices and heavy demands, requiring increased volume of output of certain products, strengthen the ability of workmen in these industries to obtain higher wages, because of the need of their services on the part of employers who wish to take advantage of these good conditions. On the other hand, falling markets and declining prices with a consequent decline in industrial operations tend to lower the bargaining strength of workers seeking employment. This usually results in a lowering of the wage scale in such industries.

Conflict of Interests. This bargaining relationship suggests a conflict of interest between workers, as a class, and employers. The tendency on the part of the employer is to reduce labor costs to a minimum—at least as far as this is possible without impairing the productive processes. The wage earner, on the other hand, wants as much compensation as he can get. As standards rise, his wants increase, and he will try to maintain the living conditions that he considers essential to the comfort and well-being of his family.

Management therefore looks at higher labor costs as the cause of smaller profits or of losses, while the worker regards the payment of profits and dividends as an unjust basis for the lowering of wages and the lengthening of working hours. In some enterprises, particularly small ones, there is genuine understanding between the owners and the employees regarding their relative positions with respect to business conditions. Under such circumstances there may be a number of petty disagreements from time to time, but there are no deep-seated antagonisms or conflicts. In certain industries, however, where a general class consciousness has developed among large groups of workmen, there is open defiance on the part of employees against the managerial policies of their employers. This manifests itself in the direction of united demands for higher wages, shorter hours, and better working conditions; or in some instances, it may give rise to more radical goals such as the complete abolition of the wage system and the transfer of the control of industry to the workers.

In the large corporation, as has been noted, ownership and management are not synonymous. Most of the officers or managers of such companies are paid employees who may or may not own stock in the concern that they serve. It is these officers who, directly or through their subordinates, engage and discharge the large working staffs employed by these companies. Here, then, is another basis for conflict or friction. Any attempt on the part of the executives to reduce costs by decreasing the wages of employees is met by demands from the workmen that executive salaries should be slashed correspondingly—or perhaps by a greater percentage in view of the greater security of position.

The interests of the buying public are also opposed to the demands of employees if such demands result in a rise in prices. Unless profit margins have been inordinately high, an increase in labor costs usually necessitates a rise in prices if losses are to be avoided. Frequently such increased prices discourage buying. This, of course, causes a drop in revenue to the company and again emphasizes a possible conflict of interest between worker and employer.

Identity of Interest. Despite opposing points of view on the part of workers and their employers, it must also be recognized that in certain respects their interests are identical. Without the services of the workmen, industry would be at a standstill; conversely, without the organization and direction of industry, the high degree of specialization that permits the employment of millions of people in the production and distribution of great quantities and varieties of goods would be impossible.

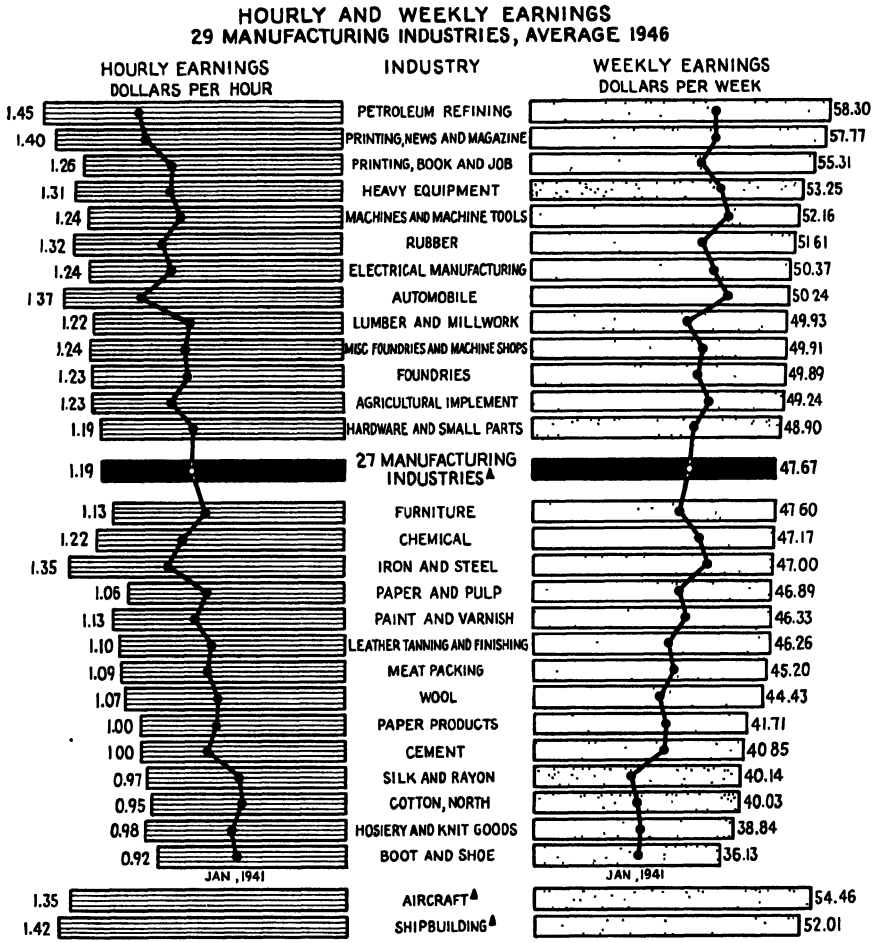
The conflict arises in the determination of the size of the distributive shares relative to the amount of effort expended. Aside from this, there is mutual interest. Many workers are spurred to greater effort in order to obtain promotion and advancement. They look upon the firm's progress as a means of providing greater opportunities for higher earnings and better jobs. The transition from wage earner to salaried employee represents a gradual shift from the labor point of view to an appreciation of the problems of management.

Economy of High Wages. Perhaps too much emphasis is placed upon how much the laborer receives rather than upon what he produces in return for his wages. The business that is run scientifically is interested not so much in the wages paid to the individual as in the labor cost *per unit of goods produced.* Thus it may be found that low wages mean high costs and high wages low costs, in terms of efficiency of labor.

Many studies have been made of the relationship between low wages and the physical condition of the workers. From a purely pecuniary standpoint (without consideration of the humanitarian arguments), it can be shown that it is often to the interest of a company to raise the wage levels of its employees. Increased productivity resulting from improvement in the health, strength, and morale of the workers may prove to be more than proportionate to the advance in the wage bill.

Another reason why low wages often represent poor economy is that they buy second-rate ability. The number of individuals who really excel in their respective fields are, on the whole, comparatively few. Consequently, their bargaining position is somewhat better than that of the usual run of worker in each class. The policy of paying low wages will therefore deprive a company of such superior ability. It is well known among executives that the services of a well-paid secretary are worth many

times the efforts of a stenographer or typist whose pay is only one-third or one-fourth of the secretary's salary. A highly skilled mechanic who is paid twice as much as the novice who might be employed to take his place justifies this wage in terms of his superior productivity.

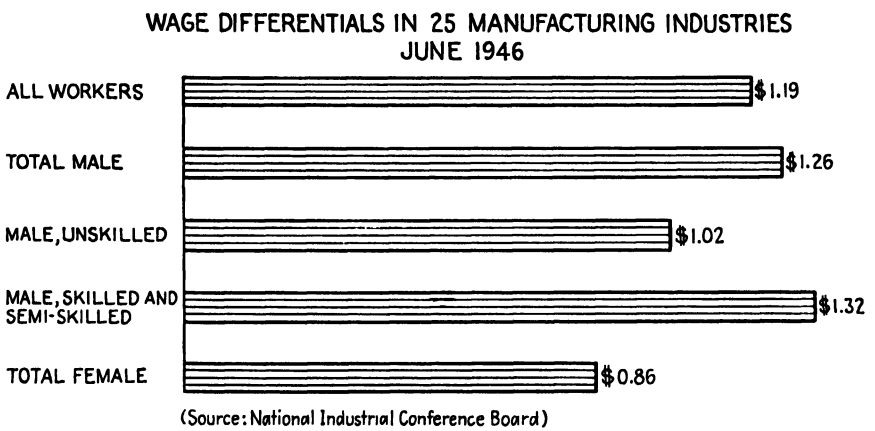


(Data from National Industrial Conference Board.)

However, it does not follow from the foregoing statements that it would be profitable in all industries and for all types of employment to increase wages indiscriminately. Furthermore, although higher wages tend to obtain for the employer a greater productivity of labor, the ratio of such productivity to the wage rise differs materially in various occupations. Many conditions, such as the character of the work, the application of

machinery, and the age and sex of the worker, will influence the results. Hence a generalized statement in favor of the profitability of paying high wages in all occupations cannot be made.

From a social point of view, the maintenance of a "decent living standard for all workers seems desirable, and employers in general are feeling the pressure of public opinion in this direction more and more. Moreover, increased wages unless accompanied by a parallel rise in prices mean greater purchasing power with the consequent stimulus to buying. Intelligent and farsighted employers as a group are aware of the general advan-



Wage differentials in 25 manufacturing industries in June, 1946.

tages of a high wage level. They know that their own security and that of the country depend upon the maintenance of an adequate purchasing power. They would prefer to pay a "decent" level of wages rather than to offer their employees degrading incomes which are barely sufficient to provide the minimum necessities of life.

Wage Differentials. It is apparent from the chart on page 252 that variations exist in different industries both in hourly earnings and in weekly pay. Although the hourly wages and weekly earnings were highest in petroleum refining and printing, some industries showed relatively high hourly earnings and lower than average weekly incomes. The iron and steel industry, for example, with an hourly rate of $1.35 was fourth highest in the group, but the weekly earnings of $47 placed it below the average.

Wage differences exist between skilled and unskilled workers and among skilled workers employed at different occupations in a single industry. For example, in the printing trades, there is a wide gap between the wages of press assistants and feeders and those of photoengravers and, in the

clothing industry, between the pay of clothing designers and that of pressers.

There are also geographical differences in wage rates for the same type of work. High living costs in some areas make higher wages mandatory as compared with sections where rents and other cost-of-living factors are relatively low.

Because of the greater bargaining strength of workers united in labor organizations, the average level of union wages tends to exceed the pay of unorganized workers. There are thus a number of important factors that account for individual variations in rates of wages:

1. Fluctuations in demand for certain products and consequently for the labor necessary to produce them.
2. Differences in occupations within an industry and in qualifications of workmen needed for these various jobs. The qualifications include such factors as

a. Training.	*d.* Speed.
b. Experience.	*e.* Ingenuity.
c. Dexterity.	*f.* Physical fitness.

3. Differences in age, sex, nationality, and living standards of workmen, which affect their bargaining position when seeking employment.
4. Variations in living costs in different localities.
5. Degree of unionization of workmen or the relative scarcity of skilled talent.

Standardization in Wage Rates. Despite the marked differences in wage rates shown in the preceding charts, a leveling process is taking place to some extent in the wages paid to labor throughout the country. This is due to several factors. In the first place, productive processes have become more standardized. This has resulted from the spread of the machine technique and the consequent reduction of industrial operations to routine tasks requiring less individual ingenuity and skill. Moreover, women have tended to assume a more prominent position among permanent classes of wage earners and to support dependents and, as such, have sought equality with men in compensation for equal work or productivity. The spread of public education has helped to reduce the discrepancies between relative abilities of individuals and has tended to elevate living standards. The improvement of transportation and communication and the simultaneous growth of various sections along new industrial lines lessen the importance of geographical differences in living costs. In addition to all these factors, federal legislation has exerted an important equalizing influence upon wages. As a result, the range of compensation for the services of labor is rapidly becoming narrower for the ordinary routine operations in which perhaps 90 per cent of the working population is engaged.

Methods of Wage Payment. In general, two methods of compensation or systems of payment to workers are found in American industries. A

worker is paid either on the basis of the time that he spends at his job or according to the amount of work that he does. The former arrangement is known as the "time wage" and is quoted as "cents" or "dollars" per hour, day, week, or month. The latter is referred to as a "piece rate" and is expressed as a fixed price per unit of output.

Time wages are the most common form of payment. Comparative ease of checking on the amount of time served by employees by means of time-keeping systems and simplicity of recording payroll data are among the advantages of using this method of payment. It is assumed that, in most instances, men will conform in their productivity to certain standards of performance and that the most convenient device which can be used in compensating them is to pay them an hourly rate. Especially is this method of payment desirable when it is difficult to measure labor productivity in terms of any definite units of output.

A series of disadvantages may, however, be noted. Because of its lack of emphasis upon incentive, this type of wage leads to "soldiering" on the job unless a careful supervisory checkup is employed. Furthermore, because of differences in ability and in employee psychology, the output of one worker will be greater than that of another, without any greater immediate recognition for his efforts. This tends to discourage the more active or ambitious worker.

Piecework wages are applicable only when it is possible to measure units of output. In view of the fact that the worker is paid on the basis of volume of output, he is provided with an incentive to increase his efforts. The more he produces the greater will be his compensation. This is the obvious advantage of this system. The employer is relieved of "driving" the workmen, for they tend to drive themselves. The costs of supervision thus tend to be lessened. Furthermore, this system provides a simple means for calculating costs or for making estimates, inasmuch as the labor cost per unit of output is always a constant. However, this method of payment also has disadvantages. In putting a premium on quantity, it often reduces quality of output. This raises inspection costs. The clerical work of keeping records and of making up payrolls is made somewhat more burdensome as well. In their attempt to obtain high pay, laborers may work to the point of exhaustion, undermining their physical strength and lessening their future productive capacity. Another evil that frequently accompanies piecework payments is that the rate per piece is gradually beaten down competitively until it is set at so low a level that only with the greatest effort can the best workmen attain a decent wage. Unforeseen delays and stoppages in work are at the expense of the workmen. When the employees come to realize this, a generally hostile attitude is built up among them against the management with an attempt to "beat the game"

wherever possible. In addition to resulting in slovenly work, this frequently leads to the careless use of machinery and equipment with accompanying increases in replacement costs.

Neither system of wage payment outlined above is ideal. In order to approach the problem more scientifically, some companies have studied the nature of certain jobs and the incentives for work so as to arrive at a more equitable basis of compensation.

Wage-incentive Plans. This has led to a method of compensation that operates on a premium or bonus basis. The idea is to increase efficiency by varying the worker's pay with the quality or quantity of his output. Many incentive-wage systems have been devised.

The original differential rate plan applied to piecework by Frederick W. Taylor, as a part of his program of scientific management, prescribes a rise in the rate of compensation per piece as the output increases. Under this plan, the management is supposed to work out scientifically the method for the performance of each task and the time required for its completion. The pay is so adjusted that the worker receives a low piece rate for all production up to standard and a high piece rate if his output exceeds the standard. For example, it has been determined that an average worker should produce 150 units per day at a given job and the low piece rate has been set at 3 cts., with the high piece rate at 4 cts. Any amount produced by a laborer up to 150 units will entitle him to output times 3 cts. Should he produce more than this number, say 160 units, he would receive 160 times 4 cts. or $6.40 for the day. This gives the more efficient laborer a higher average wage per unit of output as well as a larger daily wage. It penalizes the inefficient worker by setting a low rate of compensation per unit for small output. The policy is intended to place a premium upon exceptional effort and to cause inefficient men to drop out.

A somewhat similar wage plan is the Gantt task and bonus system. Under this plan, however, a definite minimum hourly or day rate is guaranteed. Job standards are set; and if the employee does the work in less time, he receives a bonus. This bonus works out as a higher hourly rate. The minimum rate is increased on a sliding scale ranging from 10 to about 30 per cent. This increasing bonus rate usually starts when the worker has attained 66⅔ per cent efficiency, thus rewarding those who are striving to reach the standard as well as those who have bettered the standard. The cooperation of foremen is also sought by paying them a bonus that depends in size upon the bonuses received by their workmen.

The Halsey premium plan also involves setting a standard time for each task. This is based upon observation and experience. The worker is paid an hourly rate. If he performs the job in less than the standard time,

he is paid the regular rate for the hours he worked, plus a percentage (usually 50 per cent) of the compensation applicable to the time saved. Thus a worker given a job that should be completed in 4 hours and that pays 50 cts. per hour will receive $2 for the operation. If he takes only 2 hours to do the task, however, he receives $1 plus 50 cts. premium and has 2 hours left in which to start some other work.

A quality bonus is sometimes given if high-quality workmanship and elimination of wasted materials are more important than quantity output. In such cases, the rate of compensation is made to vary inversely with the number of rejections of an employee's products. Many other incentive-wage payment schemes have been devised. Some of the better known plans include the Emerson efficiency plan, the Bedaux point system, the Rowan plan, and the Diemer premium system.

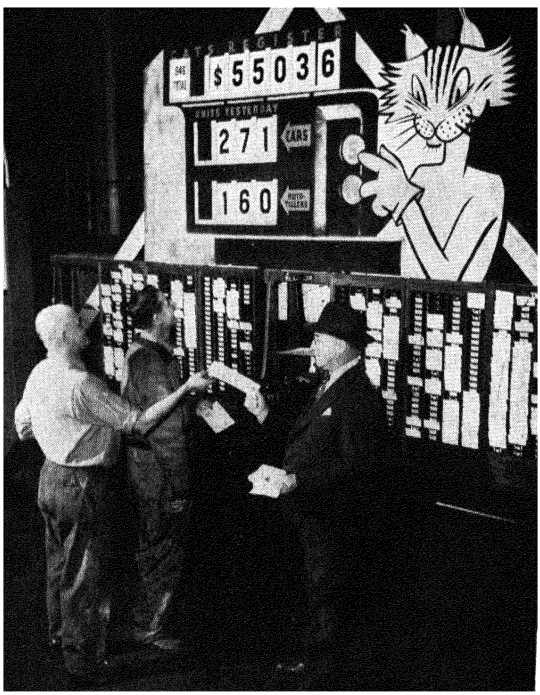
Plant-wide Incentive Plans. There are many adaptations of these incentive plans to fit the needs of particular firms. One of the simplest methods of making the worker feel that his interests are identical with those of the firm is the plant-wide incentive plan. Simply stated, this means that if the company, as a whole, produces more, the worker shares in the added output by receiving a bonus in addition to his regular pay. For example, if there is a 10 per cent increase in production over reasonable standards, then the entire working force in the plant receives a bonus of 10 per cent. A form of this plan was adopted by Henry J. Kaiser in his "bonus per car" basis for linking earnings to performance. For every new Kaiser-Frazer car that employees see rolling off the assembly line, a $5 bonus goes to the company "kitty" to be divided up at the end of the year among the employees. Kaiser's reason for this method of incentive payment as against profit-sharing programs was that a bonus of $5 per car is simple, visible, and tangible as against methods that require periodic financial reports concerning company profits and other accounting data (see illustration).

The Lincoln Electric Company's plan includes a special year-end bonus paid to workers in varying amounts. In 10 years, this company paid its workers in year-end bonuses an average of 100 per cent of their regular earnings. This firm claims that as a result of increased performance, profits grew enormously and costs dropped, enabling it to make marked reductions in the price of its products.

James F. Lincoln, president of the company, stated: "Wage incentive means paying a worker for what he does, rather than for the amount of time he takes to do it. It means paying for the home run that takes one strike, rather than three times as much for a strike-out because it takes three times as long." [1]

[1] In the *Christian Science Monitor*, Nov. 10, 1945.

Obviously the application of these wage systems varies considerably with the type of business concerned. Certain plans are much better adapted to some industries than to others, and it is impracticable to make any general estimate of the desirability of one method of compensation



Willow Run's "Cat's Register" records the worker benefits of the Kaiser-Frazer unique contract with the United Automobile Workers. Management sets aside $5 for every car shipped. This is distributed among eligible employees at the end of the year. (*Courtesy of Modern Industry and Kaiser-Frazer Corp.*)

over another. Some of the essentials of a good wage-incentive plan are summarized as follows: [1]

1. It should be just to both employer and employee, increasing the mutuality of their desires. It should be positive, not unnecessarily punitive, and so operated as to promote confidence.

2. It should be strong both ways, that is, it should have a standardized task, preferably high, and a generous reward. The latter should usually be in direct

[1] LYTLE, C. W., "Wage Incentive Methods," rev. printing, p. 32, Ronald, 1938.

proportion to employee effort, preferably more than this for the highest productions. One writer puts this aptly, "It should reflect an employee's contribution to his company's success."

3. It should be unrestricted as to amount of earnings, that is, the rate guaranteed against change until the job is changed.

4. It should be reasonably simple for an employee to figure, prompt, and clear in its relation to individual performance, as well as practical for shop procedure. . . . The time period over which efficiency is averaged should be short, usually a day.

5. It should be flexible and intimately related to other management controls.

Through individual or group bonus plans, employees have reaped the advantage of greater pay for increased efficiency. They have also experienced a relaxation in supervision in some instances where the management relied upon the bonus as a pace setter. However, unions have opposed these systems for a number of reasons. When compensation is fixed on a production basis with monetary rewards for better than average work, the pecuniary advantages of collective bargaining are less marked. The laborer regards the wage-incentive plan as a cunningly devised speed-up system. Earnings are unstable, since they move in sympathy with variations in output. Frequently workmen are unable to earn their rates on account of material shortages and machine breakdowns rather than because of inefficiency of labor. Moreover, because of individual differences in ability, one man is pitted against another, especially in the operation of group-piecework plans, where friction arises because the fast men on the job are penalized by the slower ones. Finally, some of the plans are so complicated in the computation of the bonus rates that distrust and misunderstanding result. The outcome of employee hostility to these bonus systems has been that leading firms in several industries have dropped them in favor of a stated day rate.

Profit-sharing and Stock-purchase Plans. The ideal employer-employee relationship from management's viewpoint is the one where the employee is made to feel that he is part of the firm and definitely profits from its growth, where employees say "we" when they refer to their firm instead of "they." To develop closer ties between employee interests and those of the company, some firms inaugurated plans to distribute a definite portion of the profits among their employees. At times, as in the J. C. Penney Company, such profit-sharing plans are limited to a small group who have served the company for some time, and who are in the managerial or junior executive ranks. Men in such positions are able to see fairly clearly the relationship between their own efforts and the earning capacity of the company. Where the profit share is a substantial one, there is a strong incentive among these individuals to increase profits.

Where, however, some of the profits are distributed to the rank and file of employees in a large company, the shares must naturally be smaller, and there is little correlation between individual effort and company profits. Consequently, there is likely to develop a sense of indifference to the profit-sharing plan or of suspicion of the management on the part of the workers.

Nevertheless, certain companies have adopted profit-sharing schemes with considerable success and have frequently combined with them plans for the purchase of stock by employees. There is some variation in the structure of these plans. Occasionally, they are linked with the thrift or savings systems, under which employees accumulate sums that ultimately are converted into stock. Sometimes installment payment plans are provided. Quite frequently, the stock is sold at a substantial discount, or outright gifts or bonuses are distributed. Stockholding employees in a few concerns receive privileges or special bonuses not given to other employees. The purpose of all these arrangements is, however, the same. If the enterprise is financially sound and its earning power can be maintained or increased, such plans usually succeed in building up good-will among employees and in developing a closer bond between worker and company.

The joint earnings plan of the George A. Hormel and Company illustrates a profit-sharing arrangement which applies to all employees who have been with the company for the previous 12 months.

For accounting purposes, the business is treated as a joint enterprise of the stockholders as one group and the employees as the other. All sales and miscellaneous income are credits to and expenses are deductions from what is called a "joint earnings account." The balance is divided between stockholders and employees on the basis of a sliding scale, with the stockholders' participation beginning only as the amount becomes more than enough to pay full-time wages at going rates to all participating employees. As the company's earnings increase with relation to its basic payroll requirements, the stockholders' rate of participation increases but the share of the employee group never falls below 50 per cent of the total joint earnings.[1]

Guaranteed Wages. During the "prosperous twenties," a number of different firms pioneered in setting up plans that guaranteed their working force a certain number of weeks or months of steady employment. These plans were developed, not so much as philanthropic devices, but from the belief that it was good business to give workers extra security. This policy not only reduced labor turnover but also increased labor productivity. Instead of being paid on a straight piecework basis or at an hourly

[1] Based upon a leaflet entitled "The Hormel Annual Wage, Wage Incentive and Joint Earnings Plan," issued by George A. Hormel and Co.

rate, employees are promised a minimum annual or monthly wage. The Procter and Gamble Company, for example, guarantees employment on an annual basis. Another of these plans is that of George A. Hormel and Company. An annual budget of performance, based upon past experience and sales forecasts, is set at the beginning of the year for each department. Total labor costs for each department are computed and are paid out in 52 weekly installments. Average working time is 40 hours per week but may run as high as 53 hours in rush seasons, falling off considerably during slack periods. Bonus payments are made for production in excess of the quota set. As a result, the worker is assured a job with steady pay.

The Nunn-Bush Shoe Company operates along somewhat similar lines. The concern guarantees that production employees shall receive 52 pay checks throughout the year, regardless of business conditions or factory shutdowns. Compensation for the year is based upon a fixed percentage of the value of all shoes produced. This is paid into a salary fund from which weekly pay checks are drawn. Although this system does not assure the worker a guaranteed annual income, it provides him with a steady job and a weekly income flow that keeps pace with economic changes.

The Armstrong Cork Company of Lancaster, Pa., has a policy according to which an employee with at least one year of continuous service, if laid off through no fault of his own, will receive in the current year, at the expense of the company, unemployment compensation during the equivalent of one full waiting period as established by applicable unemployment compensation laws, for the number of hours shown in the schedule below for each week of such waiting period, times the employee's average hourly rate of pay.

Service of Employee at the Beginning of the Week for Which Payment under the Plan Is Requested	Hours of Unemployment Compensation per Week in Waiting Period
Employee with more than 1 year of continuous service but less than 5 years of continuous service	24
Employee with 5 (or more) years of continuous service	40

As the purpose of the plan is to "tide over" the employee during the waiting period, no unemployment compensation is payable to any employee in any locality where such payment would itself extend the waiting period, or postpone the receipt of unemployment compensation under applicable laws.

Some concerns have provided for maintenance of employment, coupled with an increase or decrease in pay, by a scale based upon a rise or fall in the cost of living indexes or upon the company earnings. The General

Electric Company and the Westinghouse Electric and Manufacturing Company illustrate these types. Other firms such as the Standard Oil Company (New Jersey) and the Chrysler Motor Car Company have distributed lump-sum year-end bonuses to employees on the regular payroll without attempting to spread such payments over the year or to guarantee security of work. The trend is gradually developing in this latter direction.

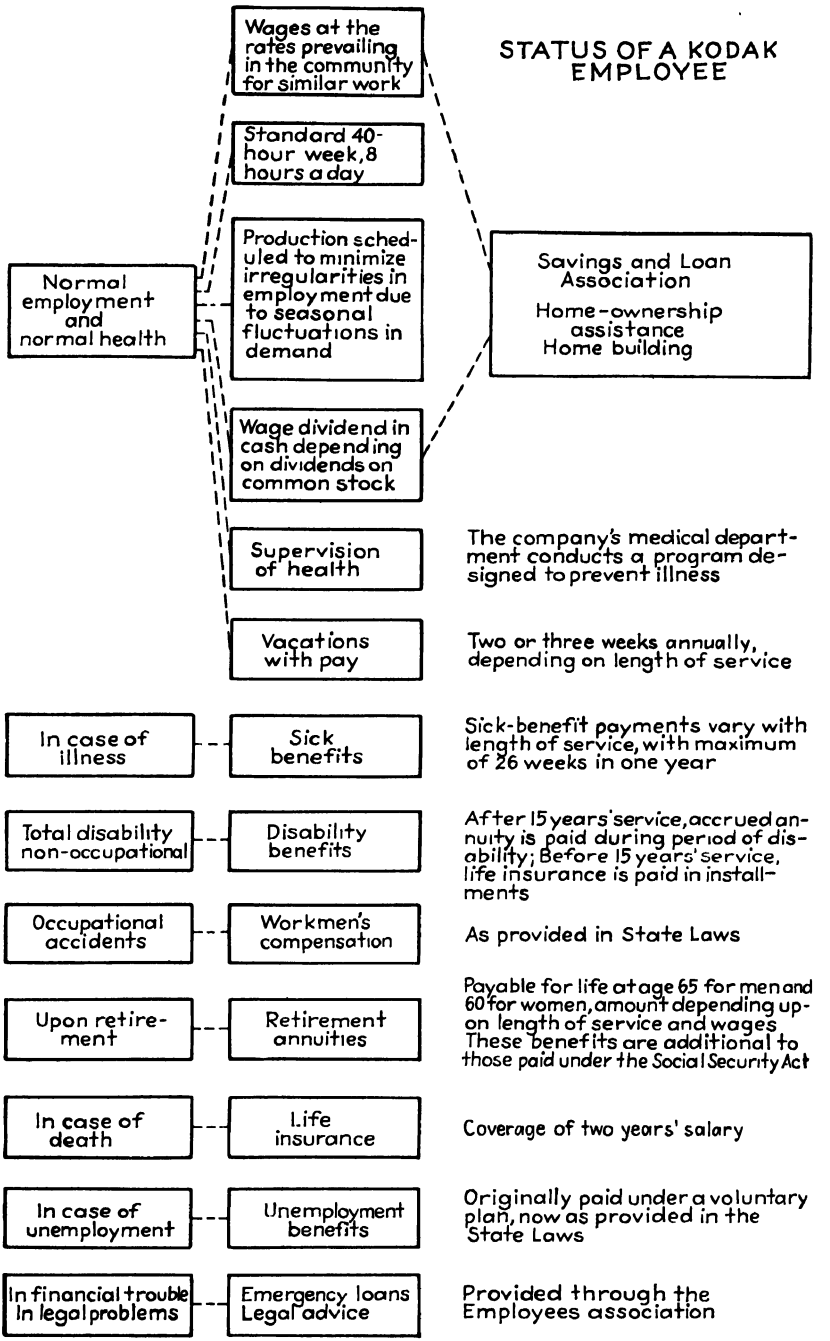
None of these plans implies that the company "owes any worker a living," independently of his properly performing his job. Each provides that any worker may be discharged for cause. However, all extend to qualified workers an important measure of security from layoffs or periodic seasonal unemployment.

Financial Welfare Plans. In order to aid their employees in the handling of their personal financial affairs and in meeting unforeseen emergencies, some companies have provided thrift plans, insurance and pension systems, mutual-benefit associations, and profit-sharing schemes.

Thrift and Savings Plans. Industrial thrift plans may involve simply an educational program on the part of a company designed to instruct its workmen with reference to the fundamental principles of saving. They may go a step further and provide deposit facilities for systematic saving or deduct small amounts from the pay of employees for deposit in a savings account. In some instances, in order to encourage habits of thrift, companies add a specific sum of money to every dollar set aside by an employee in a thrift account or in a savings bank.

Coupled with these savings plans, there are sometimes savings and loan associations and credit unions formed under the direction and encouragement of the concern. Through such organizations, employees are able to make investments or obtain emergency loans when necessary and thus develop a greater degree of financial independence.

Insurance and Pension Systems. Insurance is also designed to give the worker a greater sense of financial protection and security. The knowledge that provision is made for himself and his dependents against risks arising from the uncertainties of life makes a worker happier and more contented than if he were constantly faced with the worry of providing for his dependents in the event of death or disability. Industrial group insurance, provided by a considerable number of firms, entitles each employee to a life insurance policy that guarantees benefits to his dependents in the event of death or disability. Workmen's compensation insurance also assures employees or their survivors of an income and coverage for medical or funeral expenses in the event of industrial accidents resulting in injury, ill health, or death. Mutual-benefit organizations to which employees contribute small dues offer sick benefits or disability payments in addition to those provided by insurance. Such associations are usually encouraged and


STATUS OF A KODAK EMPLOYEE
Normal employment and normal health
Wages at the rates prevailing in the community for similar work
Standard 40-hour week, 8 hours a day
Production scheduled to minimize irregularities in employment due to seasonal fluctuations in demand
Wage dividend in cash depending on dividends on common stock
Savings and Loan Association
Home-ownership assistance
Home building
Supervision of health
The company's medical department conducts a program designed to prevent illness
Vacations with pay
Two or three weeks annually, depending on length of service
In case of illness
Sick benefits
Sick-benefit payments vary with length of service, with maximum of 26 weeks in one year
Total disability non-occupational
Disability benefits
After 15 years' service, accrued annuity is paid during period of disability; Before 15 years' service, life insurance is paid in installments
Occupational accidents
Workmen's compensation
As provided in State Laws
Upon retirement
Retirement annuities
Payable for life at age 65 for men and 60 for women, amount depending upon length of service and wages These benefits are additional to those paid under the Social Security Act
In case of death
Life insurance
Coverage of two years' salary
In case of unemployment
Unemployment benefits
Originally paid under a voluntary plan, now as provided in the State Laws
In financial trouble In legal problems
Emergency loans Legal advice
Provided through the Employees association

During the year, 350 employees were retired on pension and at the end of the year 2,800 men and women were receiving pensions under the company's annuity plans. The company has maintained retirement plans for its employees continuously since 1903, when its first annuity plan was adopted.

Welfare Work. Some companies have endeavored to promote a general feeling of good-will and mutual understanding among their workmen through the conduct and encouragement of various forms of welfare work. The scope of this welfare work frequently involves the maintenance of hospitals, company lunchrooms, restaurants and stores, housing, gardens,

Many companies provide restaurants and lunchrooms for the benefit of their employees. Shown above is one of the cafeterias of the Metropolitan Life Insurance Company where employees may take lunch without charge.

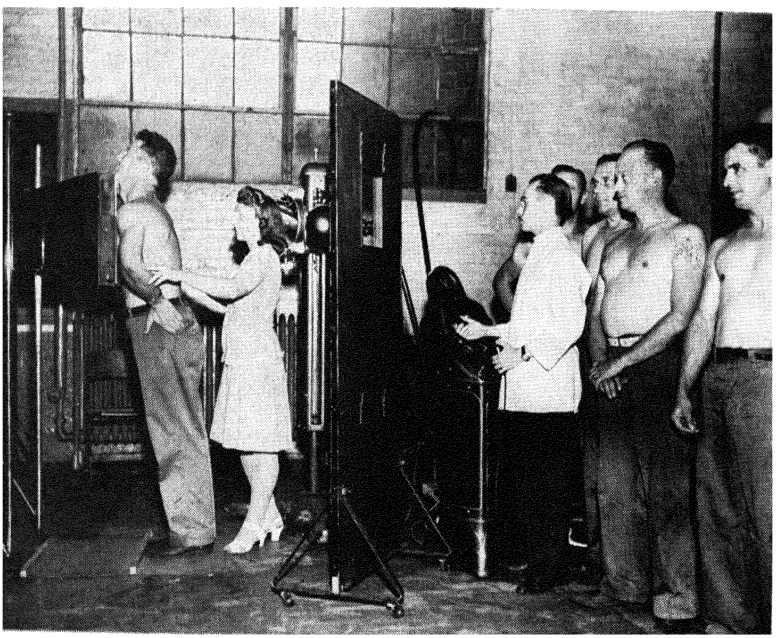
parks, and recreation centers. Social activities such as parties, picnics, dances, shows, and boat rides are frequently provided.

Housing and Community Improvement. Companies whose employees form virtually the entire population of a given community sometimes build dwellings at low rental rates for their workmen. In addition, they construct churches, schools, hospitals, stores, community centers, and athletic fields for the benefit of the townspeople. Especially has this been seen in a number of automobile, coal, and steel centers and in certain textile towns. The United States Steel Corporation, for instance, built the city of Gary, Ind., and provided its workers with model cottages, playgrounds, vocational schools, hospitals, pure drinking water, and athletic fields.

Such plans are particularly important where the factory is far removed from a large, developed city or town. In northern Minnesota mining towns, where the workers are more prosperous and independent, conditions are good, and educational appropriations large, the scope of welfare work is restricted; whereas in Alabama, where opportunities for welfare work are more numerous, the companies subsidize schools, initiate adult classes and social activities, and maintain libraries and hospitals.

Occasionally, when it is consistent with the industrial processes involved, landscape gardening is resorted to for purposes of beautifying the factory environs. The Eastman Kodak Company and Doubleday & Company, Inc., developed parklike grounds about their manufacturing plants.

The town of Hershey, built by the Hershey Chocolate Company, became a show place in Pennsylvania with its resort hotel, four golf courses, a big



Some of the larger companies furnish free medical services to employees. (*Courtesy of the Borden Co.*)

swimming pool, a sports arena, a park of 1,000 acres and a ballroom that accommodates 4,000 dancers.

Restaurants, Rest Rooms, and Recreation. Many companies—industrial plants, insurance firms, banks, and retail stores—serve their employees free lunches or meals that are sold at nominal prices in company restaurants.

Rest rooms, solariums, and hospitals are often provided, varying in number, equipment, and service with the size of the company. Some of the larger concerns maintain regular full-time staffs of doctors, nurses, and dentists who furnish free medical services to employees and their families.

Recreation rooms and buildings are found in industrial plants. Swimming pools, bowling alleys, and dance floors, as well as outdoor tennis

courts and baseball diamonds, are sometimes made available to employees.

The well-ventilated, heated, and lighted, fireproof structures of the modern day, equipped with the most up-to-date sanitary improvements and facilities for rest, recreation, and personal hygiene, often located in a setting of natural beauty, are in sharp contrast to the offensive squalor of factory environment that characterizes some of the less progressive industrial plants.

Attitude of Employees toward Welfare Work. Where a company can prove to the satisfaction of its employees that its various "welfare plans" are of distinct value to them and that through such activities working conditions are more pleasant and the health and well-being of individual workmen are improved, the policies may be considered successful. However, a considerable amount of antagonism to welfare programs is sometimes found among employees. They view these policies as "charity" or "benevolent paternalism" and an attempt on the part of the management of a firm to govern their lives. The average factory worker feels that during working hours his time belongs to the firm but that when he quits at night, he should be permitted to do as he pleases. If, therefore, the company supplies clubrooms, gymnasiums, and "wholesome" places to spend his leisure hours, without his being free to spend them as he pleases, even though it may be in a saloon, he resents this interference with his freedom.

Organized labor has protested against company welfare activities on the ground that they are subtle "weapons" against labor unions. The sincerity of the employers is questioned by the unions—the suspicion being that welfare work often has the effect of depriving employees of just compensation for effort and that the money expended for it comes from their pockets. They declare that through these service policies and profit-sharing schemes, employees are lulled into a false sense of contentment, are led into the abandonment of trade unionism for the protection of their interests, and ultimately become completely subservient to their employers.

During a strike in the Pullman shops, one of the strikers testified that he was born in a Pullman bed, brought up in a standardized house owned by the Pullman company, worked in the Pullman shops, bought all his needs in the company store, had to spend his leisure hours in the amusements provided by the Pullman Company, etc., so that he felt that he belonged to the company, body and soul. He struck for freedom from a life that resembled somewhat a state of serfdom. Welfare work that reaches into the life of the worker outside the shop or factory places him in a dependent position, which will often cause a smoldering resentment rather than gratitude and contentment.

Effectiveness of Welfare Work. Some writers on labor problems feel that the general experience among businessmen seems to be that no incen-

tive to efficiency and contentment equals that of wages—that the non-pecuniary incentives are weak. However, it is generally admitted that welfare activities do achieve considerable success when carefully worked out and properly applied. The same methods that are used to foster "school spirit" or loyalty to a lodge or club can be used profitably by an employer.

House organs, contests, rewards, conspicuous publicity given to an employee who "makes good"—showing the rewards that the loyal and hard-working employee may reap—may all be used to advantage.

Pleasant rest rooms, employee cafeterias, and various opportunities for social contact, such as bridge tournaments and dances, attract certain classes of employees. Bonuses, monetary rewards, stock participation, insurance, and pensions frequently earn more for the employer than they cost. In the isolated industrial community, welfare work must of necessity be more elaborate. In some of these areas, the provision of housing, sanitation, amusements, medical care, and company stores are essential company functions.

Companies have discovered that it pays to have satisfied and contented employees. Fewer labor troubles and a small labor turnover result when a genuine interest is taken in employee welfare.

The success of welfare work depends largely on the skill with which these plans are handled, on the type of employee, and on the degree to which such plans may interfere with the employee's personal freedom. It has been found that most of these plans fail to eliminate friction if the attempt is made to usher them into being through the use of force or coercion. They must win the *wholehearted approval of the employees* and be managed or administered to a large extent by the employees themselves. It must also be recognized that welfare activities cannot be used as substitutes for satisfactory wages and hours. Companies that have developed extensive employee-service plans have regarded these as methods for creating more wholesome working conditions and for cultivating more friendly relations with their employees. Any attempt to cut wages or to increase working hours, in conjunction with such policies, quickly arouses antagonism among employees and defeats the very purpose of these measures.

Summing up the role of the personnel manager, D. M. Mason, personnel research director of the Armstrong Cork Company, recently stated:

> There is a tendency among students and even among business men when speaking superficially or thinking casually, to consider the personnel program of a company as consisting of those few insurance plans or absence payment procedures such as vacation, etc. However, personnel management means simply the handling of human beings and the function of an executive, when carefully analyzed, reduces to planning and controlling activities, all of which are directed at enlisting and

encouraging human efforts. In other words, the real function of an executive is not to handle funds, products, equipment, etc., but to handle the members of the organization and to accomplish through them the objectives of the organization. Since every objective of management is accomplished through humans, every activity of management affects its relationship with its associates and subordinates.

Questions and Problems

1. You have been appointed personnel manager of a large plant. What will be your duties and functions? What would you state to be your most important goal or objective? Describe the methods that you would use in each important phase of your work. How would these differ if the plant were a manufacturing firm? A large retail establishment? A chain organization? A transportation company?

2. "Labor turnover is expensive. . . . There are many causes of labor turnover. . . . A certain amount of labor turnover is desirable." Explain and illustrate each of the above statements. Discuss labor turnover in the light of seasonal and cyclical changes. Elaborate some of your plans in answer to Question 1 with regard to the reduction of labor turnover.

3. There are wide differences in pay among workers for the same job, for different jobs, and in various locations. How do you account for these wage differentials? Are wages tending toward a leveling process, or are the gaps growing wider? Explain and justify your answer, citing recent trends in laws or in the labor movement.

4. Some industrialists prefer plant-wide wage incentives to individual bonus systems like the Emerson or Gantt plans. Compare plant-wide incentives with the other systems. Contrast the Kaiser plan with the Lincoln incentives. Which do you think provides a more immediate appeal? Do you think that the principles of compensation used by the Lincoln Electric Company can be successfully applied to most or all employer-employee situations?

5. Compare the problems of working hours in continuous-process industries with those which operate on set hours each day. In both types, discuss the relationship between the hours of work and production costs. Describe the method used in the Kellogg plant. How successfully can this method be used in other plants? What are the limitations or objections to its general use in other types of business?

6. To what extent are the interests of employer and employee identical? Why are there frequent conflicts of interest? What can you do, as an employer, to strengthen the loyalty and ties of the worker to the business?

7. Welfare work may be quite simple, or it might encompass an entire town with all its functions. Enumerate some of the details of an employee welfare organization in a small plant; in a large firm located in a large city; in a firm such as Hershey Chocolate or U. S. Steel or any other company occupying an entire town. Why do workers sometimes resent these efforts on their behalf? Explain what errors in the administration of welfare work must be avoided if such plans are to succeed in bringing about more harmonious employer-employee relations.

8. Large banks, insurance companies, and manufacturing firms offer their workers attractive financial welfare inducements other than the bonuses and incentives for greater production. Describe the plans used by such firms as Armstrong Cork, Chase Bank, or the Hormel Company.

9. What is a "guaranteed wage"? Show how the idea started, not as a philanthropic scheme but as good business. If this system becomes widespread, it may have important

effects on the business cycle. Do you agree? Explain. Describe the specific plan of one company, and appraise it critically. What are the characteristics of certain concerns and industries that make an annual wage plan feasible, and why may such plans be inappropriate for other industries?

10. " . . . the real function of an executive is not to handle funds, products, equipment, etc., but to handle the members of the organization and to accomplish through them the objectives of the organization." In the light of the discussion and material in this chapter, explain the foregoing quotation.

CHAPTER XIII

COLLECTIVE BARGAINING AND LABOR DISPUTES

Types of Unions. In order to improve their relative bargaining positions in negotiating for satisfactory arrangements concerning wage rates and working time, workers in many leading crafts and industries have formed labor unions. The characteristic feature of a labor organization is that its members agree not to bargain individually but to establish the conditions of work by means of a collective contract between employer and union. The workers are thus in a position to force the employers to deal with them as a group instead of as individuals. This process is known as *collective bargaining.*

Such group effort is organized in a variety of ways. It may consist merely of a spontaneous mobilization of workers within an individual plant for the purpose of settling an immediate grievance, or it might develop along more permanent lines and over a broader base. In general, labor organizations are permanent groups of workmen and include in their membership laborers employed in certain trades or industries.

Craft, Industrial, and General Labor Unions. Craft unions in the United States have, in the past, been the most common type of labor organization. They are organizations of skilled workers in individual "trades" or "crafts" or in closely allied crafts. The basis of membership is the function performed or tool used by the worker. Unions of carpenters, woodcarvers, mechanics, barbers, and cigar makers are of this description. These unions are often referred to as *horizontal* unions.

Industrial unions, on the other hand, comprise all workers—skilled and unskilled and of all crafts or trades—within a given industry. The basis of organization is the product. The Amalgamated Clothing Workers Union and the United Mine Workers of America are prominent examples of this type. Workmen in all occupations within these industries are eligible for membership in these organizations. Industrial unions represent a *vertical* type of organization.

General labor unions, in a more limited sense than that used at the beginning of this chapter, are a third form of labor organization found in the United States. In such unions, all wage earners, regardless of craft or of industry, are joined together in order to strive for common interests.

The Knights of Labor, organized in 1869 by Uriah Smith Stevens, was an example of the general labor union. The Industrial Workers of the World (IWW) is a contemporary illustration of this type of labor organization.

Local, Regional, and National Bodies. These various classes of union organization are local, regional, national, or even international in scope. The local units or lodges are actual groups of workmen, within a given geographical area, who meet periodically for the purpose of discussing their common interests. The regional, national, and international organizations are delegate bodies which have been formed to unite the local groups of laborers into stronger unions. International organizations in the United States ordinarily include representatives from Canadian or Mexican labor.

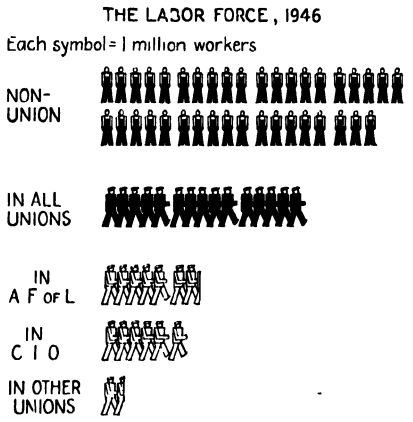
The "nationals" or "internationals" are the central or sovereign bodies in the American labor movement. They charter the local organizations and, to a large extent, control their activities. They determine membership conditions, the functional character of locals, the general working rules, and the bases for negotiating agreements. They receive the major portion of the dues paid by the workers and therefore control the purse strings. In most cases, they exercise the sole right to authorize the declaration of a strike on the part of a local union. Local union officers are responsible to the national for the conduct of their branches. Each of these nationals holds periodic conventions attended by delegates from the local unions, but the regular administration of its affairs throughout the year is vested in an executive board.

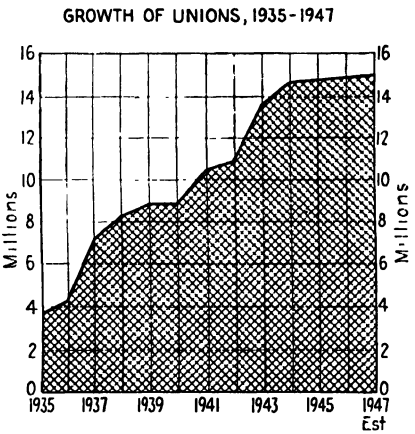
Amalgamation and Federation. There are several ways in which these different types of unions have combined. The various "city federations," "city centrals," "local trades and labor councils," and "state federations," illustrate this movement. In the category of national federations, the American Federation of Labor and the Congress of Industrial Organizations are the most important bodies in the United States.

The AFL, originally founded in 1881, is composed of over one hundred national unions and several hundred local, city, and state federated bodies. It is a federation of sovereign units, which exercise voting control in it. Briefly stated, its purposes are to spread the organization of labor into unorganized crafts and industries, to develop a harmonious spirit of cooperation among all crafts, to influence public opinion favorably with respect to the labor movement, and to secure advantageous labor legislation.

In its early history the AFL was primarily a federation of crafts. At its 1934 convention, it opened the way for the establishment of a greater number of industrial unions in its ranks. Today it includes such important industrial unions as the International Ladies Garment Workers Union, as well as amalgamated crafts like the Building and Construction Trades Department.

The CIO was organized in November, 1936. Beginning as an organization of 8 to 10 member unions, it rapidly enrolled scores of national unions and hundreds of separate units not yet organized on a national basis as direct affiliates. Opposed in principle to the emphasis on craft unionism in the AFL, the organizers of this rival federation sought to advance the cause of industrial unionism. They argued that employees in basic or mass-production industries have greater bargaining power if they are not divided into a number of craft unions; furthermore, that in many highly integrated industries, the technology and controls are such as to make





(Prepared from data obtained from The New York Times.)

industrial organization the only form of labor organization possible. They attacked the craft unionists as minorities and as "aristocrats of labor" who were unwilling to aid the millions who make up the rank and file of unskilled trades. Starting at first as a militant minority group, the CIO (Committee for Industrial Organization and associate unions) was finally suspended from membership in the AFL in 1936. This split resulted in transforming the CIO into a new federation representing the interests of a large percentage of the American labor population. Within 10 years after its inception, the CIO rivaled the AFL in the power that it wielded. It had organized, not only many basic industries, but also governmental employees, tenant farmers, migratory farm hands, white-collar workers in offices, retail employees, transportation, and maritime workers.

The Railroad Brotherhoods are characterized by purposes that are essentially the same as those of the other large federations except that their membership is more homogeneous, being composed of skilled railroad workers, and consequently their jurisdictional interests are somewhat more limited.

The preceding charts present a graphic picture of the strength of the nation's labor unions.

Independent Unions. Labor organizations that are not affiliated with the AFL or CIO are known as independent unions. The most important of these are organized much like the international AFL or CIO unions. The Railroad Brotherhoods, known as the "Big Four," for example, consist of four unaffiliated craft unions: the Brotherhood of Locomotive Firemen and Enginemen, the Brotherhood of Railroad Trainmen, the Grand International Brotherhood of Locomotive Engineers, and the Order of Railway Conductors of America. These often act jointly through common spokesmen in connection with industry-wide problems.

Other important independent unions are the International Association of Machinists, which withdrew from the AFL in 1946 as a result of a jurisdictional dispute; the National Federation of Telephone Workers, consisting of independent local unions; and the United Mine Workers of America, which left the AFL in 1947.

An entirely different type of independent union is the plant-wide organization whose membership, like that of the company union, consists of the workers of a single firm. These unions, not connected with others in the same trade or industry, were the outgrowth of company unions that had acquired the bargaining status of recognized labor unions. In most instances, they are the employees of large plants who prefer to confine their bargaining activities to their own immediate problems. They may also be the employees of small organizations. For example, the workers of the Brick Oven Bakers, Inc., instead of belonging to the AFL Bakery and Confectionery Workers' Union, have their own organization, the Brick Oven Employees' Association.

Foremen's Unions. A new development during the 1940's was the extension of the idea of collective bargaining to include foremen and other supervisory groups in the membership of industrial unions. Although this trend was confined to a relatively small group of individuals, it involved important questions of principle. It created the anomalous situation of having representatives of management join the labor organizations, *i.e.*, the unionization of management. Strong opposition to such practices was voiced by industrial leaders. They pointed out that if these general foremen and assistant foremen, on whom management relied to see that work is done at the shops, were realigned so that instead of being the agents of management working in the company's interests, they became associated, through unions, with the workmen whom they were supposed to supervise, a fundamental change would result. The removal of foremen from their present position as an integral part of management would require reorganization of factory management on a basis far more complicated and de-

cidedly less effective. Nevertheless, in May, 1944, the Ford Motor Company signed a collective bargaining agreement with the Foreman's Association of America, an independent union. A stipulation in the contract, however, was that the association would not affiliate with any other local or national union and that all nonsupervisory employees would be excluded from its membership.

Employer Attitudes toward Collective Bargaining. *Recognition.* In order to make collective bargaining possible, the employer must "recognize" the union that wishes to deal with him. Successful negotiation depends upon frankness, confidence, and mutual respect. Constructive results are attained only if the attitudes on both sides are fair. Recognition involves the admission on the part of an employer that his employees, as a body, have the right to organize for the purpose of negotiating with him with reference to working conditions for individual workmen within the group. This means, of course, that the employer will agree to deal with representatives of the union as the spokesmen for the laborers. Such representatives may be individual workmen, committees of employees, or special paid "business agents" appointed by the union.

For differing reasons, employers are led to sanction these arrangements. Certain unions, through their well-regulated apprenticeship systems, have built up a capable and dependable labor supply in the trade. Reliance may be placed upon the skill of the members of these unions, and little extra expense in "breaking in a new man" is involved. Moreover, strong unions that standardize wage schedules help to establish uniform labor costs among competitors and avoid price cutting and unfair competition. Agreements with responsible unions thus assure continuity of production under stipulated standards which are sufficiently high to maintain decent living levels for competent craftsmen. Finally, labor might be so well organized that employers have no alternative but to deal with the unions, particularly during periods of active business when skilled labor is in a strategic bargaining position. In the iron and steel, the automobile, and the coal-mining industries, for example, from 80 to 100 per cent of all workers are covered by union agreements.

Opposition. Such recognition is not always accorded organized labor. In fact, many employers have deliberately increased wages, shortened hours of work, and undertaken elaborate welfare schemes in order to prevent the growth of unions among their workmen. Others have shown open hostility toward the efforts of organized labor and have resented the use of collective bargaining, viewing it as a menace to the management of their concerns, a threat to profits, and a cause of disturbance.

Employers of labor find that their dealings with unions vary considerably. Some unions are strong; others exist only on paper. Some are conservative;

others extremely radical. Some are headed by honest and able men and have raised the standards of their workers; the members of others have been victimized by unscrupulous leaders.

In some industries particularly, union factions have allied themselves with radical political groups. The result is constant warfare, not only between these men and the employers, but also against the right-wing groups. Often the antagonism against fellow workers is even more bitter than against the employers. It is almost impossible to achieve a harmony of interests between worker and employer when the union is basically opposed to all forms of private enterprise and lays down the principle that the worker will always be the exploited victim unless the present system of industry is abolished.

The leading cause of conflict between employers and labor unions in general is the question of control. Owner-managers and salaried executives dispute with organized labor its bid for power to share in the control of business. Employers contend that they are in charge of their companies and that all regulative or directive authority is vested in them. When laborers wish to work, they will be glad to give them employment if there happens to be a need for their services. However, they oppose the efforts of outside labor organizations in attempting to interfere with the management of the business. The nature and scope of labor's policies that threaten to contest the undivided control over industrial affairs on the part of employers will receive brief treatment in the sections immediately following.

Policies of Organized Labor. *Standardization of Working Conditions.* The determination of wage rates and of working-time schedules has been seen to rest basically upon the relative bargaining powers of employer and employee. Through collective action, the labor group is placed in a more strategic bargaining position than that held by its individual members. Collective action, however, necessitates the elimination of competition among individual workmen and the presentation of demands for the group as a whole. This leads to the establishment of uniform rates of pay (either piece rates or time rates) and of working hours. These standards are set up for each class of workmen within a craft or industry and serve as basic minimum scales for all union laborers within each classification.

The employer is thus deprived of his right to compensate workers according to their individual ability or worth to him except, of course, that unions usually interpose no objections if employers wish to offer wages higher than the union scale. Inasmuch as the standard rates tend to become the maximum rates, employers who pay the union scale of wages frequently discover that they must pay a fixed rate for labor power, even though the quality of performance varies. The problem is somewhat reduced in the

cases where the unions rigidly adhere to certain minimum standards of performance on the part of their members.

Other aspects of working conditions, such as requirements relating to the installation of safety devices, adequate sanitary facilities, and provision of proper ventilation and lighting, are features ordinarily included in union programs. Frequently these stipulations become very petty and annoying and are the cause of much friction between unions and employers, who look upon such rules as further encroachments upon their rights to run their business.

The Closed and the Union Shop. Naturally, the ability to control all the laborers in a given trade adds materially to the collective-bargaining strength of a union. Consequently, labor organizations have attempted to set up requirements that would prescribe membership in their unions as a condition determining the eligibility of an individual for employment. This is known as the *closed shop.* In its most extreme form a *closed shop* is one in which every eligible employee must be a member of the union and in which the employer must do his hiring from among union members. A less extreme form, usually called the *preferential union shop,* is one in which the manager may employ nonunion help if he can obtain none of equal competence from the union but in which employees so hired must join the union. In general, the idea behind a *union shop* is that both union and nonunion workers are eligible for employment, but the latter must become union members after a trial period.

In the past, the majority of employers have favored either the *open shop* or the *nonunion shop.* In the former, both union and nonunion men are employed on equal terms. In the latter, union men are debarred—the employer refusing to recognize the union.

There are, however, certain employers, *e.g.,* in the building trades, who would prefer the closed shop or the union shop to the open shop. They feel that the mixture of two antagonistic groups of workmen on a job will spell trouble sooner or later. On a lump-sum building contract such trouble is expensive. Long-term agreements with union workmen, specifying all conditions of employment in advance, are favored in such cases. The closed shop has also been popular in the needle trades and in the newspaper industry.

Union Security Agreements. Other safeguards sought by the unions to control their membership and protect their finances are the so-called "union security clauses" that are written into labor contracts with employers. These include the *maintenance of membership clause* and the *checkoff.* The former merely states that all employees who are members of the union at the time of the signing of the contract and all those who subsequently become members shall, as a condition of employment, remain members of

the union in good standing during the life of the agreement. The checkoff is a device that makes the employer the dues collector for the union. It specifies that during the period covered by the contract, the employer shall deduct initiation fees and dues from the pay of union employees and remit these sums to the union local.

Membership Policy. In a number of unions, the long training necessary to acquire the proper skill at working in a craft automatically limits the membership. In others not so dependent upon a high degree of skill, there have been attempts to restrict the supply of union workmen by artificial devices. These have included the limitation of admission of workmen to unions, the use of high initiation fees, and the raising of standards for apprentices with reference to length of service in that rank. In addition, territorial and intertrade jurisdictions have been set up by unions, so that members of unions in one locality or in closely related trades do not compete for work with union labor in other areas or with other craft unions.

Limitation of Output. Another policy followed by unions that is frequently a source of irritation to the employer is to limit the worker's output by placing definite restrictions upon the quantity of work to be done per hour or per day. This takes the form of a limitation upon piecework, the tools used, or the methods of work. In some trades, such as house painting, are found provisions that limit the size of the brush or restrict the kind of work on which spray machines may be used.[1]

"Soldiering on the job" may also be encouraged, as a result of these policies, through forbidding workers to exceed the limits of output set by the union and by imposing fines upon members who set a pace of work beyond the capacity of other union workers.

Limitations of output take other forms, a common one being a general opposition to machinery. Machines may be completely prohibited, or the number of them limited. Stonecutters opposed the use of planing machinery and of mechanical stone picks which would greatly increase output. The following quotation further illustrates the nature of this problem:[2]

> There is no doubt that many skilled molders put to work on the machines did not honestly try to bring out their best possibilities. . . . When the members of the Union took their places at the machines, unsatisfactory results almost always followed. The output was not nearly so great as the employer thought it should be; the machines manifested a persistent tendency to get out of order. The journeymen after a few days' work were always wanting to return to handwork.

In some unions much the same attitude still prevails today.

[1] U. S. Bur. of Labor Statistics, *Bull.* 626, p. 21, May 15, 1936.

[2] STECKER, MARGARET L.; The Founders, the Molders and the Molding Machine *Quart. Jour. Econ.*, Vol. 32, pp. 278–308, February, 1918.

Featherbedding. Where unions insist upon the hiring of unnecessary workers, production costs rise. Should the management refuse to hire these extra employees, a costly stoppage is likely to follow. Featherbedding has been practiced particularly in the building industry, in entertainment and theatrical fields, and in the railroad and shipping industries. It is a union "make-work" demand, requiring the employment of more men than are reasonably required for the performance of a given job or the payment for a "standard crew" whether or not the full services of such employees are actually utilized. The American Federation of Musicians, for example, at one time required that a double crew of musicians be employed by broadcasting stations if the same musical program is broadcast on both a frequency modulation station and a standard wave band and that "stand-by" musicians (instrumentalists who are paid though they do not play) be engaged if amateur or school orchestras play for radio broadcasting. The Lea Act, passed in 1946, made it unlawful to force a broadcasting company "to employ any person or persons in excess of the number of employees needed to perform actual services." The constitutionality of this act was upheld by the United States Supreme Court in 1947.

Coercive Practices of Labor Unions. From the point of view of the worker, the strength of unionism lies in the fact that it gives labor an opportunity to enforce its demands upon the employers. But suppose that the bargaining process comes to no successful conclusion? What power does organized labor possess? The answer to this question depends upon how highly organized and how well managed a union might be. If the union is a powerful one, it might be capable of depriving employers of the ability to produce or market their goods. In general, three weapons have been used by organized labor with a fair degree of effectiveness.

The Strike and Picketing. A situation may arise where the union representatives fail to arrive at a satisfactory agreement with employers relating to the wages and hours of certain classes of workers; or perhaps the employer flatly refuses to have any dealings with a union. In order to enforce their demands, the laborers may decide to suspend all work until the employers can be brought to terms. This is known as a *strike* and is described as a concerted withdrawal from work by a part or all of the employees of an establishment or several establishments to enforce their demands.

There are several kinds of strikes. The most frequently encountered strikes are found in individual crafts or industries and involve the workers of one firm or one locality. These strikes usually occur because of local friction that cannot be settled amicably. As a result, the laborers collectively refuse to go back to work until the dispute is settled. A variation of the "refusal to go back to work" is a refusal to leave the plant. This is

known as the *sit-down strike*, a device that the courts have declared to be illegal. Employees commandeer their employers' production facilities and remain idle in the factory or yards until their demands are met or a solution is worked out. Meanwhile it is virtually impossible to hire substitutes to take their places. Occasionally, workers strike "in sympathy" with other unions that have gone on strike. Although they have no special complaints to make against their own employers, they demonstrate their interest in the "cause" of the other workers by cooperating with them in enforcing their demands. A *general strike* is one in which all workers cease working. Such work stoppages occurred in various European countries as part of the political and economic unrest following the Second World War. This weapon, however, is seldom used by American labor.

RIVET AND SCREW IN ROW

Kansas City Electricians, in Feud with Machinists, Strike

KANSAS CITY, Mo., Feb. 2 (U.P.) —A jurisdictional dispute over the rivet and the screw has started a strike of electricians at the Air Communications Company plant.

The company makes radios and the necessity for attaching sockets to the receiving set touched off a feud between the two American Federation of Labor unions in the plant.

Electricians had been screwing the sockets to the sets until last week. Then it was decided to rivet the sockets into place. Machinists took over the job, but the electricians said they wanted to do it.

Machinists replied that electricians couldn't use riveting machines.

Company efforts to negotiate a peaceful settlement failed. The electricians went on strike. The forty machinists went on riveting the sockets.

Jurisdictional Disputes. One of the most annoying threats to industrial peace has been the recurring internal strife within the ranks of labor. The bid for power on the part of competing unions gives rise to dual efforts to organize workmen. This involves conflicts among unions of different affiliation and among unions belonging to the same affiliated body. Even if employers are willing to deal collectively with their employees, they frequently find themselves caught in the center of a jurisdictional dispute. Recognition of either union brings the picket lines of the rival unions, and

failure to deal with any labor representatives results in governmental inquiry and action.

For years this has been the experience in dozens of industries and trades throughout the country. The most frequent jurisdictional contests have probably occurred in the building trades unions because of rapid changes in construction materials and in techniques. Upholsterers, painters, linoleum layers, and carpenters have repeatedly vied with one another for control over men and jobs. Teamsters and brewery workers had interunion rows for 50 years. The newspaper story appearing on page 280 describes one such jurisdictional dispute.

This interference with the smooth operation of production was especially evidenced in the open rivalry between the AFL and the CIO. The latter was aggressively seeking new recruits and, in order to increase its membership, staged a series of spectacular strikes particularly in the mass-production industries. Supporters of the AFL waged a counter-warfare to prevent a threatened loss in their membership, and to build up new organizations.

The struggle for supremacy between rival unions sometimes reaches fever heat as was the case, in 1937, in the extended dispute in the West coast sawmills, docks, and warehouses. Neither side was willing to yield a single major point. Each threatened to fight until victorious or vanquished. In the meantime, throughout the entire area west of the Rockies, commerce was hindered and industry harassed.

Outstanding as an example of a jurisdictional struggle has been the intermittent strife in Hollywood, Calif., between the Conference of Studio Unions, made up primarily of AFL craft affiliates and the more inclusive AFL International Alliance of Theatrical Stage Employees. A further illustration of union rivalry was the controversy in which the Seafarers International Union (AFL) picketed piers in New York City and other Atlantic ports, urging other workers to refuse to handle cargo of CIO ships unless the International Longshoremen's and Warehousemen's Union (CIO) abandoned its boycott against AFL manned ships on the West coast.[1]

Unauthorized Strikes. Another element that contributed to unsettlement in industrial relations has been the *wildcat* or *outlaw strike.* These strikes took the form of the ordinary concerted withdrawal from work pending settlement of a dispute but, in the early stages, also included sympathy strikes and illegal sit-down strikes. The danger of this type of demonstration is that it is a rank-and-file device which, starting spontaneously, is not under the control of union leaders and consequently may actually injure rather than help the broader cause of labor. By interfering with plant operation in defiance of signed agreements, such outlaw strikes

[1] *Monthly Labor Rev.*, May, 1947, p. 796.

undermine confidence in union organizations. They are regarded as characteristic of immature, inexperienced unions rather than of older well-established organizations. In new, hastily organized unions, the high command lacks effective control. This was noted in the succession of sporadic strikes that followed in the wake of the signing of contracts by some of the young CIO affiliates. In several factories producing automotive parts, for example, unauthorized strikes occurred despite the fact that the union leaders had guaranteed to the management that there would be no interruption to production.

In the main, stoppages of this character were provoked by local friction or minor grievances of several varieties including the refusal on the part of union men to work alongside nonunion workers, the discharge of one or more union men, or the dislike toward a foreman and the demand for his transfer. Occasionally more significant questions of hours, wages, or vacation pay were involved.

The effectiveness of a strike depends upon business conditions. If business is good, the employer will be more likely to agree to the workers' demands, for he would not care to keep his factory closed at a time when orders come in. During dull periods, fewer strikes occur. The employee is unwilling to risk losing his job when there are no others in sight and when there are thousands of unemployed ready to take his place. At such times, too, the employer is less eager to come to terms.

In general, strikes are considered by organized labor as a last resort—to be used only after other efforts have failed. Strikes are costly in a number of ways. They deprive union workers of their regular pay during the period of the strike, and they reduce union treasuries because of the heavy expenses that strikes usually involve. For this reason, national unions are not always quick to approve the application of a local union to go on strike. However, the *right* to strike is jealously guarded as the most effective weapon of the unions and is therefore a constant threat to the employer.

The employer can effectively break a strike if he can obtain enough nonunion substitutes to take the place of the strikers. Such workers are known as strikebreakers or more contemptuously as "scabs." In order to prevent "scabbing," strikers resort to *picketing*, which means that they station themselves in front of a plant where a strike is in progress in order to dissuade others from working. To be legal, picketing must be peaceful, without coercion, restraint, or violence. But peaceful picketing is frequently ineffective in preventing people from working; and when peaceful methods fail, strikers resort to violence. In order to protect his workers or his property, the employer can call upon the police or the militia. Large companies sometimes arm their own employees and have them appointed

(*Wide World Photos*)

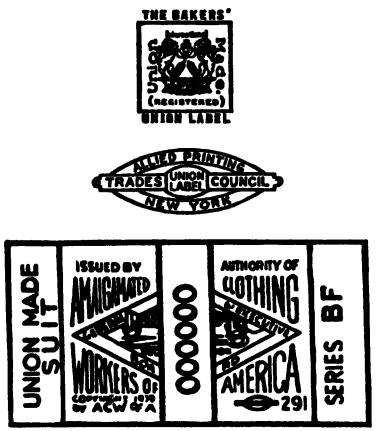
(*Wide World Photos*)

Our immature labor relations have all too frequently been characterized by force instead of by persuasion. Above, aftermath of a strike. Below, company police.

as deputy sheriffs. This has often led to open warfare with the unfortunate accompaniments of bloodshed and loss of life.

The Boycott. Union labor sometimes employs picketing as a boycotting device. Pickets in front of a restaurant or retail shop are posted not so much to keep workers away as to inform the public of the strike. In this way, the business of the employer may be injured.

A boycott is a collective attempt on the part of workers to break off economic relations with an individual or a group of individuals against whom they hold a grievance and to induce or coerce others to act likewise. The purpose of the boycott in most labor disputes is to destroy the patronage of the employer and in that way bring him to terms.



Types of union labels.

This is attempted in several ways. The simplest form of boycott, known as a *primary boycott,* is where the employees directly concerned in a dispute refuse to deal with their employer. Naturally the use of this weapon is limited to those trades in which the patronage of these employees and their families is of some importance. This narrows itself down to the production and retail sale of certain consumers' goods. On the other hand, the *secondary boycott* may become far-reaching in its effects.[1] This involves an attempt to induce or force other people not to use the products of a company that sells the goods of a striking plant or to have any dealings with it. In the famous Danbury Hatters case, the Supreme Court held this latter type of boycott to be illegal.

If successful, a boycott causes such injury to a business as to be detrimental to the workers themselves should they seek reemployment there. Despite this, it has come to be used as an effective device against the employer, especially during strikes.

The *union label* is a kind of negative boycott. It is a device in the form of a characteristic stamp, label, imprint, or other mark designed to identify

[1] The following types of boycott are sometimes distinguished:

A primary boycott is directed against a plant whose employees are on strike.

A secondary boycott is conducted against a firm that sells goods of a striking plant even though its own workers are not on strike.

A complex boycott arises when by publication, advertising, or use of the mails the attempt is made to induce other workers or the public to boycott the products of a plant.

all products that have been produced by union labor under working conditions prescribed by labor unions. All organized labor, when making purchases, is urged to insist on products bearing the union label, and an educational campaign is conducted by the AFL to spread this idea to all sympathizers of labor among the consuming public. Representatives of the typographical unions, for example, periodically visit the schools and urge them not to buy any printed materials, circulars, books, and other literature that do not bear the union label. Approximately half of the national unions have adopted some form of union label. Although limited in effectiveness as a weapon in unionizing industry, it is in general used by labor organizations in preference to the positive boycott.

Sabotage. Perhaps the most malicious practice followed by discontented employees in manifesting their opposition to the policies of the management is the series of acts collectively described as "sabotage." Basically, sabotage represents the deliberate attempt on the part of a group of employees to slow down operations and to soldier on the job so as to decrease output and raise production costs. The purpose, obviously, is to embarrass the employer and to force him to accede to the demands of labor.

The original intention of slackening output is quickly translated into more destructive acts as the friction between employer and employees becomes more intense. As a result, sabotage usually includes such tactics as the removal of vital parts from complex mechanical equipment, the pouring of sand particles into roller bearings, the improper mixture of ingredients, the improper billing and routing of goods, and dozens of other acts resulting in heavy losses to employers. Frequently such conduct is traceable to discontented individuals not affiliated with a union. Most of these destructive tactics are, however, engineered by the revolutionary types of labor unions. The more conservative labor organizations rarely use such methods.

Steps Taken by Employers. Employers, in order to set up counterweapons as powerful as those devised by labor, have formed associations to combat the growth of labor unions. In addition, they have sought legal limitations upon the activities of organized labor and have obtained important decisions that would curb certain practices and destructive acts on the part of labor organizations.

The employer's counterpart of the strike is the *lockout.* He refuses to permit employees to work until they agree to his demands. The employer seldom resorts to a lockout unless he finds operation under existing conditions impossible. Employers also circulate secretly among themselves a list of union agitators or "troublemakers" so that they can be excluded from employment. This is called the *blacklist* and is, for the most part, an informal boycott on the part of employers against those who are apt

to develop into strike leaders. Like the secondary boycott, such a list is illegal in most states but is, nevertheless, employed because of the difficulty of detecting its existence.

Another device that was formerly used rather extensively by employers was the so-called "yellow-dog contract." This was an "antiunion" contract or agreement which all applicants for jobs had to sign, stating that they would not join any labor association while employed there or aid in any strikes against their employer. The Norris-La Guardia Act and subsequent labor legislation invalidated such agreements.

As a restraining measure against the coercive practices of unions, the favorite legal weapon of the employer is the *injunction*. This is a court order or writ, requiring an individual or group of individuals to "cease and desist" from doing certain specified acts. Violation of the injunction constitutes contempt of court and is punishable by fine and imprisonment. The legal status of this practice has changed within recent years and will be discussed at greater length in the next chapter.

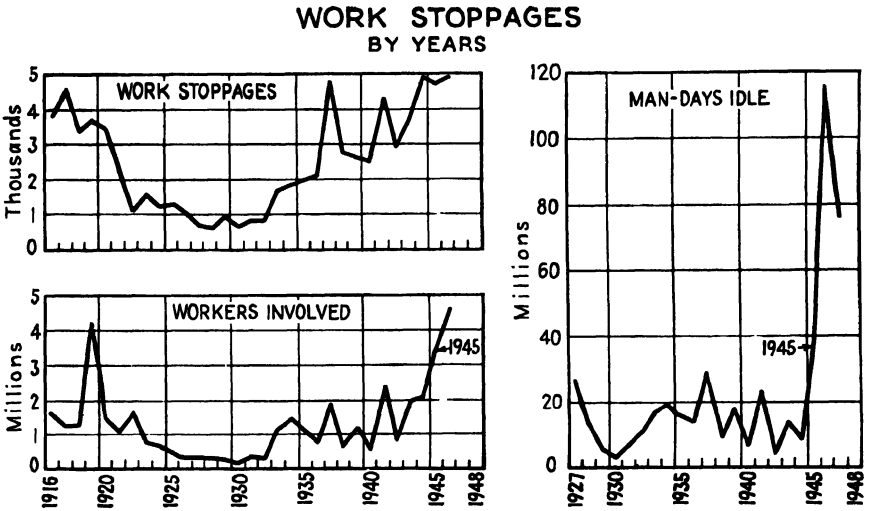
Sometimes in order to avoid labor troubles, firms move their plants to outlying sections or to different parts of the country. This was one of the important reasons for the shift of textile mills from New England and New York to the South. It has also been cited as the reason for the movement of firms in the clothing and printing industries from New York City to less unionized areas in neighboring states.

Employers' Associations. In uniting for purposes of resisting powerful combinations of labor, employers have formed two general types of associations. "Bargaining" associations have been designed for the purpose of collectively negotiating agreements with labor groups. "Belligerent" associations, on the other hand, have as their aims either the destruction of labor organizations or the rendering of assistance to employers in combating the efforts of the unions.

The Smokeless and Appalachian Coal Association is an employers' association of the bargaining type which was organized for the purpose of negotiating advantageous agreements with workers represented by the United Mine Workers of America. Such associations collect data relating to the labor market, the growth or decline of labor-union membership, the prevailing price levels, and other pertinent information which may help to build up a case for the employers in their collective-bargaining negotiations with the workmen.

The National Metal Trades Association, on the other hand, illustrates the belligerent type, which for many years waged war against labor organizations—attempting to destroy existing groups, to limit their activities and powers, and to prevent the rise of new unions in their industries. Several methods are employed by these belligerent associations in com-

bating union organizations. One is the maintenance of espionage or detective systems. Men are scattered within the ranks of the employees and report regularly to the employers' associations all union affiliations, proceedings of meetings, and plans for strikes. With this advance information, employers are frequently able to dismiss strike leaders, remove petty causes of friction, and so avert any demonstration on the part of workers. Occasionally, employers' associations go further and, through their agents,



Work stoppages arising out of labor disputes. (*Data obtained from U. S. Dept. of Labor, Bur. of Labor Stat.*)

stir up internal friction and animosities within labor organizations, which may lead to either a poorly timed strike or a complete rift in the union.

Another method used by employers' associations to injure labor organizations is to issue propaganda to the public against union labor, emphasizing the corruption among labor leaders, the destructive practices of strikers, and the alliance of left-wing union leaders with the radical political movements. They have also bribed, bought off, or arranged for the promotion of certain active labor leaders within the ranks of the workers. The most dangerous form of militant opposition to organized labor on the part of the employers is the secret arming of certain American industrial plants in anticipation of war with their workers. The purchase of tear gas, guns, and ammunition by concerns that expect labor troubles does not offer much hope for sound industrial progress. Instead it appears to sow the seeds for a national labor conflict.

Extent of Labor Disputes. Regardless of the ultimate gains that might possibly be achieved by labor or by business as a result of labor disputes,

strikes are wasteful and costly, not only to those directly involved, but also to society. Business activities today are so interrelated that a strike in one industry injures many others financially. A taxicab strike, for instance, will affect travel, shopping, theaters, restaurants, and hotels, in addition to curtailing the purchasing power of the strikers themselves. Similarly, a railroad strike will adversely influence dozens of industries dependent upon the movement of goods prepared for shipment, and a tool workers' strike may cause the temporary closing of automobile plants because of inability to obtain the necessary dies required for new models.

The erratic movement in the number and magnitude of strikes called in the United States over a period of years is revealed in the charts shown on page 287. Work stoppages arising out of labor disputes reached their peaks after both world wars. However, the loss in man-days was far greater after the Second World War than it was after the first war. Various estimates showed that the total idleness caused by strikes and walkouts during 1946 was over three times the 38 million man-days of idleness in 1945, which itself was a record, and more than twenty times as great as the time lost through strikes in 1930, at the beginning of the great depression.

Causes of Industrial Disputes. It is frequently difficult to discover the single basic cause of a particular strike. The factors leading to a demonstration of discontent are numerous, and any circumstance that is the immediate turning point resulting in an open break might not be the real reason for the strike. There are many hidden elements that are never revealed in any statistical compilation of the causes of strikes. However, certain fundamental bases for discontent on the part of workmen may be recognized.

Wages and Hours. Foremost among these is the question of wages. Normally, seasonal or cyclical declines in business are followed by attempts to reduce wages, accompanied by strong resistance to such wage decreases. Conversely, a marked upturn in business activity, occurring simultaneously with an advance in prices, usually results in controversies arising from labor's efforts to share on a rising scale in the larger earnings of business. An examination of strike data reveals that demands for wage increases or opposition to wage cuts accounted for a large proportion of strikes in the twentieth century. Closely related, although not so significant a factor leading to strikes, have been disputes over hours of work. Strikes said to be due fundamentally to disagreements over wages and hours were approximately 45 per cent of the total called in 1946 and accounted for more than 80 per cent of the idle man-days (see Table 12).

TABLE 12.—MAJOR ISSUES INVOLVED IN WORK STOPPAGES ENDING IN 1946 *

Major issue	Stoppages		Workers involved		Man-days idle	
	Number	Per cent of total	Number	Per cent of total	Number	Per cent of total
All issues ...	1,990	100.0	4,940,000	100.0	124,000,000	100.0
Wages and hours	2,238	44.9	3,710,000	75.1	101,000,000	81.9
Wage increase	1,570	31.6	2,250,000	45.4	76,700,000	62.0
Wage decrease	25	0.5	27,000	0.6	225,000	0.2
Wage increase, hour decrease	82	1.6	400,000	8.1	5,220,000	4.2
Wage decrease, hour increase	2	†	180	†	420	†
Other ‡	559	11.2	1,040,000	21.0	19,200,000	15.5
Union organization, wages, and hours	914	18.3	439,000	8.9	16,600,000	13.4
Recognition, wages and or hours	413	8.3	53,700	1.1	1,700,000	1.4
Strengthening bargaining position, wages, and or hours	96	1.9	183,000	3.7	5,840,000	4.7
Closed or union shop, wages, and or hours	387	7.8	199,000	4.0	8,910,000	7.2
Discrimination, wages, and or hours	16	0.3	2,970	0.1	140,000	0.1
Other	2	†	480	†	960	†
Union organization	703	14.1	129,000	2.6	2,190,000	1.8
Recognition	401	8.0	42,600	0.9	852,000	0.7
Strengthening bargaining position	42	0.8	26,700	0.5	457,000	0.4
Closed or union shop	128	2.6	23,700	0.5	634,000	0.5
Discrimination	83	1.7	21,400	0.4	133,000	0.1
Other	49	1.0	14,600	0.3	114,000	0.1
Other working conditions	879	17.6	425,000	8.6	2,500,000	2.0
Job security	418	8.4	172,000	3.4	905,000	0.8
Shop conditions and policies	355	7.1	173,000	3.5	775,000	0.6
Work load	90	1.8	62,300	1.3	765,000	0.6
Other	16	0.3	17,600	0.4	51,300	†
Interunion or intraunion matters	246	4.9	236,000	4.8	1,140,000	0.9
Sympathy	57	1.1	148,000	3.0	459,000	0.4
Union rivalry or factionalism	125	2.5	43,800	0.9	539,000	0.4
Jurisdiction	50	1.0	16,900	0.3	110,000	0.1
Union regulations	8	0.2	3,460	0.1	7,950	†
Other	6	0.1	24,700	0.5	25,700	†
Not reported	10	0.2	1,530	†	6,260	†

* Data from U. S. Dept. of Labor, Bur. of Labor Statistics.

† Less than a tenth of 1 per cent.

‡ Includes stoppages involving adjustments of piece rates, incentive rates, wage classifications for new and changed operations, retroactive pay, holiday and vacation pay, payment for travel time, etc.

Demands for Union Recognition. Attempts at organization and demands for union recognition have also been major factors leading to industrial disputes. Labor organizers, seizing upon discordant conditions, maladjustments in income, or other evidence of industrial tension, persuade the employees to agree to join a walkout that has as its basic purpose the unionization of unorganized workmen. Or laborers who have joined a union but who cannot get their employer to deal with them collectively call a strike for purposes of demanding a closed shop, a union shop, or stronger bargaining rights. In both instances, the primary question is union recognition or union organization, all other employer-employee relationships being considered of lesser importance, at least for the moment. During the first quarter of the twentieth century, this matter, though significant, did not take the lead as a cause for labor disputes. However, in the last decade, it has been an important feature of the strikes that were called.

In addition to these basic demands which have characterized the labor struggles of half a century, other problems leading to industrial warfare include job security, dissatisfaction over workshop conditions, and complaints of infringement of union rules. Stoppages arising over interunion or intraunion matters, which included issues involving sympathy, union rivalry, or factionalism and jurisdiction, remained comparatively low numerically but nevertheless have attracted considerable public attention. At times, union workers refuse to continue working after a contract expires. Such work stoppages are frequently employed by unions to hasten efforts to secure favorable terms in the new agreement.

The Trade Agreement. Orderly bargaining between management and the unions requires adequate working rules. Most of these rules grow out of mutual agreement, whether or not the discussions over the bargaining table have been preceded by violence and strife, and are formalized in a written contract known as the *trade agreement.* Such an agreement is the outcome of collective bargaining and depends upon many factors: the comparative strength of the parties, their waiting power, the indispensability of each to the other, the tactics that they employ, and the freedom that the law affords to the use of such tactics.

The trade agreement is the crystallization of the results of collective bargaining. It generally provides for recognition of the union and sets up specific rules governing employer-employee relations. These points include

1. *Wages.* Schedules of weekly, hourly, or piece rates for each grade of labor with provisions for methods of computation, allowances for overtime pay, and bases for readjustments in wage scales.

2. *Hours.* Statement of the normal work day and work week. Restriction upon overtime work and regulations governing work on Sundays and holidays. Provisions for rest periods and vacations.

3. *Amount of Output.* Classification of jobs and agreements concerning minimum and maximum production limits where possible. Restrictions upon speed-up of assembly lines or machine operations.

4. *Working Conditions.* Stipulations relating to safety measures and appliances, sanitary conditions, and minimum requirements for the safeguarding of the health of the worker.

5. *Machinery for the Adjustment of Disputes.* Provisions for the consideration of grievances. Establishment of shop stewards, plant arbitration committees, and industrial arbitration courts for purposes of adjusting all elements of friction that arise in the enforcement or interpretation of the agreement.

6. *Hiring and Dismissal Policies.* Agreement with reference to the method of selecting and placing workmen; provisions relating to sharing of work, rules governing apprentices, temporary workers and journeymen. Regulations concerning promotion and dismissal. Definition of jurisdiction claims of the union over workmen covered in the agreement.

7. *Renewal of the Agreement.* Definite understanding concerning the length or duration of the agreement with an outline of steps to be taken in renewing or replacing it.

8. *Other Provisions.* Special agreements relating to other conditions peculiar to the industry or to the particular firms involved.

Frequently a trade agreement is so elaborate in character that it is almost regarded as the "constitution of industrial relations" for a given industry or trade. In some instances, it is merely a brief recital of basic wage rates and hours. Where there are great numbers of different classifications of wage earners, several pages may be devoted to a recital of wage scales and working hours. In the more extended forms of trade agreements, detailed provisions are included for the adjustment of all varieties of friction that arise and for the settlement of major disputes.

In this way, some industries lay the basis for the solution of their labor problems for periods ranging from one to three years. During the life of the agreement, the controversial points that usually result in labor troubles are settled by means of machinery provided for in the trade agreement. When an agreement is broken, the parties sometimes resort to injunctions or lawsuits for damages, although sanction is ordinarily sought in the balance of power of the parties to the contract. When such agreements are about to expire, both sides often present revised scales of wages and hours as a basis for a new agreement. If the opposing demands are too far apart, there is generally preparation for a strike. This can be avoided

through the formulation of a new agreement. Failing in this, a strike may take place pending the acceptance on the part of both parties of the terms of the new agreement. When such a strike threatens or occurs, outside forces are brought into play to bring about a quick adjustment of the dispute.

Conciliation and Mediation. The services of conciliators or mediators are employed in the settlement of industrial disputes when the ordinary processes of collective bargaining break down and the use of coercive tactics is imminent. *Conciliation* is described as the efforts of labor and employer representatives or of official agencies, such as federal and state departments of labor, in encouraging both sides to a dispute to settle their differences amicably. The aim of this procedure is to repair the collective bargaining machinery so that a satisfactory solution can be reached by the parties themselves.

Mediation involves the intervention of a third party in an effort to restore harmony by acting in the diplomatic role of suggesting possible solutions to the problems under discussion. A mediator is generally a disinterested and unbiased individual who serves as a go-between. Through his influence, patience, and tact, he is often able to persuade management and labor to make concessions. It is not his function to pass judgment on the issues but rather to narrow the breach and to suggest compromises acceptable to both sides.

There is no element of compulsion in either of these methods of settling disputes. They represent attempts on the part of impartial, cool-headed, and clear-thinking individuals to bring about an accord between disputants who have temporarily refused to recognize the rights of the other side.

When the situation seriously affects the public welfare, as in the threat of a railroad or milk strike, and efforts of outsiders to effect a settlement go unheeded, the government might resort to an investigation of conditions. *Compulsory investigation* goes further than mediation. It generally involves a required "cooling-off period" during which an official investigating board is empowered to ascertain the facts relating to the dispute. The results of the investigation are published, often with recommendations as to the terms of settlement. In such a case, the only weapon is that of public opinion. The government (municipal, state, or federal) can, however, as a result of the investigation, take sides either by offering protection to strikers or by policing the property of the employer in such a manner that business can be carried on with the use of strikebreakers.

Arbitration. In bringing about the adjustment of an industrial dispute, a third party may intervene in more than an advisory capacity. Arbitration involves the selection of an individual or group of persons acceptable to both sides to act in the capacity of judge in deciding the issues of a particular case. If the parties to the dispute agree of their own volition

to the submission of their problems to an arbiter, the device is known as *voluntary arbitration.* Frequently trade agreements provide for arbitration procedure of this variety. If both the submission of the dispute and acceptance of the decision are voluntary, it is referred to as "voluntary arbitration with voluntary acceptance of award." This has virtually the same effect as mediation inasmuch as cases decided in this fashion will still be followed by coercive tactics if employers or employees are sufficiently dissatisfied by the ruling to refuse to accept its terms. If, however, the disputants agree in advance to abide by the decision, the result is "voluntary arbitration with compulsory acceptance of award."

Compulsory arbitration exists when employers and employees are required by law to submit their disputes to a third party for decision. The results of such decisions are generally binding. Other varieties of governmental regulation apply to both voluntary and compulsory arbitration methods, thus resulting in various gradations in the use of force or coercion.[1]

Several plans have been used in the United States, involving in some instances conciliation and voluntary arbitration and in others compulsory arbitration. Some firms and, on a larger scale, some industries have attempted to secure peace by setting up permanent machinery equipped to handle such questions as may arise.

Hart Schaffner & Marx Plan. One of the best known and most successful of such plans was the Hart Schaffner & Marx system, later adopted by other clothing factories in Chicago, Rochester, New York, and other clothing centers. The arrangement called for a permanent board of arbitration composed of one member from each side and a third to be chosen by these two. This board was supplemented from time to time by other governing units as occasion required.

The workers (all members of the Amalgamated Clothing Workers of America) elected shop chairmen, whose function was to adjust grievances with the shop foremen. If settlements could not be reached in this way, deputies from either side, *i.e.*, officials especially employed for this work by the employers and employees, were called in as conciliators. If the matter still could not be settled, it went to a trade board made up of not more than five members from each side and an impartial chairman. This tribunal handed down decisions that were final unless an appeal was taken by either party to the arbitration board, the supreme court of the system.

Under the Chicago system, stoppages of work were forbidden, and violators of this rule were subject to discipline. The machinery set up was

[1] For example, there may be voluntary arbitration coupled with voluntary or compulsory acceptance of the decision or with compulsory investigation, compulsory cessation of strife, etc. There may also be compulsory arbitration with compulsory or voluntary acceptance of the judgment.

not intended to settle important matters of principle or changes in the terms of employment. The union and the employers accomplished this by formulating a new agreement to govern their relations for another period of years. Every opportunity was provided for the adjustment of grievances as near their source as possible, the board of arbitration being only a last resort when other means of settlement failed.

This system proved favorable to both employers and workers. Strikes were eliminated, and the workers gained higher wages, shorter hours, and better working conditions. It is interesting to note also that increased efficiency and productivity resulted.

Voluntary arbitration has been used to a fairly large extent in the settlement of labor disputes in the United States. It has proved an acceptable device for the interpretation of existing agreements but not for the laying down of new principles or for formulating terms of employment. Employers and employees have each insisted on retaining this function for themselves.

Role of the Government in the Settlement of Disputes. *Federal.* The federal government, through its Department of Labor, attempts to restore peace and harmonious relationships between workers and employers by assigning conciliators to discuss the various labor problems with the quarreling parties. The bureau in charge of this work, known as the U. S. Conciliation Service and organized in 1914, became an independent body in 1947. Its representatives have had a long experience in bringing about the settlement of thousands of industrial disputes and have won the respect of both employers and employees.

Other efforts at federal intervention in labor controversies have been witnessed when serious strikes threatened or when a special emergency situation arose. Occasionally, presidents of the United States have served as mediators or have appointed special investigating commissions in attempts to bring about peaceful adjustments. During the brief period under the National Recovery Act in 1933–1934, a National Labor Board, assisted by local or regional boards, was created with broad authority to settle by mediation, conciliation, or arbitration all controversies between employers and employees that might arise out of the operation of the President's reemployment agreement and of any approved industrial code of fair competition.

In order to safeguard against serious interferences with railroad service, the United States government in 1926 passed the Watson-Parker Act. This act, amended in 1934, provided for collective bargaining between interstate railroads and organized labor. A National Railroad Adjustment Board composed of equal representation from unions and from the railroads was created for the purpose of settling grievances and disputes. Impartial referees were empowered to decide cases in the event of a deadlock. Awards

of this board were made binding, and action for enforcement could be brought in the federal district courts. In addition, a National Mediation Board was established to act as a mediator in disputes between railroad companies and the unions, arising out of attempted negotiations of new trade agreements.

During the Second World War, the President, by executive order, established the National War Labor Board, representing labor, employers, and the general public, whose function was to determine disputes in which other procedures for adjustment or settlement had been exhausted and that might interrupt work contributing to the effective prosecution of the war. After a dispute had been certified to the board by the Secretary of Labor, mediation, voluntary arbitration, or arbitration under rules prescribed by the board might be used to bring about a settlement. The War Labor Disputes Act of 1943 enlarged the board's authority by giving it compulsory arbitration powers. It was directed to "provide by order, the wages and hours and all other terms and conditions (customarily included in collective bargaining agreements) governing the relations between the parties."

These emergency war powers were dropped with the termination of hostilities, and emphasis was again placed upon mediation and conciliation rather than arbitration in the settlement of disputes by government agencies. The Taft-Hartley Act, passed in 1947, provided for a Federal Mediation and Conciliation Service.

State. Most of the states have passed legislation designed to encourage the peaceful adjustment of labor difficulties. Such legislation may be classified as follows: [1]

1. Local boards, established for temporary service when serious disputes appear.
2. Local bodies of a more permanent nature, appointed by authorization of the state.
3. State officials, authorized to attempt mediation in industrial disputes throughout the state and to make their services available at all times.
4. Conciliation boards or commissions having jurisdiction over all industries in the state. These are becoming increasingly common, and permanent commissions, usually of three members appointed by the governor, now characterize all predominantly industrial states.

Compulsory settlement of industrial disputes has not met with much support in this country, and only one state, *viz.*, Kansas, in 1920, attempted to set up an industrial court of compulsory arbitration. Its operation was suspended in 1925, although the act is still on the statute books.[2] Colorado,

[1] YODER, DALE, "Labor Economics and Labor Problems," 1st ed., p. 492, McGraw-Hill, 1933.

[2] This act was declared to apply only to public utilities, but its application to private enterprise was held to be unconstitutional by the Supreme Court. *Charles Wolff Packing Co. v. Court of Industrial Relations of Kansas*, 262 U. S. 522 (1923).

however, enacted a law in 1915 that provides that in industries affected with a public interest, the Colorado Industrial Commission shall have jurisdiction over every dispute. Strikes, lockouts, and changes in wages, hours, or working conditions are prohibited for 30 days while the commission is seeking to settle the dispute. The commission's findings are binding only if both parties agree to it in advance.

In order to set up more adequate machinery for the prompt adjustment of industrial disputes, several states, notably New York, Pennsylvania, and Wisconsin, supplemented their labor relations acts by providing for state mediation boards or commissions. Disagreements, except complaints involving practices prohibited by the labor relations acts, are referred to these commissions for investigation and settlement.

Questions and Problems

1. From the point of view of organized labor, discuss the relative advantages and disadvantages of craft unions as against industrial unions. Why are these called horizontal and vertical unions?

2. What were the circumstances leading to the organization and growth of the CIO? What were the basic differences between the CIO and the AFL? Do these rival federations differ in principle today? Discuss the advantages to organized labor if these two "unions of unions" were to merge.

3. The advantages of affiliation do not appeal to those unions known as *independents*. Describe two types of independent unions, and explain why they prefer not to be affiliated with the large federations.

4. Despite the huge membership of unions, most workers do not belong to labor organizations. What advantages do unions offer workers? Why do many employees prefer to remain outside the fold of organized labor?

5. What are the employers' objections to labor unions? Account for the fact that some employers are heartily in favor of organized labor.

6. What weapons do unions use to attain their ends? What are the means taken by management to fight organized labor? Appraise critically the steps taken by the two antagonistic groups.

7. If you were an employer why might you object to the following: the closed shop, preferential hiring, the checkoff, maintenance of membership, and featherbedding?

8. Obtain figures showing the extent of idleness caused by strikes. What are the important causes of labor disputes? Show how they harm workers, business, society. Describe the steps taken by employers and organized labor in the settlement of disputes.

9. Discuss the role of government in the settlement of labor disputes in the case of a railroad or public utility, coal mines, clothing, or food. Why would the methods be different in each case? How successful have government agencies been in securing industrial peace?

10. Jurisdictional disputes and wildcat strikes harm labor by alienating public sympathy. Explain and illustrate these types of strikes. Suggest ways of eliminating them through efforts of organized labor, by management, by the government.

CHAPTER XIV

INDUSTRIAL LABOR LEGISLATION

Labor and the Law. The relationship between employer and employee was traditionally regarded as a private affair. The determination of wages and hours and the exercise of the freedom to work or to stop work or the ability to employ and dismiss were matters that had come to be accepted as strictly the functions of individuals or of private groups. However, the gradual abandonment of the doctrine of economic individualism as a basis of American government resulted in the passage of a considerable number of restrictive and regulative statutes pertaining to industrial welfare. Neither in the economic sense nor from the legal point of view can there be said to exist today an unrestrained, free bargaining relationship between worker and employer. Very few of the acts of either can be entirely divorced from the public interest. Lawmakers in the federal and state governments have, to an increasing extent, accepted the view that the fundamental purpose of the law should be the promotion of the common welfare and that if this is to be its purpose, the law must adapt itself to changing industrial conditions. This process of adaptation has run largely in the direction of recognizing certain inequalities and relative weaknesses in bargaining. As a result, various laws have been passed to protect the weaker bargaining groups and to define and limit certain constitutional privileges in terms of social welfare.

Scope of Labor Legislation. The legal basis for labor legislation and other social-control measures is the police power of the state. A state may modify or completely abolish the rights of an individual or of a group of individuals when the welfare of society seems to require such action. It is inevitable that legislation of this type, no matter how reasonable, will adversely affect the interests of certain individuals and destroy contractual privileges or property rights. Redress can be sought in the courts that test the constitutionality of the laws. In the last analysis, then, judicial interpretation and defense of statutory enactments are the really significant guideposts to follow in studying the final effects of this trend in the legislative channels of government.

In general, labor legislation has proceeded in three major directions, *viz.*, protective legislation; legislation relating to the rights, responsibilities, and limitations of power of organized labor; and legislation designed to encourage the arts of industrial peace.

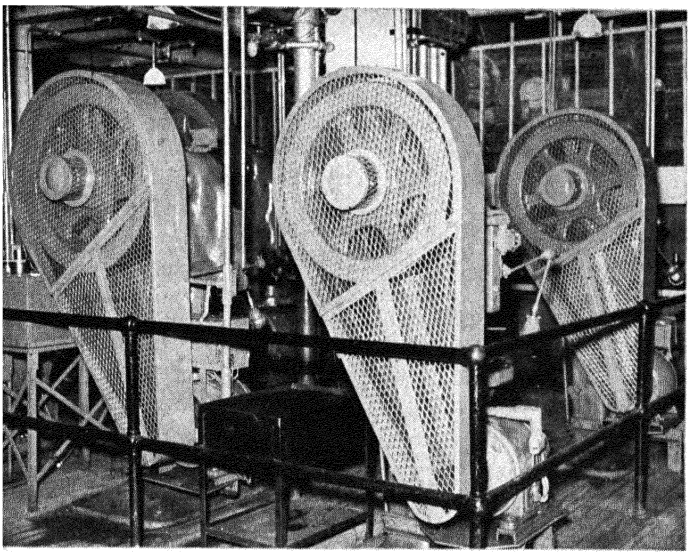
In the category of protective legislation are found laws providing for the elimination of preventable hazards of industry, the maintenance of sanitary and healthful working conditions, the establishment of various kinds of insurance and pension systems, and the regulation of wages, hours, and bargaining relationships of weak bargaining groups.

In the second group are laws recognizing unions, declaring or denying the legality of their right to strike, picket, and boycott; defining their civil and criminal responsibilities; and upholding or limiting the power of collective bargaining.

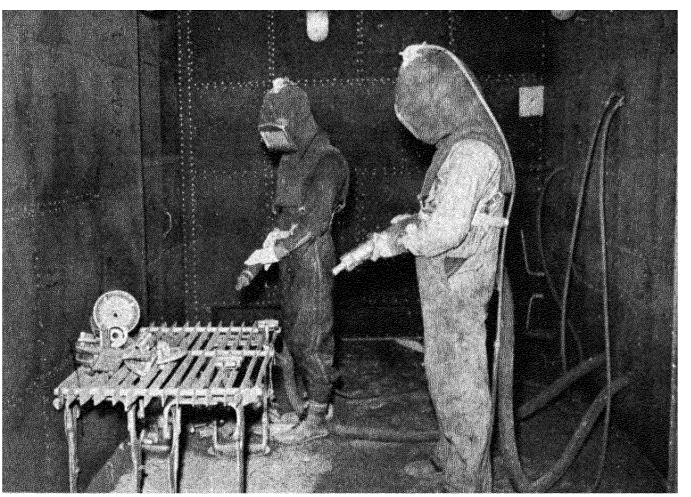
The final group of laws relates to the several attempts that have been made by the federal government and by states to set up machinery of a character that will ensure the peaceful solution of labor difficulties. Courts of arbitration, mediation boards, and the laws requiring investigation and conciliatory efforts are of this variety.

Protective Legislation. *Safety and Health Laws.* Among the first laws passed by the states for the purpose of regulating or controlling the status of workmen in private industry were those relating to the maintenance of minimum standards governing the health and safety of employees. The statutes in the several states vary materially on these subjects, and special rules apply to individual classes of industry. For example, in industries using machines with sharp cutting edges or revolving parts that are exposed, it is necessary, in most states, to provide screening and protective rails. In operations such as welding, which involve the use of electric arcs, special masks or shields must be supplied as part of the workman's equipment. In coal-mining states, the law usually prescribes the sprinkling of water or of rock dust in the mines in order to prevent gas or dust explosions. Safety belts are required for certain types of construction workers; caisson diggers and sponge divers are limited to a few hours of work per day because of the physical dangers of prolonged operations under high pressure; special directional and signaling devices and parachutes are part of the standard equipment prescribed for commercial aviators. An almost interminable list might be drawn, from the statute books of each state, of the safety laws of this character that apply to given industries and to specific occupations.

As a result of these safety measures, the industrial accident rate has been reduced considerably. However, the working time lost by those injured in an industrial or commercial pursuit is still shockingly high. The follow-



In industries using machines with sharp cutting edges or revolving parts it is necessary to provide screening and protective rails



Special masks and shields used in welding operations. (*Courtesy of U. S. Department of Labor.*)

ing table reveals the number of disabling work injuries,[1] by major industrial groups, for several years.

TABLE 13.—ESTIMATED NUMBER OF DISABLING WORK INJURIES BY MAJOR INDUSTRY GROUPS,* 1942–1945

(In thousands)

	1942	1943	1944	1945
All industries	2,267.7	2,414.0	2,230.4	2,002.8
Agriculture	283.7	311.9	311.9	305.6
Mining and quarrying	102.7	96.4	92.1	82.1
Construction	349.5	260.1	99.6	112.2
Manufacturing	635.2	802.5	786.9	574.6
Public utilities	21.0	19.7	19.3	20.3
Wholesale and retail trade	284.2	268.4	273.8	296.0
Railroads	60.8	85.4	92.4	94.1
Service and miscellaneous	393.7	423.6	419.3	378.0

* Data obtained from the U. S. Bur. of Labor Statistics.

Protection against health hazards also forms a considerable part of state labor legislation. Rules prescribing the amount of floor space to be allotted to each employee, sanitary equipment to be installed, and minimum provisions relating to ventilation and heating are commonly found. Regulations are also set up in several states for the purpose of reducing the causes of occupational diseases.

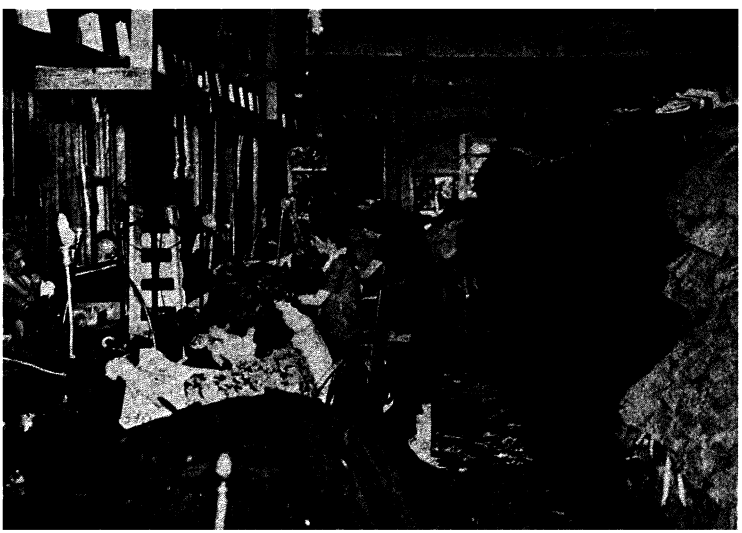
Workmen's compensation laws enacted in practically all states provide for the payment of a definite schedule of benefits to injured workmen or to their beneficiaries. These payments are usually awarded as compensation for disability or death arising from sickness or accident caused by industrial operations. In some states, the premium rates for insurance designed to cover these losses are reduced in proportion to the diminution in recorded accidents. This is designed to stimulate a greater interest in the provision of safety devices and in the promotion of accident prevention.

Several states have established industrial commissions that, in a number of cases, not only are authorized to inspect industrial plants and to enforce the various safety and health rules but are also empowered to set up any

[1] A disabling work injury is one that results in (1) death or (2) permanent physical impairment or (3) renders the injured person unable to work beyond the day on which the injury occurred.

new regulations which appear desirable from the standpoint of public welfare.

In addition to these various state laws, local, town, and city governments have passed ordinances relating to building-construction requirements, setting forth minimum specifications for light, ventilation, heat, and sanitary facilities. Fire regulations providing for fire escapes and fire extinguishers and prohibiting the conduct of certain hazardous operations are found in



State and local health authorities seek to eliminate crowded and poorly ventilated workshops such as the one pictured here. (*Courtesy of U. S. Department of Labor.*)

every local jurisdiction. To this can be added special health-department and police-department rulings.

Child-labor Laws. Almost all states today have regulations prohibiting the employment of children under a specified age. These rules are often related to the compulsory education laws. In many of the states, a child who wishes to work must obtain an employment certificate. Such certificates not only require a minimum age limit but in some cases are given only after the child has completed a minimum of schooling and has passed a physical examination.

Child-labor legislation in the several states has been characterized by a material lack of uniformity, thus tending to cause unfavorable competitive relationships among producers in interstate trade.

New York State's child-labor laws, for example, have the following important provisions:

A. Children between sixteen and eighteen years of age may not work without an employment certificate, which is granted only on completion of a certain minimum of school attendance. Those who are not high-school graduates must attend continuation or part-time school 4 hours a week.

B. Certificates of physical fitness issued by boards of health, or in smaller cities by a medical inspector, must be presented.

C. Factory work is forbidden before 8 A.M. or after 5 P.M. and is limited to six days a week, 8 hours a day, and 44 hours a week.

D. The employment of children is prohibited in certain dangerous occupations or industries.

E. Regulations *C* and *D* apply to boys under eighteen and to girls under twenty-one.

Illinois revised her child-labor laws in 1946 by excluding boys and girls under sixteen from occupations that might tend to impair health or morals. Children under sixteen may not work in taverns, bowling alleys, and poolrooms. Forbidden also is employment at skating rinks, exhibition parks, or other places of amusement; in garages and filling stations; as bellboys; in work in connection with power-driven machines; and in other hazardous occupations.

Minors are regarded as wards of the state and incapable of free contract. Consequently, the doctrine of personal liberty cannot be successfully urged against regulation of their terms of employment, and the constitutionality of such legislation has been upheld.

In an endeavor to standardize the widely varying state regulations, Congress in 1916 passed two laws, which attempted to regulate child labor. The first taxed all goods in interstate and foreign commerce produced in mines or quarries employing children under sixteen years of age. It also taxed manufacturing establishments employing children under fourteen and children working more than 8 hours a day or at night and those working more than six days a week. The second levied a revenue tax of 10 per cent on net profits of corporations producing such goods. Both were declared unconstitutional as undue uses of the commerce and taxing powers. In 1924, a constitutional amendment was proposed to give the national government the power to regulate the industrial employment of children. This was sent to the states for ratification, but by 1948 it still lacked the approval of the requisite 36 states.

Under the child-labor provisions of the federal Fair Labor Standards Act of 1938, employment of children under sixteen in any occupation was prohibited, except in cases other than manufacturing or mining where the work would not interfere with schooling and health. Children between sixteen and eighteen were not permitted to engage in any occupation that the Children's Bureau of the U. S. Labor Department declared hazardous

or detrimental to health or well-being. A major purpose of this law was to prevent the shipment of goods made by child labor from one state to another and, in that manner, to protect the industries of those states which already had effective child-labor laws from the competition of states where child labor still existed.

Protection of Men and Women. For the purpose of affording them protection, early British factory legislation placed women in the same category as children between the ages of thirteen and eighteen and applied to them the same restrictions as to hours. American legislation and opinion, however, have tended to separate the two classes and have been less certain that women are wards of the state.

Earlier legislation limiting the hours of labor for women was declared unconstitutional on the grounds that it was an arbitrary restriction on freedom of contract which women shared equally with men. Some state courts subsequently held, however, that women and children were wards of the state. Legislation governing the hours of women in industry was made more secure when the Oregon 10-hour law for women in factories, laundries, etc., was upheld by the Supreme Court in 1908. The grounds for the decision were based not so much on legal aspects as on the social effects of long hours upon the health of women. In part, the decision stated: [1]

> . . . as healthy mothers are essential to vigorous offspring, the physical well-being of women becomes an object of public interest and care in order to preserve the strength and vigor of the race. . . . The limitations which this statute places upon her contractual powers, and upon her right to agree with her employer as to the time she shall labor, are not imposed solely for her benefit but also largely for the benefit of all.

On the strength of this decision and in view of similar decisions later handed down by other courts, legislators were encouraged to pass laws of this character elsewhere. As a result, practically all states passed legislation governing the hours of women and prohibiting their labor at certain hazardous or physically arduous tasks. Certain states also required the provision for rest periods and for leave of absence. In most states, the tendency was to limit the working day for women to 8 or 9 hours.

Although legislation affecting women and children was generally accepted, courts held that when such regulations were extended to men, they violated the right of contract. Only in public works was such regulation clearly constitutional. In private employment, regulation of hours was held to be constitutional only where the courts were convinced that the public welfare was clearly implicated. The chief field for such legislation has been in transportation and in obviously dangerous trades. Since the

[1] *Muller v. Oregon*, 208 U. S. 412.

public safety is affected, laws have been passed regulating the hours of transportation employees.

Mining, because of its dangerous character, was held to be a field where the hours of labor could be limited. At present, most of the important mining states have 8-hour laws. A 10-hour day for bakers in New York State was declared unconstitutional because it involved neither "the safety, the morals, nor the welfare of the public . . . " and because "the trade of a baker has never been regarded as an unhealthy one." [1]

Minimum-wage legislation for women was based on woman's weakness as a bargainer and the social importance of preserving her health. This was the attitude in most states, but in 1923 the Supreme Court held the District of Columbia statute invalid as an infringement of the right of contract. Nevertheless, additional minimum-wage legislation was passed by other states. By 1938 more than half of the states had legislation of this character in force.

Connecticut's law, which was closely copied by Ohio, requires fair wages and forbids the payment of an "oppressive and unreasonable wage." The law defines this term as follows: "both less than fair and reasonable value of service rendered and less than sufficient to meet the minimum cost of living necessary for health."

The Recovery Act of 1933, passed as an emergency measure, attempted to raise wages and reduce working hours of both men and women in all industries by requiring that employers under NRA codes should comply with the maximum hours of labor, minimum rates of pay, and other conditions of employment approved or prescribed by the President. Wages and hours clauses in these codes, for a short time at least, had substantially the force of law. In all but approximately 60 out of more than 400 approved codes, the 40-hour week was provided for both men and women. Minimum wage rates ranged from approximately 20 to 50 cts. an hour. When the NRA was nullified by the decision of the Supreme Court, efforts were immediately made to perpetuate some of these gains for labor. The first step was to pass the Walsh-Healey Act, which established wage and hour regulations covering all contracts amounting to more than $10,000 between private industries and the federal government. These standards included the 8-hour day and the 40-hour week with an overtime rate of time and a half for all hours in excess of the legal limits, no child labor for boys under sixteen and for girls under eighteen, and the payment of minimum wages as determined by the Secretary of Labor.

The Fair Labor Standards Act of 1938 sought to restore the essential labor provisions of the original recovery act. It set a wage minimum for all industries whose products move in interstate trade of 25 cts. an hour

[1] *Lochner v. New York*, 198 U. S. 45.

which was gradually increased to 40 cts. by October, 1945. In addition, the law provided for a maximum work week of 44 hours, which was reduced to 40 hours by October, 1940, with compensation for overtime work on a time-and-a-half basis. Exception was made for seasonal industries where the administrator under the act might permit a 56-hour week for no more than 14 weeks in each year. Beyond the basic minimum wages and maximum hours, the law provided that in specified trades and occupations, minimum wages be raised at once to 40 cts. an hour. Determination of these wage standards was placed in the hands of separate committees for each industry, made up of representatives of management, labor, and the public. The passage of this act was regarded in most circles as a thrust at "chiseling employers" rather than an attempt to bring about a revolutionary change in general wage-hour relations. According to the federal Bureau of Labor Statistics, there were, at the time when the law went into effect, only about 800,000 employees who were working more than 44 hours per week and about 1,500,000 who were paid less than 25 cts. an hour. Consequently the law did not dislocate industry by abruptly raising labor costs. On the other hand, it tended to eliminate the age-old practice of reducing costs under the stress of competition by lengthening hours and cutting wages to less than subsistence levels.

Regulation of Industrial Homework. In many states, manufacturers have resorted to the practice of parceling out work to employees where such work might be performed at home. Assignments are distributed, particularly among women and children on farms and in the cities, and these assignments range from the unskilled stringing of beads to such skilled work as hemstitching, embroidering, and knitting. By sending out bundles of work to homeworkers, manufacturers save, not only through low piece wages, but also by escaping the added overhead costs of rent, lighting, heating, and power. This has resulted in a sweatshop system of production with low wages, long hours, nightwork, and child labor. It has consequently tended to undermine the wages paid to factory workers by firms trying to maintain fair standards.

In order to combat this evil, state legislatures have passed laws that regulate or even prohibit the system of homework contracts. New York, Connecticut, and Rhode Island led the way in attempting to cope with this problem by empowering the labor departments to prohibit the giving out of homework in industries where the "continuance of this type of work might injure the health or welfare of the homeworkers or undercut standards established by law or agreement for factory workers." Illinois, Massachusetts, and Pennsylvania rapidly followed suit, and other states are tending to enact similar legislation. Most of the state laws prohibit the manufacture or processing of certain kinds of articles in homes.

Old-age Pensions and Unemployment Insurance. With the spread of the social-welfare point of view, a growing conviction developed that industry should bear some of the "social overhead cost" of supporting laborers who, because of old age or inability to obtain work, had no source of income. The expenses of caring for the aged and the unemployed were regarded as legitimate charges that industry could count among its production costs quite as conveniently as it includes its expenses of depreciation and obsolescence. This contention led to proposals for legislation making mandatory provisions for the establishment of private pension systems and unemployment-insurance plans or setting up some public insurance and pension plans of this variety.[1]

Approximately half of the states in the union had established public pension legislation by 1934. Most of these laws placed the burden of the plan upon the local community or the state rather than upon the employer and employee. Retirement was provided at the ages of sixty-five or seventy, and benefits ranged from less than $200 to more than $500 a year. In most instances, benefits were limited to the poor and needy and were therefore of the nature of charitable grants, carrying with them the suggestion of personal inadequacy.

The Railroad Retirement Act of 1935 set up a comprehensive system of pensions for railway workers involving equal contributions by railroads and employees. This law, amended in 1946, made railway workers eligible for retirement at 65 or after completing 30 years of service.

Unemployment insurance provided by legislation is comparatively new in the United States. Although many bills had been proposed in several states, they were always defeated. In 1932, however, Wisconsin passed a law providing for a compulsory unemployment-insurance plan which would place part of the cost upon industry. The act applied to employers of ten or more persons and benefited regular employees making under $1,500 a year. Exemption from the tax was granted employers who had acceptable insurance plans of their own. The passage of this law encouraged other states to renew their efforts for legislation of this type.

The federal Social Security Act passed in 1935 was designed to deal with both of these problems of insecurity and in addition to provide further government aid to needy or handicapped persons. The law established a system of federal old-age and survivors' insurance based upon earnings received prior to the retirement age of 65, an unemployment compensation plan administered under state laws, and a series of federal grants to states for public assistance to the aged, blind, homeless, disabled, and other needy cases.

[1] This legislation should not be confused with the various private plans voluntarily established by different concerns.

To provide for old-age benefits, the law imposes upon all employers in specified industries a federal excise tax on payrolls. This tax applies to that part of any wage or salary which is under $3,000 per annum. In addition, employees are required to pay an equal sum, which is deducted from their pay checks. The tax rate was originally established at 1 per cent each on wages and payrolls, with the provision that this rate would gradually rise. However, it was later decided by Congress to postpone such increases until after 1949. The size of the monthly income that a pensioner will receive and of the monthly benefits payable to survivors upon the death of a fully insured worker are determined by the amount of his joint contributions with his employers during his working years. It is not a form of charity and has nothing to do with the amount of his wealth or property at the time of retirement.

To take care of unemployment insurance, the law requires employers of eight or more persons in specified industries to pay a federal excise tax of 3 per cent on their entire payrolls. Credits are provided, however, up to 90 per cent of this tax for payments made under an approved state unemployment compensation law. Every state now has such a law. Benefits for loss of income through unemployment are paid after a waiting period of two or three weeks. There are wide variations among the states in eligibility requirements for unemployment compensation as well as in provisions governing the amount and duration of benefits.

As originally designed, the federal law and the many state laws worked out in connection with it may be regarded as "first steps" in the direction of large-scale governmental effort to cope with industrial insecurity. Needless to say, many amendments will be introduced before a perfectly thoroughgoing and efficient program of this type is attained. The magnitude of the sums involved, the incidence of the tax burden, the size of the pension, the extent of coverage to beneficiaries, and the relation between unemployment insurance costs and relief grants are some of the vital subjects that for many years to come will serve as points of departure for repeated criticism and modification. Though recognizing the limitations of existing legislation, critics agree that it has gone far toward allaying the fear of unemployment and of a dependent old age and has therefore helped to reduce the social insecurity that threatened the American scene.

A new departure in social security that has been sought in the United States is a program of socialized medicine. Health insurance and state provision of medical care are regarded as necessary supplements to existing protective legislation. The U. S. Bureau of Labor Statistics reports that on an average day of the year, 4 million or more persons in the United States are disabled by illness. Every year 70 million sick persons lose more than one billion days from work or customary activities. In many

instances, especially in families with incomes of less than $1,000 a year, the sick have neither the services of a physician nor hospital care. It is further estimated that almost 100 million people in the United States need financial help to meet the cost of serious illness. The total hidden costs of sickness and disability, wage loss to workers, and costs to industry were reported at 15 billion dollars for the year 1943.

To remedy this situation, public health programs are being proposed to coordinate health and welfare activities in the United States; these programs involve state subsidies or grants-in-aid. The Social Security Act provides money, through the U. S. Public Health Service, for use by the states in extending health services to all counties and localities, especially those which have no such services at the outset; this money also provides for the training of health officers, nurses, and other public health workers to supply these services. Special work is being conducted to prevent industrial diseases such as silicosis, tuberculosis, and industrial poisoning. As a long-run policy, this would probably lead to health insurance legislation similar in structure to unemployment and old-age insurance laws. Such state insurance systems involving employer-employee contributions with provision for free medical and hospital care in the event of sickness have been established for many years in most of the European countries. American protective legislation is rapidly moving in this direction.

Laws Relating to the Status of Labor Unions. Although the Sherman Anti-trust Act was originally passed to regulate industrial monopolies, trusts, and combinations in restraint of trade, it was actively applied against unions and union practices, including strikes and boycotts. The Clayton Act of 1914 amended the Sherman Act in this respect by declaring (Sec. 6): "Nothing contained in the antitrust laws shall be construed to forbid the existence and operation of labor . . . organizations, instituted for the purpose of mutual help . . . ; nor shall such organizations, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the antitrust laws." It also prohibited injunctions to prevent "any person or persons, whether singly or in concert, from terminating any relation of employment, or from ceasing to perform any work or labor, or from recommending, advising, or persuading others by peaceful means so to do."

The constitutionality of this act was upheld, but its effects in broadening the powers of labor organizations were largely nullified by a series of Supreme Court decisions, the last of which, the Bedford Case, declared that the union was guilty of conspiracy in restraint of trade.[1] Labor organizations protested and took vigorous steps to have legislative protection against court decisions.

[1] *Bedford Cut Stone Co. v. Journeymen Stone Cutters' Association*, 274 U. S. 37 (1927).

The Norris-La Guardia Act. As a result of this agitation an "anti-injunction act" was passed in 1932. This law prohibits the issuance, by any federal court, of an injunction in a case involving or growing out of a labor dispute. It lists nine specific union actions that may not be enjoined, although, at one time or another, these same actions had been regarded as unlawful and in restraint of trade. It also assures the employee's right to collective bargaining, outlaws antiunion contracts, and specifies certain conditions under which injunctions might be issued and the required procedure in such cases. In 1947, the Supreme Court in the case of *United States v. United Mine Workers of America* ruled that the Norris-La Guardia Act is inapplicable to the federal government when it is acting in the capacity of an employer.

The National Industrial Recovery Act. During the depression years of the 1930's, measures were introduced to facilitate economic recovery. Chief among these was the NIRA, passed in 1933. It provided an impetus to labor organization and collective bargaining, by providing among other things that

> . . . employees shall have the right to organize and bargain collectively through representatives of their own choosing and shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining. . . .

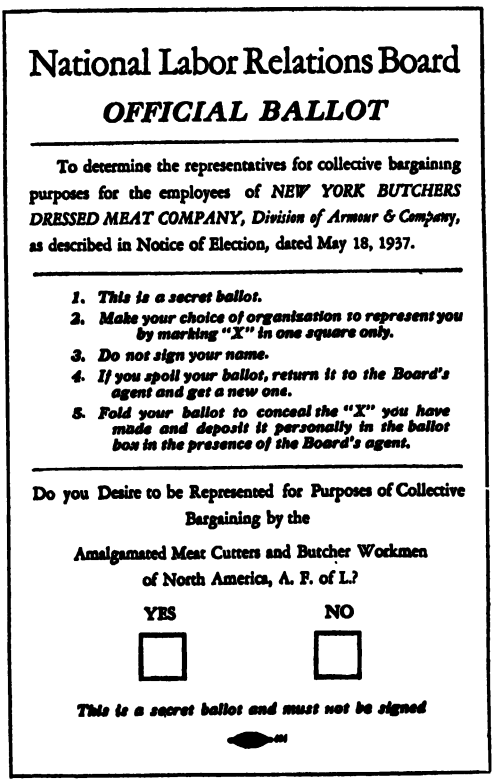
Codes of fair competition adopted for each industry were required to include the foregoing conditions. However, in 1935, the provisions of this law relative to making such codes were declared unconstitutional by the United States Supreme Court.

The National Labor Relations Act. In the same year that the NIRA was nullified, the National Labor Relations Act, otherwise known as the Wagner Act, was passed. It sought to extend the principles of collective bargaining, to broaden the powers of labor unions, and to outlaw certain "unfair practices" on the part of employers. In the words of Senator Wagner, it gave

> . . . explicit recognition to the rights of workers to bargain collectively and it established the sanctions necessary to safeguard that right. It provided that the right of workers to organize should not be interfered with by the yellow-dog contract, the company-dominated union, or the discriminatory discharge; and that through majority rule workers might choose their spokesmen who would be entitled to bargain collectively with the representatives selected by their employer.

Under the provisions of the act, a National Labor Relations Board was set up to serve as a quasi-judicial body. The latter was not designed as an arbitration court or a peacemaking tribunal in industrial disputes but

rather as the spokesman or legal defender of the rights of labor. It would receive petitions from employees for an election and hear complaints against employers accused of practices unfair to labor. The board was empowered to decide if an election would be in the public interest, and what rules or regulations should govern its procedure and to ascertain the employees' representatives for collective bargaining. Workers claiming the right to



National Labor Relations Board

OFFICIAL BALLOT

To determine the representatives for collective bargaining purposes for the employees of *NEW YORK BUTCHERS DRESSED MEAT COMPANY, Division of Armour & Company,* as described in Notice of Election, dated May 18, 1937.

1. *This is a secret ballot.*
2. *Make your choice of organization to represent you by marking "X" in one square only.*
3. *Do not sign your name.*
4. *If you spoil your ballot, return it to the Board's agent and get a new one.*
5. *Fold your ballot to conceal the "X" you have made and deposit it personally in the ballot box in the presence of the Board's agent.*

Do you Desire to be Represented for Purposes of Collective Bargaining by the

Amalgamated Meat Cutters and Butcher Workmen of North America, A. F. of L.?

YES ☐ NO ☐

This is a secret ballot and must not be signed

bargain collectively had to show that their representatives were actually chosen by a majority of all employees in their bargaining unit. Shown above is a sample ballot used in the elections that were held soon after the law was enacted. In cases where jurisdictional disputes arose between rival unions, employees were given the privilege of casting their votes for one or the other or, if they preferred, for neither.

The board also had the authority to investigate controversies, summon witnesses, conduct hearings, and adjudicate cases concerning practices or acts construed to be unfair to labor. Twenty-one regional offices sifted

the cases which eventually reached the board in Washington. Not until the regional agents had made their investigation, held hearings, and prepared findings did a case come to the board itself for a final decision. After the board ruled, the parties to a dispute had no recourse except to courts of law. Appeals from decisions could be taken directly to the Circuit Court of Appeals.

The ultimate aim of the law was to achieve just and peaceable labor relations in industry and to bring about a sense of responsibility and willing cooperation on the part of management and labor. Immediate effects during the first several years of its operation seemed far from this goal. A great flood of strikes and organization drives was labor's first method of asserting itself once its rights had been recognized by national law. Employers occasionally retaliated by refusing to recognize newly formed unions, by resorting to industrial espionage, and by challenging the actions of the National Labor Relations Board at every turn. In rapid succession there followed union demands, injunctions, sit-down strikes, picketing, union drives, jurisdictional disputes, broken contracts, charges of foul play, antiunion drives, and pitched battles. The industrial scene fairly bristled with controversy, and the conflict between management and labor seemed to be headed for a crisis.

Meanwhile another law was passed that still further strengthened the position of organized labor. This law, enacted in 1936, declared it to be unlawful to transport or to aid or abet in transporting strikebreakers in interstate or foreign commerce. The act was amended in 1938 to include as strikebreakers anyone who obstructs or interferes with a strike by force or threats.

War Labor Disputes Act. With the advent of war and the peril to national security of any prolonged strikes, appeals were made to labor leaders to offer no-strike pledges for the duration of the emergency. By and large labor kept its pledge, but some strikes and stoppages nevertheless continued; and therefore as a war emergency measure, the War Labor Disputes Act, or the Smith-Connally Act, was passed in 1943. It gave the President authority to seize and to operate any plants, mines, or other facilities whenever a threatened or actual interruption because of a strike or other labor disturbance would unduly impede the war effort. The emergency provision of this act expired in 1947.

Postwar Industrial Unrest. With the return of peace and the lifting of war controls, a period of unsettlement followed. This was characterized by rising prices, shortages of basic materials, reduced output, reconversion change-overs, and lower take-home pay for employees. The series of strikes that accompanied these conditions contributed still further to the slowing down of production—particularly in such scarce raw materials as

coal and steel. This threat to the national economy influenced many lawmakers in favor of taking steps to curb labor's powers and revived many of the complaints that had been heard before the war against the Wagner Act.

Criticisms centered around several leading issues. Foremost was the contention that the law was one-sided in bestowing certain rights upon labor which were not similarly granted to management. In particular the demand arose that employers, as well as employees, should be permitted to initiate cases under the law and that employers should have the right to request elections of employee representatives wherever such action would appear necessary to head off a crisis. In reply, it was asserted that the act merely sought to extend to labor privileges which industry had long since possessed. Injunctions, antilabor statutes, and adverse court decisions were cited as obstacles against which labor had been forced to struggle.

Another complaint, based upon the troublesome situations caused by splits in the ranks of organized labor, was to the effect that laborers were not free from intimidation on the part of fellow employees or unions. Proposals were advanced to change the law so as to forbid coercion of workmen by unions and their agents and to list unfair labor practices on the part of employees as well as employers. The counterargument was that common law and state statutes were adequate to cope with this problem and that an amendment of the type suggested would seriously handicap the organizing efforts of unions because of the possibility of unfavorable court interpretations of the term "coercion."

It was further argued that rights given to labor should carry with them reciprocal duties and that trade unions henceforth should be incorporated so that a greater degree of legal responsibility and regulation might be imposed upon them. Proponents of the statute replied that incorporation of unions would seem to be of dubious value in enlarging responsibility for torts committed in their behalf. Furthermore, if employers found it difficult to obtain civil damages or to forestall violence, it was not because of any deficiencies in the law but rather because the chaotic character of the strife made it hard to fix responsibility.

Finally, accusations of bias and favoritism were heard and pleas made that every person accused of violating the act be assured an opportunity for a fair and impartial trial. Employers claimed that they were not properly represented on the various labor boards. These, they felt, were composed mainly of representatives of labor or of those who favored labor's contentions with the result that decisions of the boards were unfair to the employer.

Whether this law gave rise to increased industrial strife or prepared the way for a more genuine industrial peace is a matter of serious debate.

Unquestionably the act engendered many disputes that otherwise might not have arisen. This was because the terms of the act changed the *status quo* of labor and raised some very important questions of "elementary rights" on both sides. It expressed the principle that the rights and interests of each or any person are secure from being disregarded only when the person interested is himself able and habitually disposed to stand up for them. Management contended that the law led to excessive demands on the part of the workers. Labor leaders asserted that employers did not accept in good faith the philosophy of industrial democracy in American life, basic to the law.

Taft-Hartley Labor-Management Relations Act. Finally, Congress cast its lot with those who had been insisting that labor's rights and privileges so far outstripped those of industry that as between labor and management, there was an unbalance, unfair to the latter group. As between drastic proposals in the House of Representatives and somewhat milder changes brought forward in the Senate, a compromise bill was evolved which was finally passed in 1947 over President Truman's veto.

Briefly, the law contained the following essential provisions:

1. The closed shop (making union membership a condition of employment) was forbidden, and the union shop (requiring workers to join after they were hired) was permitted only if a majority of those eligible voted for it.
2. Certain "unfair" labor practices were forbidden. These included secondary boycotts, jurisdictional strikes, featherbedding, and the payment of excessive fees by union members.
3. A 60-day "cooling-off" period was required at the end of each contract. In emergency cases affecting substantially an entire industry or national health and safety, a delay of 75 days was required.
4. The provisions of the Norris-La Guardia Act were modified by permitting the use of the injunction in all unfair labor practice cases (like those in Par. 2). Either the employer or the union could request the National Labor Relations Board to petition for injunctions.
5. The act prohibited, under severe penalties, contributions by labor unions and corporations in connection with federal elections. Further provisions restricted the political activities of labor publications or the issuance of pamphlets advising workers about the labor record of a candidate.
6. The National Labor Relations Board was divested of its administrative functions by the setting up of a statutory general counsel named by the President and confirmed by the Senate. The NLRB, enlarged from three members to five, became a judicial body, while the general counsel was given complete supervision of the field staff, investigation of charges, and issuance of complaints.
7. Other provisions of the law denied bargaining rights to foremen and withheld protective features of the act from unions whose officers were communists.

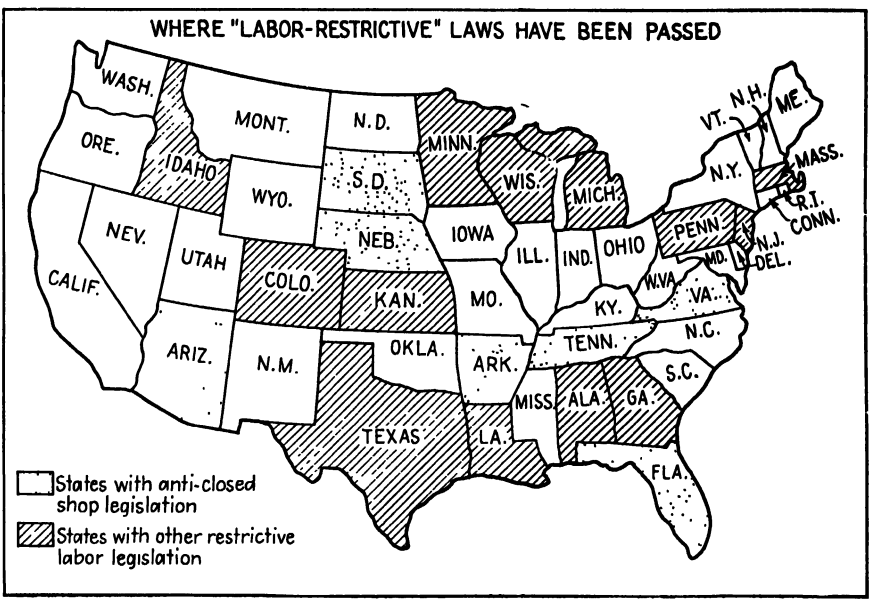
Under the Taft-Hartley Act, employees were still guaranteed the right to form labor organizations and to bargain collectively through representatives of their own choosing, and employers were required to bargain with

unions certified as the legal representatives of a majority of their employees However, unions were prohibited from coercing any individual workman in the exercise of any of his rights. Although the law continued to prohibit unfair labor practices by employers, it also denied to unions the right to engage in certain unfair practices. Employers, as well as unions, were given the right to petition the National Labor Relations Board for an election. Unions, like industrial corporations, were obliged to make disclosures of basic facts relating to charter provisions, membership, and finances. The Labor-Management Relations Act thus sought to redefine the rights of both labor and management in terms of the public interest. Much constructive study is still needed in this area before federal legislation can be so developed as to encourage full cooperation between employers and employees.

Collective Bargaining Rights in the States. During the 1930's, legislation following the pattern set by the federal Wagner Act and designed to apply to intrastate business was enacted by some of the states, notably Massachusetts, New York, Pennsylvania, Utah, and Wisconsin. These laws created boards or commissions empowered to forbid certain unfair practices, to hold elections, and to certify the proper representative for collective-bargaining purposes. In New York, for example, the Doyle-Neustein Act, passed in 1937, had as its purpose the protection by law of employees in their rights to join a union and to bargain collectively with their employers. Known as the "Little Wagner Act," this legislation extended to those whose employers operated entirely within the borders of the state the same advantages accorded by the federal government to labor engaged by interstate businesses. Unfair practices on the part of employers specifically forbidden under the act included spying upon workers' union activities, using blacklists, discriminating against employees because of union membership, requiring workers to join a company union or to refrain from joining a given union, and refusing to bargain collectively or to discuss grievances with accredited representatives of employees. Employers were further prohibited from instigating, helping, or dominating the creation of a union or in any way influencing or interfering with its operation. This virtually outlawed company unions, but it did not prevent employees from selecting a plant union of their own in preference to one of the local or national craft or industrial unions. A State Labor Relations Board was empowered to enforce the act in defending the collective-bargaining rights of labor and in recognizing the legal bargaining agencies chosen by groups of employees. Provision was made for appeal from the rulings of the Board to the State Supreme Court, the Appellate Division, and the Court of Appeals.

However, as the pendulum began to swing in the other direction and demands were heard for more restrictive laws, the labor unions experienced

a wave of "antilabor" legislation in the states. Through the passage of laws or by means of constitutional amendments, several states outlawed the closed shop or placed limitations on it, and many more passed some form of union regulation, covering such phases as registration, limitation on dues, public accounting requirements, or regulations for incorporation of unions. Certain types of strikes and picketing were also outlawed in a



The "restrictive" legislation referred to in the chart includes such state laws as those requiring unions to file financial statements, to give strike notice, to limit contributions to political parties, and to elect officers at stated intervals. (*Data from The New York Times, Feb.* 23, 1947.)

number of states. The above map reveals the extent to which such legislation had proceeded by the year 1947. Pending bills during that year which were slated for almost certain passage involved additional restrictive features.

Responsibility of Industry and Organized Labor. It is evident that within the last generation, two opposing trends have been seen in the legislation, both state and federal, pertaining to industrial relations. The first wave of legislation was designed to protect labor groups against the crushing superiority in bargaining power of the big corporations and to eliminate abuses that could be laid almost wholly at the door of management. For over a quarter of a century, unions had battled for the establishment of bargaining rights and for the removal of ill-conceived and unfair labor

practices by industries that were protected in their policies under laws then on the statute books. It took years of patience and sacrifice on the part of industrial workers to achieve the victory that they finally won.

Aside from recognizing their legal authority to act as representatives of workmen, laws also granted unions immunities from regulations pertaining to combinations in restraint of trade and limited the recourse to injunctions against unions. The attempt to exercise these rights, especially in dealing with employers who had traditionally opposed union organizations, would naturally have been expected to lead to serious trouble. In addition, however, there were shortcomings in the conduct of organized labor itself that brought about a wave of public opposition. Corruption, abuse of power, violation of contracts, outlaw strikes, and resort to lawless tactics were some of the charges justly leveled against organized labor. This led to a number of proposals for legislation defining the liabilities and responsibilities of labor unions and restricting their activities. Among such schemes for fixing legal responsibility upon unions were that (1) unions be required to incorporate or register, (2) union funds be subjected to judgment for damages caused by union members, (3) strikes be outlawed if they violate any collective-bargaining agreement, (4) the use of coercion and intimidation by unions or by union members be prohibited.

Undoubtedly many of the demands for an increase in the legal responsibility of unions have come from quarters unfriendly to labor. By these means they have sought to embarrass labor unions in their efforts to extend their influence and to establish collective bargaining on a solid foundation. However, not all the charges of irresponsible conduct have emanated from this source. Business leaders who would welcome the growth of organized labor along constructive lines have become apprehensive of the kind of unionism that is unreliable and unstable. Their experiences in making contracts that are promptly broken, of dealing with unions that rely upon brute force in preference to peaceful bargaining, and of working with organizations whose leaders are unable to control the acts of their members have caused them to withdraw their support of the labor movement.

Thoughtful labor leaders and well-established unions are giving serious thought to this problem. They realize that if voluntary discipline is not achieved within the ranks of labor, public opinion will quickly force the enactment of restrictive legislation.

Management, on the other hand, has learned that it must accept the institution of collective bargaining and deal realistically with modern unions. It is recognized as "good business" to maintain good industrial relations. It pays off to everyone concerned, *i.e.*, to management, to labor, and to the general public.

Cooperation is needed on both sides if satisfactory working relationships between two powerfully organized groups are to be attained. Employers must be willing to negotiate with the representatives of labor and to abandon the use of spies and blacklists. Labor, on the other hand, must recognize the need for absolute integrity and fair play and show a sense of responsibility commensurate with its greater power. The essence of successful labor relations is an unvarying respect for the sanctity of contracts.

In the words of Henry Ford II:[1]

> What is needed today is industrial statesmanship—from both labor and management. Instead, we have a tradition of industrial antagonism. . . . If we can solve the problem of human relations in industrial production, I believe we can make as much progress toward lower costs during the next ten years as we made during the past quarter century.

Questions and Problems

1. For years the underlying principle governing labor relations was that of *laissez faire*. What conditions caused state governments and then the federal government to shift from freedom or a policy of noninterference to one of regulation?

2. Make a list of all the rights enjoyed by labor under the law today. How does such a list compare with labor's rights at the close of the last century? What are the rights of the employer? Did these increase or decrease in the last 50 years?

3. The first thought in labor legislation is protection of the worker. Cite court cases upholding or invalidating some of the original state laws. What is the status of such legislation today?

4. The Fair Labor Standards Act was a milestone in labor legislation. Mention two provisions of this law which had, in previous acts, been regarded as unconstitutional. Why are some of these provisions not so important as when the law was passed?

5. The problem of insecurity and uncertainty used to be the constant fear of most workers. How did federal legislation lessen this problem? Describe the employers' and workers' contributions toward unemployment insurance and social security. What are the limitations of existing legislation? What steps have been recommended to extend the protection of the law?

6. Labor unions were affected adversely by the antitrust laws. Cite cases and court decisions showing how unions were regarded as coming under the jurisdiction of laws designed to regulate monopolies and restraints of trade. Discuss the changes brought about by the Clayton Act. Why was it necessary subsequently to pass the Norris-La Guardia Act?

7. Federal labor legislation during the decade of the 1930's materially strengthened the collective bargaining position of organized labor. Outline the important gains to organized labor under the Norris-La Guardia Act of 1932 and the National Labor Relations Act of 1935.

8. Explain the antagonism of the employer toward the Wagner Act. Discuss the role of unions, the National Labor Relations Board, and the position of unorganized labor under this law.

[1] Quoted from the *St. Louis Post-Dispatch*.

9. In what ways did the Taft-Hartley Law change the status of labor? Of the National Labor Relations Board? The rights of employers? Which provisions of the Taft-Hartley Law would you regard as fair? Which as objectionable? How do you explain the change in the trend of labor legislation as embodied in this law?

10. What is the present legal status of each of the following: the closed shop, the yellow-dog contract, injunctions in labor disputes, the jurisdictional dispute, the union shop, featherbedding, the company union, the wildcat strike?

Part V

MARKETING METHODS

CHAPTER XV

MARKETING FUNCTIONS AND DISTRIBUTION CHANNELS

Importance of Marketing in Modern Business. Goods are made to be marketed. In the modern business regime where production is, not for self, but for sale, merchandising plays a predominant role. When most producers operated on a local-custom basis, few problems of marketing arose. Orders were placed as goods were needed, and the chief concern on the part of the producer was to turn out his products fast enough to meet the demands of his customers.

With the advances in technology involving the mechanization of productive processes and the application of greater horsepower in the fabrication of commodities, volume of production naturally increased. In fact, in most lines of business the capacity to produce outstripped the ability to sell. Local demands no longer sufficed, and it became necessary to look for new markets.

There is thus a considerable pressure on the part of producers to force their goods into the markets of the world. Modern facilities of transportation and communication have expedited a broader distribution of products. In addition, however, a complex marketing network has been spun for the purpose of developing the demand for goods and for physically handling their movement through the different channels from producers to ultimate consumers. In general, costs arising in connection with the distributive process have tended to mount as greater economies through larger scale production were achieved. The great difference between the value of labor and raw materials and the ultimate price of the finished product is a rough indication of the monetary importance of the marketing steps that intervene between the making and consuming of certain classes of goods. A part of this price spread covers such costs as advertising, salesmanship, transportation, warehousing, insurance, and expenses and profits of the various middlemen engaged in selling the product.

The daily deliveries of such essential commodities as milk, bread, and newspapers are accepted without question by most people. The average shopper takes for granted that the market will always have on hand ample supplies of food, clothing, household appliances, or whatever else he may need. No longer dependent upon local output, retail markets

feature merchandise that has come from distant production centers. It has become so commonplace to find well-stocked shops, offering a wide range and variety of goods, that few buyers realize what a complicated system of marketing has made possible this modern miracle of distribution. Only during occasional emergencies involving shortages and rising prices do consumers begin to inquire about the sources of their supplies and the methods of bringing them to the market.

Types of Markets. The term *market* is not limited in use to describe any specific place or center of exchange. In its broader sense, it represents any meeting of buyers and sellers in whatever manner or place it may occur. To a promoter or sales manager, canvassing the field in order to determine the probable market for his product, the market consists largely of the unsatisfied desire and potential demand for his goods, wherever that demand is located geographically. In other words, there are often several markets for the same commodity in the same place at the same time, catering, however, to different needs, tastes, or special requirements of purchasers.

How can these markets be classified for the purpose of better understanding their nature and functions? Several methods suggest themselves. For example, a distinction is drawn, from the point of view of the seller's functions, between primary and secondary markets. In the *primary market*, the seller performs the function of assembling raw materials. He may be the original producer such as a farmer, or he may be a merchant who collects for sale and delivery materials like cotton, wheat, crude petroleum, or minerals. Wholesale markets in which these raw materials and semiprocessed goods are resold to producers for further processing or in which finished goods are sold to retailers for further sale are known as *secondary markets*. The retail outlets that resell goods to final consumers also fall into this latter category.

A distinction is also made with reference to the type of transaction that is negotiated. Those who sell *actual* cotton, wheat, coffee, sugar, etc., for immediate or for forward delivery sell in *spot markets*. They make actual delivery to the buyer when and as he needs the goods and in accordance with specifications made by him relating to grade and quality. On the other hand, the coffee broker, the cotton broker, and the wheat broker may buy or sell, for the account of their clients, *contracts* for future delivery. Trading is conducted on organized *exchanges* or markets in which "futures" are bought and sold. Few actual deliveries of the commodities in question are ever made or expected. The purpose of the trading is primarily for "hedging" or insuring against losses through price fluctuations, or it may be for purely speculative ends. Transactions are usually settled by making or receiving payments equivalent to price differences between buying and selling quotations.

Another classification is based upon the types of buyers to whom the markets cater. *Industrial* markets are those in which purchases are made by customers who intend to process and resell or to utilize the product in some way in the production of some other commodity or service. These markets include most primary and wholesale secondary markets. *Consumer* markets are those in which sales are to final users of the commodities, and they include most of the retail distributors.

Markets may also be considered with reference to their geographical extent. Meat packers, for example, have *local* markets within a community or within a metropolitan area; larger packing houses cater to *regional* markets—embracing a whole state or perhaps several states. The largest meat packers are *national* firms—shipping to every part of the country. For those doing business abroad, a distinction is usually made between *domestic* and *foreign* markets.

A further classification is made in terms of the commodity sold. The metals market, the cotton market, the wheat market, and the fruit and vegetable markets are examples of *commodity markets*. Of course, all these classifications overlap in the sense that a given market fits into more than one of the above-named categories. An analysis of this kind is helpful, however, in understanding the nature and functions of the various marketing groups.

Changing Markets. As in all phases of business activity, significant changes take place in marketing methods and in market demands. Postwar conditions of supply and demand, installment selling, cooperative marketing, and sweeping transformations in advertising technique are some of the factors that have exerted a considerable influence upon sales methods and market conditions throughout the world.

Hand-to-mouth buying, or the practice of making frequent purchases in small lots, affects production schedules in certain lines of business and gives rise to new problems relating to storage, geographical distribution, pricing, and financing. Installment selling increases the possibilities of mass production but also results in the need for more rapid and larger scale distributive facilities. The development and growth of cooperative organizations, among producers of agricultural staples in particular, has materially changed older methods of marketing. This has resulted in better standardization, processing, transportation, market distribution, and merchandising. The growth in importance of the advertising business, as well as the development of new advertising media, is an important factor in influencing shifts in public demand for the products of industry.

New tastes and new buying habits are constantly being developed. Changes in demand are stimulated through offerings of new types of products and improved types of old products. In addition, general changes in

tastes and desires of consumers, increases or decreases in purchasing power, and alterations in the "tempo" of living are responsible for the many fluctuations in demand for certain commodities. Radios, practically unknown before 1920, are now found in millions of homes.

Changes in industrial methods and requirements have produced similar problems. The steady drift toward the use of hydroelectric power for industrial purposes is intensifying the struggle to market bituminous coal. Railroads are experimenting with new types of locomotives powered by gas turbines and jet propulsion. Alloys of aluminum are replacing steel and other heavy metals in many industries.

Furthermore, changes in methods of distribution on the part of producers have upset the whole marketing structure in certain industries. In order to reduce marketing costs, companies have assumed various distributive functions formerly performed by middlemen. Manufacturers have developed their own retail chain stores; chain stores have gone into the manufacturing business; wholesalers have opened retail outlets; retail stores have formed cooperative wholesale buying syndicates; warehouses have offered miscellaneous financing and marketing services.

Marketing Functions. In all these shifts in the marketing process, certain basic functions remain to be performed. The importance of these several changes does not relate so much to significant alterations in the process of marketing but rather to a shift in the performance of duties from one middleman to another or from distributor to producer. It is possible to recognize a general series of marketing functions which must usually be performed in the general process of moving goods from producer to consumer. These duties include the following:

Assembling, which involves the purchase and accumulation of certain products or groups of products. Sometimes this necessitates a mere mechanical concentration of similar goods, all produced locally. Occasionally it may require far-flung purchasing operations in all parts of the world.

Storing or maintaining stocks of goods previously produced so as to meet the demands of purchasers at all times.

Sorting, grading, and packing and other rearrangements of merchandise according to the peculiar requirements of different classes of customers.

Transporting and shipping of goods from place to place.

Advertising and selling, which involve the stimulation of demand and the development of wider markets for the goods which are produced. The selling operations also include the transfer of title to goods from sellers to buyers.

Pricing. Closely associated with the selling function is that of pricing. It is important to establish prices that will cover all costs—yet not at levels so high as to discourage sales. There is wide variation in pricing methods and policies.

Financing. It is necessary to obtain adequate funds for the purchase and storage of goods and to safeguard against losses that might occur as a result of forced liquidation.

Assuming risks that arise as a result of variations in demand, styles, and prices, spoilage of goods, damages in shipment, etc. It is because of their willingness to assume such risks that many groups of marketing specialists

Like fashions in clothes, preferences in automobile colors vary. This color expert follows changing tastes by states, month by month, to anticipate customer demand. (*Courtesy of General Motors Corporation.*)

have been able to establish and maintain their positions in the business community.

Servicing and Information. Merchandising operations frequently involve not only a movement of goods but the provision of certain services, advice, and information to the purchasers of the products.

The Need for Market Research. The mere physical movement of the goods is not all that modern marketing involves. The selectivity and high degree of competition prevailing in the major markets of the world, coupled with the ease of transportation from one place to another, have opened the way for a more critical and discriminating attitude on the part of buyers. Consequently, if the producer wishes to retain his share of the business or

to expand his markets, he must continually discover methods that will attract or favorably influence the consumers of his products.

This involves a certain amount of research and market analysis. The location of potential buyers must be determined, and a study made of their purchasing power. Shifts in population are important and bear careful watching. Markets have to be examined in the light of customs and habits, psychological reactions, style trends, and changing wants. Careful attention should also be given to the most attractive price brackets, the quality that appears to have the greatest appeal, and the quantity units that are most convenient to buyers.

In the marketing of commodities, it is important to know which factors ought to be stressed most: quality, economy, style, convenience, service, or a combination of these. Different appeals must be made for markets composed largely of industrialists, wealthy buyers, the middle classes, or the comparatively poor. The market should be tested from time to time to ascertain if standards ought to be altered in any way.

Such information is useful in several ways. It will indicate special preferences on the part of customers and enable producers to revise their methods in harmony with the needs of the market. Surveys will reveal important trends and buying habits in certain markets, which are apt to open new and profitable fields for some manufacturers. In many instances, these data may shed some light on the relative desirability of particular marketing functions and consequently lead to a more intelligent selection of middlemen in the distribution of a product.

Types of Market Data. *Consumer Preferences.* Market information relating to the nature of his product may enable a producer to improve the quality of his merchandise or to bring about profitable changes in production or distribution from the standpoint of color preferences, packing, size, peculiar sectional needs, or price.

Color preferences and prejudices are sometimes interesting. Red apples sell more readily than do the yellow or green varieties. New Yorkers pay a higher price for white eggs, whereas in Boston brown eggs are preferred and command a higher price. A marked increase in sales of sanitary equipment, towels, and kitchenware resulted from the introduction of colored tiles and fixtures for the kitchen and bathroom.

The choice of the proper size and shape of a package is important. For example, a manufacturer of a toilet article learned that his package was too high for the shelves of standard medicine chests. When he changed the shape of his containers, his sales increased. Many people prefer the convenience of smaller tubes of tooth paste and shaving cream. Manufacturers produce several sizes to cater to varying tastes. Sugar, coffee, cereals, fruits, and vegetables now tend to be sold in packages rather

than in bulk. Producers who have ignored this trend have, in some instances, lost the greater part of their market.

Supply and Demand Factors. Manufacturers are also interested in knowing something about the trends in consumption of their products,

Fruits now tend to be sold in packages rather than in bulk. (*Courtesy of Container Corp. of America.*)

new uses discovered for their merchandise, and changes in output on the part of their competitors. One company discovered that its sales grew more rapidly in certain states than in others. By reorganizing its merchandising policy and concentrating all its selling efforts in a few select states,

instead of spreading a sales organization throughout the country, this concern more than doubled its sales within the short period of nine months.

There are many cases illustrating the stimulation of demand for given products through the discovery of new uses. The California Fruit Growers extended the use of lemons by advertising lemon juice for use in the treatment of colds, as a skin lotion, and as a blonde-hair wash. Sterno (canned heat), originally intended for picnic and camp use, was found to be suitable for travelers on trains and in hotels, for actors in preparing make-up, for doctors and nurses in sterilizing, and for use in the home for heating milk, curling irons, and water for shaving. The linoleum companies discovered that if they could get the public to use their product as a sanitary wall covering, their sales would increase considerably.

It is important that producers keep informed of current changes in the movement of goods to and from certain market areas. Especially is this so among shippers in the raw-materials markets—where success depends largely upon the price factor. Unlike the manufacturer, the seller of raw materials cannot usually offer style, superior quality, or distinctive features, since standardization definitely eliminates the need for specific description of a particular lot. Quotations of commodity prices and market information are regular features of many radio stations. These are valuable to shippers and buyers of farm products.

Advertising. Demand creation becomes vitally significant when production outstrips ordinary consumption requirements, when markets cease to remain local, when mass production replaces custom work. In the modern markets, advertising that conveys to the consumer the sales message of the distributor in such a way as to arouse interest and desire and to stimulate action serves a useful and necessary function. The artisan who personally sees his customers, talks to them, shows his wares, and is content to make a living by supplying their needs does not require the use of advertising. On the other hand, the manufacturer or his distributors who seek to supply national or international markets become increasingly dependent upon advertising for the purpose of informing potential customers of the merits of the products to be sold. This is the only way in which they can interest a sufficient number of people to make possible a continued flow of merchandise to the market.

The ultimate aim of advertising is to induce the purchase of something; *i.e.*, it is a method of selling, and its primary purpose is to increase sales. Advertising may, however, be put to much broader use. It is utilized to familiarize the public with the name of the advertiser in order to cultivate a certain amount of "good-will." It serves as an effective means of stabilizing certain prices in the mind of the public. It often educates the con-

sumer to the possibilities of the use of new products or of the development of new uses for well-known goods.

Advertising today is carried on in a variety of ways and for the purpose of accomplishing many objectives. It is used by all types of individual business enterprises selling goods or services, by trade associations, and by chambers of commerce. So widely is it employed that scarcely a product or a service exists which has not been made known to the public through some form of advertising.

When individual producers and distributors advertise, their purpose is to create or to stimulate demand for certain brands or types of products. Trade associations advertise primarily in order to create a demand for the product as a whole rather than for one particular brand. Slogans like "Nothing takes the place of leather" and "Say it with flowers" are used by associations to promote sales of these respective commodities. The natural beauties, healthful climate, or commercial and manufacturing advantages of certain locations are advertised by chambers of commerce, bus companies, air lines, and railroads.

Advertising Media. Advertising has sometimes been referred to as the "business of selling through print." To be sure, the greatest amount of advertising is conducted by means of printed words and pictures. Newspapers, magazines, outdoor billboards, car cards, directories, leaflets, folders, blotters, and circulars of all kinds are well-known media which annually carry over a billion dollars' worth of advertising to the reading public.

However, advertising is not limited to these devices. Television, radio, motion picture, electric sign, and window display are examples of other forms of advertising media that, for certain purposes, have proved even more effective than the printed word.

There is no single medium that can be said to be most effective for advertising purposes. Generally speaking, before approaching the problem of choice of media, the advertiser must ascertain who are his possible customers. This is the problem of analyzing the market. A prerequisite is that they have the necessary purchasing power and then the function of advertising is to create or stimulate desire and force it into action. The next problem is to determine the medium. That medium can be said to be the most useful which reaches the largest number in the most effective manner per dollar spent. Much depends upon the type of product to be advertised and the market to which the appeal is to be made. A manufacturer seeking a national market can use magazines like *Life* or the *Saturday Evening Post*, or he might engage the use of a nation-wide radio hookup. A department store, on the other hand, will be more interested in covering a limited metropolitan area and will therefore turn to the use

of local newspapers or engage the services of a local radio station. The manufacturer of surgical instruments would waste his money if he used the same advertising methods and media as the manufacturer of tooth paste or shaving cream.

Seldom does an advertiser confine himself to only one medium. He may use newspapers and car cards as well as window displays and electrical signs. Manufacturers whose products are limited to distinct markets find that class magazines, although their circulations are smaller, bring better results than the more general periodicals with larger circulations. The former classification includes sportsmen's magazines, farm journals, religious periodicals, and certain high-priced magazines which appeal to a limited group.

In addition to the choice of a medium, the advertiser faces many problems of importance if he is to get the most out of his advertising. Among these are listed the selection of the proper position for the advertisement in the paper or magazines, the best day on which to advertise, and, in the case of radio or television, the type of program and the time. These are only a few of many questions which must be decided.

The Advertising Agency. Most advertisers turn over their entire advertising problem to a reliable agency. Having a skilled personnel, the agency will budget the allotment, choose the most suitable media, and take charge of such technical details as layout, copy, art work, and printing.[1] It also issues instructions to publishers and others engaged in handling the details of an advertising campaign. In connection with this function, it maintains a complete record of the character of the advertising, the time of appearance, total costs, and disbursements.

The agency thus serves as a middleman between advertiser and advertising medium and performs a number of specialized services without additional direct costs to the advertiser.

Usually it is more economical for a firm to place its advertising through an agency. If it handled the business directly, it would have to meet costs of copy writing and miscellaneous clerical duties. The only charge that an agency ordinarily makes in addition to the regular advertising rates is for costs of art work or for special cuts, signs, novelties, and other publicity materials.

The agency receives a commission or agency discount from most publishers. In some instances, the agency is paid a retainer for its services, in which case the advertiser pays for the use of the space at the net rate plus costs of art and mechanical production. This practice is often a virtual commission-splitting arrangement between agency and advertiser. Where publications do not give an agency discount but charge both agent

[1] Space limitations prevent a separate discussion of these interesting details.

and advertiser the same amount, a frequent practice, in the absence of a retainer agreement, is to add to actual cost a premium for agency service. In fact there is a variety of arrangements differing from agency to agency and for accounts within an agency.

Methods of Judging the Effectiveness of Advertising Media. "It pays to advertise" has become a popular slogan, but the advertiser is loath to rely on this generalization. To what extent does it pay? Which method is most effective? Which one costs more than it produces? Can he afford to cut down expenses by curtailing his advertising? These are the specific problems which face him and to which advertising experts may or may not offer satisfactory solutions.

A common check on magazine or newspaper advertising is to offer a free sample or a booklet in return for the coupon used in the advertisement. When several periodicals are used, the firm employs key addresses. For instance, a firm located in the Woolworth Building, New York, gives its address in one periodical as "Woolworth Building," in another as "233 Broadway," and in a third as "235 Broadway." The addresses on the responses will then indicate in which periodical the advertisement was seen.

Another checking device is to instruct the reader to write to Dept. P 700 or Dept. S or Desk 42. For instance, an advertisement of the United Prune Growers of California bears a coupon that offers a recipe book. The writer is instructed to address Dept. 3-SP-4. Not only do such devices identify the periodical, but the numbers may indicate the particular issue.

Radio is rapidly becoming one of the foremost advertising media, but it is difficult to check its effectiveness. Unlike newspapers and magazines, the circulation presents an unknown quantity. One means of obtaining an idea of the effectiveness of the advertisement is by asking the listeners to write or phone to the station, a thing that only a small percentage do. Free pictures, books, samples, recipes, and various prizes are offered in order to encourage correspondence. Sometimes the audience is requested to vote on whether a program should be continued or not. Department stores offer very special bargains that are not advertised elsewhere and judge the effectiveness of the program by the number of responses received.

Sponsors of radio programs also use such services as Hooper or Crosley ratings. The popularity of a radio program is judged statistically by telephoning to a list of people chosen at random. From the replies received, estimates are made of the number of listeners. Some stations invite listeners to write in for questionnaires and reward their replies by offering them tickets of admission to a particular program.

Advantages of Advertising. Francis H. Sisson, of the Guaranty Trust Company of New York, in an address to 1,000 members of the New York Merchants' Association, said,

> Advertising, instead of increasing the costs of producing and selling goods, greatly decreases such costs. It is perhaps the greatest agency of natural selection in the business world. It promotes the survival of the fittest in the struggle for existence. It is a powerful weapon in the hands of the manufacturer who turns out the best product, or who turns out the same product at the lowest price. . . .
>
> The efficient producer quickly gets the bulk of the trade, expands his plant, becomes an industrial giant, and by his very growth is enabled to reduce his costs and his price still further. Thus advertising facilitates the mass production which, through its almost unbelievable economies, has worked hand in hand with higher wages in bringing new comforts within the financial reach of the great body of the population.

A study by the Advertising Federation of America showed that during periods of depression firms that advertised consistently were less affected than those whose advertising was intermittent or haphazard. The businesses of 120 corporations for a period of 17 years were analyzed. Sixty of the firms that advertised regularly spent more for advertising in 1930 and 1931 than in the two preceding years, and in 1931 their profits approximated the average for the preceding five years. The other 60 firms studied advertised when business was good but curtailed their programs in slack periods. Of this latter group, one-fifth went out of business and the others were operating on a restricted basis.

During the war years when production for civilian use was limited or unavailable, manufacturers nevertheless continued to advertise their wares. They promised the public newer and better products sometime in the future. Obviously, the purpose of such advertising was to keep their names alive in the public mind.

Criticisms of Advertising. There are several considerations that tend to offset somewhat the services rendered to business by advertising. In many cases it represents a waste from a social point of view, since the purpose is to divert users of one product to another. Minor or nonessential points are emphasized where no real difference exists. The public is urged or scared into buying and using objects of doubtful value; and in the case of some patent medicines and cosmetics, products that are distinctly harmful are sold as sure cures or as noninjurious remedies.

Aside from these social considerations, advertising defeats its own purpose, from the strictly business point of view, when it results in objectionable practices. Foremost among these are the exaggerated claims made for some products. These not only harm the sale of products so advertised but result in a loss of confidence in the advertisements of those who are not

guilty of the practice. When the public is persistently informed that success in life is due to the use of a certain mouthwash or dandruff remover, advertising becomes ludicrous.

Another aspect of advertising that tends to decrease its effectiveness and causes a loss in public confidence is the exaggerated use of testimonials. Even the most gullible realize that famous motion-picture actresses do not owe their complexions to the soaps or cold creams which they endorse, that successful opera singers do not owe their ability to the cigarettes which they claim to smoke, and that well-known athletes have not acquired their prowess through the daily use of certain brands of yeast.

Better business bureaus have realized that such claims and testimonials may be harmful to business. They have been active in bringing pressure to bear on notorious offenders in order to eliminate some of the objectionable practices. The Federal Trade Commission also has issued many "cease and desist" orders in cases involving fraudulent claims. A campaign for truth in advertising is being waged with the object of restoring the public confidence in the claims of reputable advertisers.

Radio listeners object to the excessive time taken up by commercial announcements on radio broadcasts. The Federal Communications Commission recognizes this problem by exercising some supervision over the allocation of advertising time. Stations must offer a minimum number of sustaining programs. Limits are also set for advertising announcements during news-broadcasting periods.

Other Marketing Services. The movement of goods from producer to ultimate user ordinarily involves the efforts of transportation agencies, warehouses, and other middlemen whose services at several stages supplement the work of the merchandising groups. A brief summary of some of these supplementary marketing services is given in a later chapter.

Questions and Problems

1. Marketing is big business. Show that this statement is true. Prove that the modern distribution of goods is a complex process. How do you account for its complexity?

2. What marketing problems have arisen as a result of changing conditions in industry, commerce, and consumer habits? Outline the basic marketing functions that are performed in the general process of moving goods from producer to consumer.

3. Choosing a product with which you are familiar, trace all marketing channels from the raw material to the ultimate consumer. Mention the different types of markets involved.

4. Marketing is more than buying or selling. What nonselling functions are included in the marketing process? Are these services productive? Justify your answer.

5. Outline a plan of market research for a particular product. Compare the market data and problems of two distinct products such as oil burners and canned foods.

6. The seller who blindly offers his wares makes costly mistakes What data are necessary to market successfully the following men's hats, washing machines, apples, gasoline?

7. "It pays to advertise" Explain and appraise this statement

8. Outline an advertising program for a specific product In giving the various media, show whether each is suitable or not for your purpose How would you check on the effectiveness of your advertising in radio? Newspapers? National magazines?

9. Despite considerable criticism, it is conceded that advertising leads to better quality and lower costs Explain In what other ways does advertising benefit the consumer? Give examples of advertising that are socially wasteful and that tend to hurt business by their exaggerated or ridiculous claims

10. Show how advertising, despite claims to the contrary, helps to maintain a free press and radio.

CHAPTER XVI

MARKETING OF RAW MATERIALS

Marketing Agencies in Extractive Industries. Raw materials include the products of the farm, the forest, the mine, and the oil well and, in some cases, the output of mill or processing plant. Strictly speaking, cattle hides, steel, and other partially processed goods are not classed as "raw" in the same sense as agricultural products, but they are for practical purposes raw materials for the factory or industrial plant. The marketing of agricultural staples and the products of other extractive industries involves the movement of raw materials to industrial markets. The buyers are, for the most part, manufacturers who require a constant supply of those goods in order to keep their plants running.

Agricultural products that are suitable for immediate consumption without passing through some process of manufacturing are primarily foodstuffs that are perishable in character. Consequently, marketing facilities must be adequate to make possible a steady flow of these goods in sufficient quantity to meet individual daily requirements. The supply comes from small farms scattered throughout the country. As the seasons change, different geographical sources of these commodities must be tapped in order to maintain a continuous movement of goods. The problem becomes one of supplying millions of consumers with the goods of thousands of producers.

Table 14 summarizes the various types of middlemen employed in the extractive industries and gives some of their functions and methods of remuneration.

Buying and Selling Agents. Agencies are either buying or selling offices operating as subsidiaries of the producers or of large consumers, or they may act as independent agents on a commission basis. Acting as the sales department of large producers, they often sell through other intermediaries or directly to large industrial users. Their sales, as a rule, are made on wire quotations from the shipping point, and as either f.o.b. (free on board) or delivered sales. A portion of their supplies is sold through the terminal auctions in the markets in which these auctions are located.

Cash Buyers. The cash buyer purchases products prior to shipment—and often prior to harvests in the case of agricultural commodities—assem-

bles, grades, and packs the products and supervises the loading. He operates for his own account or on a joint-account agreement with a large distributing firm or a receiver in the market, or he may be the salaried representative of such firms or receivers. Though cash buyers are to be found at most shipping points, the producing and consuming areas served by each are rather limited—very often a cash buyer handles but one product and trades in a limited number of markets.

Brokers. The buying broker operates much like the cash buyer, except that he does not buy for his own account but acts on behalf of the pur-

TABLE 14.—TYPES OF DISTRIBUTING AGENTS IN THE EXTRACTIVE INDUSTRIES

Type of agency	Function performed	Remuneration
Agents	Buying or selling	Cost of service, fixed salaries, or percentage of purchases or sales
Cash buyers	Buy for own account	Market spread
Brokers	Buying and selling	Percentage or specific amount per unit
Auctions	Selling agents	Fixed percentage
Commission merchants	Receive consignments and sell	Fixed percentage
Cooperative sales agents	Selling agents	Cost of service
Wholesalers and jobbers	Buy for resale	Market spread
Retailers	Buy for resale	Market spread

chaser. Generally the buying broker handles only carlot quantities which he inspects, purchases, and ships in accordance with his principal's instructions. His compensation is an agreed brokerage charge.

Brokers located in the terminal carlot markets are the agents of the sellers. A broker receives quotations, presents the seller's offerings and terms to the buyers for acceptance or for their counteroffers, and submits them to the shipper for confirmation or rejection. If the sale is confirmed, the broker's responsibility is at an end when he reports the shipper's confirmation to the buyer.

The shipper assumes the financial risk and the task of collecting the proceeds of the sale from the buyer. The broker's compensation is generally a stated charge per car which varies somewhat for different commodities.

Auction markets receive shipments on consignment and place samples on display in the warehouses. Shipments are listed and described as to quantities, grades, condition, variety, and other factors necessary to es-

tablish value prior to the sale. At the call, the merchandise is sold to the highest bidder. A fixed percentage charge, plus the freight, is deducted, and the balance is remitted to the shipper or his agent.

Commission Merchants. Commission merchants are found in nearly all wholesale markets. They are receivers of carlot or less-than-carlot shipments consigned to them by growers, associations, or other shippers. They dispose of these shipments in comparatively small lots to jobbers, retailers, and other buyers. Their sales are usually made from stores but can be made directly from the cars in the railroad yards. Returns are made to the shipper when the lot is sold, or the commission merchant may agree to accept the shipper's draft for a part of the estimated value of the shipment.

Cooperatives. With the development of cooperative sales agencies and other large distributing firms, the consignment of agricultural produce declined. The direct sale of shipments, either f.o.b. or delivered, is rapidly becoming the standard method of marketing. The advantage of this method is that it permits the organizations to influence the distribution of the shipments and the price at which they sell.

Wholesalers and Jobbers. In most markets, wholesalers and jobbers are buyers in quantity of the lots offered. They usually buy from the producer directly, from mill agents, from commission merchants, and at the auctions. They, in turn, sell to retailers, hucksters, and large-scale users like hotels and restaurants. Buying and selling for their own account, their remuneration is the market spread.

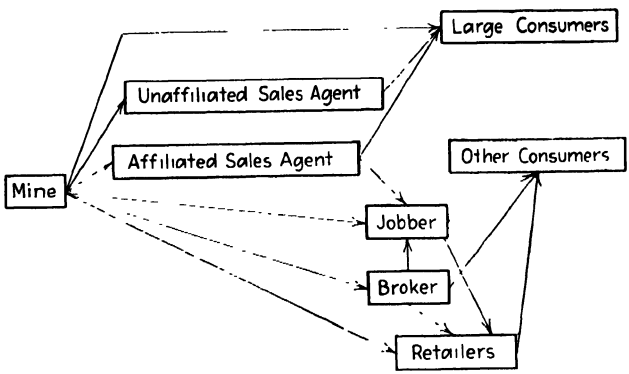
Retailers. The final link in the chain between the original producer and the ultimate consumer is the retailer. Depending on the size of the business, retailers buy from wholesalers and jobbers, from buying brokers, and at auction markets and resell to the consuming public.

Minerals and Metals. In a highly industrialized country, productive processes are dependent upon adequate supplies of fuel and mine products. Where minerals and metals in themselves form an important part of the country's extractive industries, they are often closely associated with other industries that use these raw products. Most of the important consumers are themselves manufacturers, who purchase as directly as possible or, in many cases, own their own sources of supply.

Coal. Coal is produced in 26 states from thousands of mines and consequently presents wide variations in quality and chemical content. About 60 per cent of anthracite and 15 per cent of bituminous coal are consumed as domestic and heating fuel by householders and others. The remainder is used by industry for various purposes: heat, power, transportation, metallurgy, illuminating gas, coke, and a long list of by-products. The most important single users of coal are the railroads and the steel industry.

The larger steel producers have their own bituminous mines. These are referred to as "captive mines."

Users of coal thus vary from the householder who buys a sackful or a ton from the local dealer to the public utility whose purchases run into thousands of tons. The operators ordinarily sell directly to large consumers or through affiliated or unaffiliated sales agencies, jobbers, and brokers. The jobber is a "free-lance" trader in coal, buying and selling in the open market. The three types of marketing functions are often performed by the same concern, and there are few shippers who do business



Distributing channels in the marketing of coal.

in only one way. Many of the jobbers act as agents for some mines and may own one or two mines themselves.

A coal dealer sells under his own brand the products of many mines. Few householders or even small industrial consumers buy coal on specification. Most of them order certain sizes as pea, stove, nut, or egg and ask vaguely for "good" coal. The larger purchasers either order on specification or require a chemical analysis of the coal that they buy.

Petroleum. In general, crude oil is purchased in two ways. It is bought by the large purchasing companies at "open-market" prices which are announced or "posted" by such companies. These in turn either store or sell the oil to refiners after arranging for its transportation by pipe lines. The other way involves direct purchase from the producer by the refiner, either for current needs at the posted price or for long-term requirements by contract.

When a well starts producing, the owner arranges for the sale of the crude through the local representative of a purchasing company. If sales arrangements are concluded, he communicates with a pipe-line company and asks it to lay a line to his well. Such a line may be less than a mile long or sometimes extends several hundred miles or more. A pipe-line

company will lay such lines if the volume of business in the area appears to justify the expenditure. In most cases, the pipe-line company has nothing to do with the purchase of the oil, and it is responsible for it only to the extent of delivering it at the specified destination.

This procedure applies in the case of a producer without transportation or refinery affiliations. Some companies embrace the complete cycle of petroleum activity, engaging in producing, transporting, refining, and marketing. Pipe-line operations are, as a rule, handled by separate companies, acting solely as carriers. Some pipe-line companies also purchase and sell crude oil.

Iron Ore and Pig Iron. Like coal and petroleum, iron and steel have become indispensable in almost all productive processes of a manufacturing nation. Most of the iron ore in the United States is mined in the Lake Superior region. Alabama and Tennessee are next in importance, whereas the amount produced in Pennsylvania, formerly the center of the steel industry, is relatively small.

Until about 1900, nearly all the Lake Superior iron ore was sold in the open market to manufacturers of pig iron and steel. The established practice was to sell for season delivery. The process of integration in the industry led to the acquisition of mines by iron- and steelmakers and of blast furnaces by the ore companies, so that today a comparatively small amount of ore is sold in the open market.

Pig iron, the product of the ore, is used in the manufacture of steel and for the making of malleable iron products. Pig iron sales are made on the basis of gross tons. The quantities and periods of delivery vary widely, according to the state of the market. Sales are, for the most part, made directly to the users without any intermediaries and without provision for any formal or organized markets.

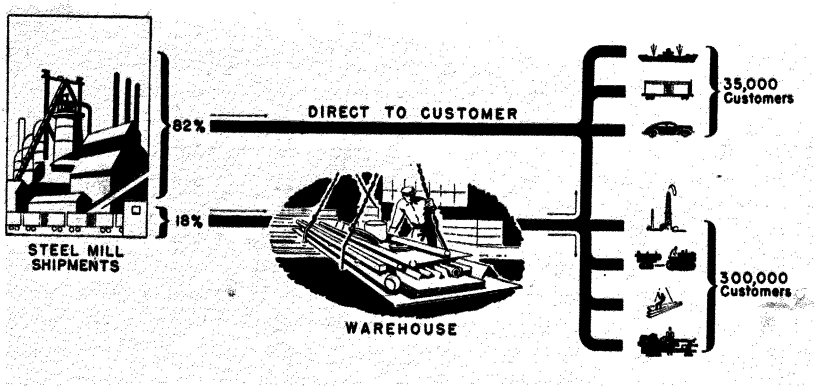
Steel. The steel industry is controlled by a relatively small number of highly integrated firms that own and control coal and iron mines, furnaces, and rolling and finishing mills. However, as one writer pointed out, "A piece of steel is as made-to-measure in composition, shape, and size to its particular use as the clothes we wear—and its sale is almost as subject to the needs, tastes, and even the whims of individual buyers." [1]

When one considers the number of uses for steel, there is little reason to wonder at its variety of types or the differences in production levels. Normally the industries that buy the bulk of our annual steel production can be grouped into six major classifications: steel processers and converters, who buy semifinished steel and fabricate their own steel products such as wire, bolts, nuts, rivets, and forgings; the general construction industries; the sheet steel fabricating industries that turn out household wares, furni-

[1] WALTZ, GEORGE H., JR., *Steelways*, January, 1947.

ture, and automotive equipment; the automobile industry; the railroad industry; and the container industry, producer of anything from tin cans to oil drums. Each group has its own diversified needs.

Such varied uses make possible the existence of many smaller steel manufacturers, known as *nonintegrated mills*. The latter buy ingots and basic sizes from the large plants and process them to fit the needs of particular classes of users. This is especially true of the many kinds of steel



Distribution of steel products. The major portion of steel is sold directly to large-scale buyers, who place orders for mill production in tonnage lots. The smaller manufacturers are the chief customers of steel warehouses, but emergency requirements, both large and small, are met by warehouses from their big and diversified stocks. (*Courtesy of Steelways.*)

alloys which are made to meet the specifications of the manufacturers of durable consumer goods, machines and parts, tools and dies, and countless other finished products.

The mills, both small and large, solicit directly the business of the manufacturer of steel products. Subsidiaries of the United States Steel Corporation sell steel for bridges, for wire nails, and for nuts and bolts. Bethlehem Steel subsidiaries build ships and offer the trade forged steel rolls. A subsidiary of the National Steel Corporation offers manufacturers cold rolled strip, and a Timken Company subsidiary advertises alloy steel rods and seamless tubing. The Midvale Company, makers of tool steel, advertises " . . . tool steel bars carried in wide assortment—all common grades and shapes warehouse stocked and ready for one day shipment . . . ask for Midvale's stock list . . . custom steel makers to industry."

An important agency in the marketing of steel sheets, rods, tubes, and rails is the jobber. Firms wholesaling such supplies are technically known

as *warehouses* in the trade. They serve the small user by keeping on hand, for quick delivery, stocks in the sizes and shapes that are required by small and medium-sized manufacturers of steel products (see advertisement below). The business of some of these warehouses has grown to such magnitude that they have been taken over by the large steel corporations and are now subsidiary companies.

GET IT QUICKLY FROM RYERSON STOCKS

JOSEPH T. RYERSON & SON, Inc., Steel-Service Plants at: New York, Boston, Philadelphia, Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee, St. Louis, Los Angeles.

DO YOU WANT A CURRENT LISTING OF RYERSON STAINLESS STOCKS?

We would be glad to send you the current Stainless Steel Stock List, showing sizes actually on hand in the following stainless products:

Plates	Squares	Tubing
Sheets	Flats	Pipe Fittings
Rounds	Angles	Welding Electrodes
Hexagons	Pipe	Fastenings

Copper. Among the domestic users of copper, there are fewer than one hundred firms who are in a position to buy more than a carload of copper at a time. Practically all sales are effected within a radius of ½ mile in downtown New York. Within this district are located the sales agents who sell practically all the copper marketed in this country from both domestic and foreign producers. Many of the large users of copper maintain offices in New York, through which the purchases are made. The majority of the sales agents are subsidiaries of the producers, although some of them, in addition to owning and operating their own refineries, represent other producers. There is, therefore, a close relationship between producers and refiners of copper and the few sales agencies.

The American Metal Company, Ltd., acts largely as a sales agency for the Cerro de Pasco Copper Corporation and handles some copper on contract from other sales agencies. The Anaconda Copper Mining Company markets practically all of its product through two of its own subsidiaries, the Metal Sales Corporation and the American Brass Company. The Phelps Dodge Corporation markets the product of its own subsidiaries, together with that of a few other producers, including the Calumet and Arizona Mining Company. Guggenheim Brothers market the production from a group of companies, comprising Kennecott Copper Corporation.

Utah Copper Company, Nevada Consolidated Copper Company, and others, all closely associated in control.

The user of copper, through his New York office, obtains quotations from one or more sales agencies. Prices seldom vary widely, and many firms make a practice of doing all their buying through one agency. Some firms place long contracts, paying for the copper at the market price prevailing when deliveries are made.

The conditions governing the marketing of copper are similar in most respects to the methods used in marketing the other nonferrous metals, except the precious metals.

Marketing of Farm Products. *Cotton.* Cotton is grown on relatively small farms, many of which are known as "one-mule" farms. There are also a few large farms owned by corporations and some by individuals who rent out sections to tenant farmers. After cotton is picked, it must be ginned before it is ready for the local market. Some farms have their own gins but most growers take their cotton to local establishments and pay a stated sum per bale for ginning. Cottonseed is frequently given by the farmer in exchange for the ginning operation.

The primary markets are villages and towns where baled cotton is first put on the market and sold by the producer. Cotton buyers go into almost every village and town where a ginnery is to be found. Interior markets are large towns and cities where cotton from primary markets is received and sold by primary buyers or mill agents. Such markets are usually the points of concentration for grading, compressing, assembling in commercial lots, and consigning to destination for consumption. They are regarded by the mills as the large industrial sources of their raw-materials supplies.

Only a few of the primary markets are organized, in the sense that there are any adopted rules governing transactions in them. Negotiations are usually quite informal. In many of these markets, after the cotton has been ginned and baled, it is hauled to an accustomed square or market street and sold from the wagons. Every railroad station that receives an appreciable amount of cotton for shipment is a market place. The following description is typical of what occurs in many of these local cotton markets:

When the farmer receives his bale of cotton from the gin, he often takes it immediately to the market square for sale. By the time the wagon has stopped, a cotton buyer asks "What do you want for that cotton?" The farmer may set a price, but ordinarily he asks what the market is and how much the buyer will give. The buyer makes an offer. If it is satisfactory, which it rarely is, the bale is sold without being cut. If it is refused, the buyer samples the bale and makes a second bid. If this is refused, the

farmer makes a counteroffer, and a direct compromise bargain is reached.

When the sale is made, the farmer is given a "ticket," which states the date, name of purchaser, number or gin mark of the bale and price paid. The farmer takes the bale to the cotton yard or local warehouse. It is weighed by a public weigher, and a weight receipt is given him. These receipts are taken to the bank or other place designated by the buyer, and the amount to be paid is calculated and paid to the farmer.

Buying cotton in a primary market. (*Allen Photos.*)

From the local areas, cotton often passes through several different markets before it reaches the mill. In the interior markets, there are generally located compresses and warehouses and the offices of cotton factors and merchants. At these central points, cotton is assembled from the surrounding districts, graded, compressed, and shipped to mills or to seaports for export.

Mills obtain their cotton through brokers located in important centers such as Boston, Gastonia, and Atlanta, known as *spinners' markets.* The brokers are in communication with the factors and cotton merchants in the interior and centralizing markets and sell on a commission basis for the account of these merchants.[1]

[1] The factor finances the farmer, furnishes supplies and equipment, and receives the cotton in payment.

The important functions performed by merchants in these markets are to buy and assemble large quantities of cotton which are shipped on demand; to classify or grade the cotton into "even-running" lots according to established standards; to carry, insure, and finance the storage of the cotton in warehouses until needed; and to sell to purchasers of spot cotton.

Tobacco. Nearly all the tobacco grown in the United States is sold through the tobacco auctioneer. Radio advertising by cigarette firms has familiarized the public with the chant of the auctioneer which sounds like gibberish to the uninitiated.

The baskets of tobacco leaves stretch in rows the length of the warehouse. The leaves have been stripped and tied together in fanlike shapes known as *hands.* There is just enough room between the rows of baskets to permit the auctioneer and buyers to move along quickly. As the warehouseman tosses down a hand of tobacco after making the first bid, the buyers go to work on the piles. They treat them roughly. Hands are jerked out all over the pile, and the buyers glance at them and toss them down. If they like the lot, they will bid against one another. A glance at the auctioneer is enough, and up the bid goes. A wink, a nod of the head, or perhaps a poke from the man next to him gives the auctioneer the sign that the bid is raised.

It is all done with incredible speed. The air seems full of flying tobacco particles, bits of leaf, and the line never stops; hardly even slows down. The buyers represent the big tobacco companies, seven or eight of them, and they are followed by speculators who occasionally buy in a lot that is passed up by the regular buyers and resort it with tobacco from other baskets so it will bring a better price.

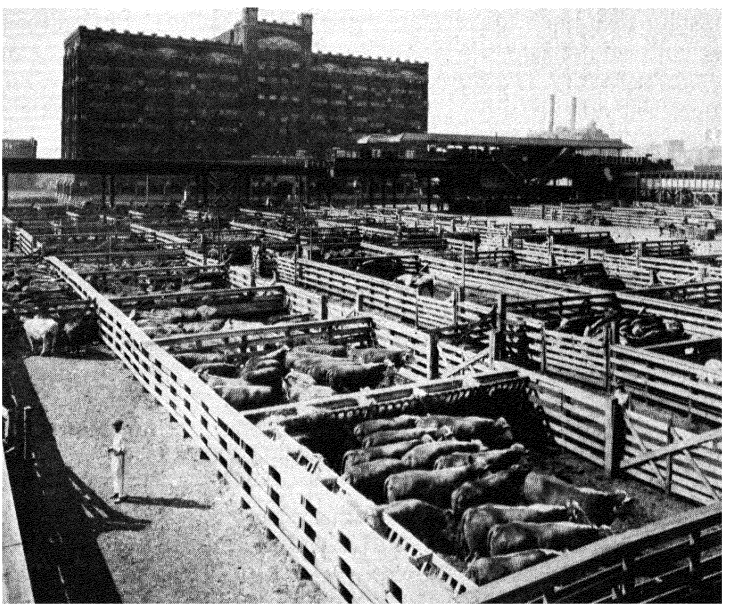
The chant goes on, the auctioneer rolling his eyes back and forth across the line of buyers, alert to catch any tiny sign that indicates a bid, voicing his disapproval by saying, "It should be more," and winding up every chant with the name of the buyer.[1]

Livestock. The development of transportation facilities and artificial refrigeration made possible a high degree of specialization in meat packing and caused the growth of large centralized packing houses. While great quantities of cattle, hogs, and sheep are still sold to local butchers, the major proportion of the livestock is shipped to the large meat packers and slaughterhouses in Chicago. There are also heavy shipments of livestock to the abattoirs located in the large cities in various parts of the country.

Livestock is raised for market under two essentially different sets of conditions. The ranches of the West and South specialize in the raising of stock for market and ship whole trainloads to stock farms in the corn

[1] Based upon an article by Russell Owen in *The New York Times Magazine*, May 25, 1947.

belt for fattening. From there the cattle are shipped directly to the stockyards in the packing centers. Another important source of supply is the small farm where livestock is only one of several commodities grown for sale. Since it is uneconomical to ship less than carload lots of livestock, it is necessary to assemble cattle, hogs, or sheep from these small farm areas and to combine them for shipment to the central markets. This assembling



Stockyards are located in the packing centers. (*Farm Credit Administration.*)

is done by cash buyers who buy the stock from the farmer, assemble them at convenient points, and ship them to central markets.

Central organized markets or stockyards are located near the packing centers. Shippers are usually represented there by commission merchants, who take care of unloading, feeding, and watering of stocks consigned to them. These commission merchants receive for their remuneration a percentage of the sales plus expenses covering the feeding, watering, and stockyards charges. The net proceeds, after these deductions are made, are then remitted to the shipper. Some of the larger sellers, who ship entire trainloads to market, accompany their stock personally or send their own representatives.

The packing houses, both local and distant, are the principal buyers in these central markets. They are represented by their own buyers who examine and pass upon lots, make and receive offers or counteroffers, and conclude purchases. Buyers in the large stockyard centers such as Chicago, St. Louis, and Fort Worth are in constant telegraphic communication with one another in order to ascertain price trends in the different markets. The biggest livestock market in the country is the Union Stock Yards of Chicago. Shipments of cattle arrive daily, and sales transactions are made chiefly between the hours of 3 and 9 A.M. Special rules governing the purchase and sale of livestock are enforced in the large organized markets through voluntary "livestock exchanges" or associations of producers, packers, shippers, and other middlemen which have been formed to stabilize marketing operations in the industry.

Hides and Skins. Hides used for leather are generally classified as "country" hides or "packer" hides. The latter are usually more carefully assorted and graded; and because of a greater degree of uniformity in killing the animal, the skins are more likely to be free from damage and blemishes. Country hides, on the other hand, have been prepared by local butchers or by farmers themselves, who generally exercise less care or less skill than do the more specialized employees of the large slaughterhouses. Yet they constitute an important source of supply for the leather tanneries.

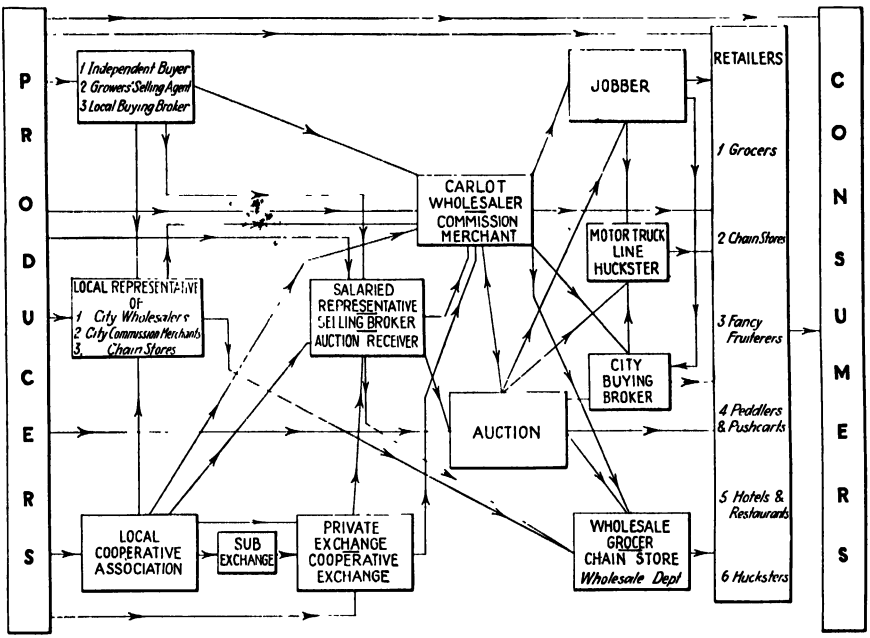
Unlike cotton or wheat, hides cannot be so well standardized that a description of the grades replaces personal inspection. Local storekeepers generally take them in trade from the farmers and butchers and ship them to central points where buyers for the dealers will gather enough to make a shipment. Most of the larger dealers are located in New York and Boston. Sales are usually made to the tanners through brokers.

Grains. One can hardly discuss the marketing of farm products without mentioning the grains which constitute by far the most important crops of the middle western states. Because of the quantities produced and traded annually and because of their bulk, transportation and warehousing play an important part in the marketing process.

The buyers in the local grain markets may be independent dealers, cooperative shipping associations, or operators of grain elevators. During the threshing season, shipments arrive in such large quantities that they must be removed from the local markets to central points that are equipped with adequate storage facilities. The local buyer pays cash for the grain as it is delivered and stores it in his own elevators, or he may ship it to a central market where it is stored in public elevators. Grain dealers protect their purchases against price changes by hedges unless they desire to speculate on the market.[1]

[1] This will be discussed in Chap. XX.

From local and central markets, grain moves to terminal markets, where huge reserve storage facilities are provided. The location of such markets is determined primarily by transportation facilities, which may be rail, water, or both. Chicago, Buffalo, Duluth, and Milwaukee are lake ports serving the grain belt and therefore are leading terminal grain markets. Minneapolis and Kansas City are important inland flour-milling centers.



Agencies and channels of distribution for fruits and vegetables. (*U. S. Department of Agriculture.*)

New York, Boston, San Francisco, and Portland, Ore., also serve as important terminal markets, primarily because, as seaboard cities, they offer export shipping facilities.

Grain shipped to terminal markets is often consigned to a commission merchant who offers it for sale on the basis of standard grades. It is purchased by a grain dealer or directly by flour and cereal millers. It then remains in storage or is shipped at once to the mill for immediate use or to a vessel for export. Legal delivery from grain elevators is generally made by transferring warehouse receipts to the buyer.

Commission merchants, in addition to effecting the sale for the shipper, arrange for the inspection, grading, and weighing of the grain. These services usually are performed by employees of an exchange or by government officials. In some markets, this work is done by licensed firms who issue official grade and weight certificates.

Fruits and Vegetables. In season, truck farmers bring their fruits and vegetables to near-by city markets where they are sold directly to wholesalers or to retail merchants. Larger growers, cash buyers, and small cooperatives consign their goods to commission merchants for sale in the wholesale markets. Important agencies for the marketing of fruits and

Auctioning cucumbers. (*Farm Credit Administration.*)

vegetables are the auctions. These are located in large cities in the East and in the Middle West. In the auction markets, there are usually various stalls at which the goods are put up for sale. The highest bidders get the goods and are privileged to choose the quantity that they need. If they do not purchase all the goods, the bidding starts over again until all are sold. As a result, prices at the opening may be higher or lower than those which continue to be established until the market closes.

Other Farm Products. A discussion of methods used in marketing even the most important farm products would require more space than could be allowed in this brief survey of marketing. Each product, as has been

shown, presents distinct problems and requires special techniques. Poultry marketing differs considerably from the methods used in selling livestock, and the marketing of tobacco, wool, and dairy products presents wide variations in procedure.

Large producers generally ship to well-organized markets; small growers sell to buyers who assemble and ship to central points. A considerable part of the produce of certain farms is sold directly by the farmer to near-by consuming markets. In the development of direct sales to consumers, the parcel post and roadside markets are important factors. The former permits of the sale of almost all the general garden or truck farmers' products directly to consumers in near-by or not too distant cities. Roadside markets are commonly located in areas producing fruits, berries, and vegetables. The increased automobile traffic and improvements in roads have led to a greater degree of direct selling, especially on the part of the small farmer.

The Development of Marketing Cooperatives. The seller of farm products is often a victim of marketing conditions beyond his control. Once his goods have been shipped, he is at the mercy of buyers, agents, or commission merchants, who, in turn, have little control over the marketing situation that confronts them when they put such goods on sale. Farmers have often complained that many of their shipments fail to cover packing, freight, and marketing charges. Although their crops are excellent, shippers frequently have "red ink" seasons because of unforeseen price declines at the time of marketing. They find themselves competing with many other sellers and quite frequently ship to glutted markets. Instead of exposing themselves to this haphazard manner of distribution where no organized attempt is made to regulate shipments with relation to demand, groups of agriculturists have seen fit to establish cooperative associations.

Another important reason for the formation of marketing cooperatives among some classes of farmers was the existence of the concentration of buying power in the hands of a few powerful firms that, by buying through a common agency, virtually controlled the market. This was the situation which led to the formation of some of the tobacco growers' cooperatives. The Federal Trade Commission in its report "Prices of Tobacco Products," 1922, stated: "While no conclusive evidence was found of collusion to depress the prices paid to the growers of the 1920 leaf, it appears that a few larger buyers had a dominant position. . . . "[1] Eighty-five per cent of the entire tobacco crop of 1919 was purchased by only 13 domestic and foreign manufacturers. The dependence of the grower upon the buyer was even more pronounced in particular grades of tobacco, since, at that

[1] Quoted from H. R. Seager and C. A. Gulick, "Trust and Corporation Problems," p. 189, Harper, 1929.

time, 90 per cent of the burley crop was acquired by six concerns and 64 per cent of the dark tobaccos was purchased by the French and Italian tobacco monopolies.[1] Tobacco growers, as a step to protect themselves against such price domination, formed cooperatives. The most important of these were the Burley Tobacco Growers Cooperative Association, Dark Tobacco Growers Cooperative Association, and the Tri-State Growers Cooperative Association.

In New York State, dairy farmers faced a similar condition. They complained of the low prices that they were receiving from the few large firms that dominated milk distribution, while at the same time consumers were complaining of the high prices that they had to pay for dairy products. This led to the formation of the Dairymen's League Cooperative Association, Inc., a farmers' marketing cooperative.

Probably few people realize that widely known trade-marks, such as Sunkist, Blue Goose, Sun Maid, Sunsweet, and Dairylea, are the property, not of single large-scale producers, but of organizations composed of thousands of independent farmers. Marketing cooperatives have grown rapidly in the last two decades and in some cases have been exceptionally successful, becoming in themselves powerful marketing corporations. Not only citrus fruits but a wide variety of fruits and vegetables and other agricultural products are now successfully marketed by cooperatives. Cotton, milk, cheese, tobacco, livestock, and wool are only a few of the products in the marketing of which cooperatives play an important part (see table on page 352).

Cooperatives and Federal Legislation. Although cooperatives existed long before the passage of the Sherman Anti-trust Act, they were regarded as combinations in restraint of trade within the meaning of the act and therefore illegal.

Section 5 of the Clayton Act of 1914 exempted labor and agricultural associations: "Nothing contained in the anti-trust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural associations, instituted for the purpose of mutual help, and not having capital stock or conducted for profit." This, however, still made the predominant form of cooperative illegal, since most of the cooperatives were stock organizations.

Constant agitation in Congress on the part of the farm bloc led to the passage of the Capper-Volstead Act of 1922. It provided that agricultural producers such as farmers, dairymen, and fruitgrowers may act together in associations in "collectively processing, preparing for market, handling and marketing their products in interstate and foreign commerce." These associations can be corporate or otherwise, with or without capital stock.

[1] *Ibid.*, p. 188.

Four years later, the already broad powers granted to associations of agricultural producers were further amplified in the act of 1926. Section 5 of this law provided that persons in such associations might acquire, exchange, interpret, and disseminate marketing information. Under this act, the U. S. Bureau of Agricultural Economics established a separate division of cooperative marketing to conduct research and disseminate information regarding the development and problems of farmers' cooperative business organizations. In 1926, Congress also amended the income-tax laws so as to exempt cooperatives and their subsidiary corporations from the payment of income taxes. The Agricultural Marketing Act of 1929 set up the Federal Farm Board with unusually broad powers and resources. This body was organized to aid the farmers primarily through the medium of their cooperative associations. The establishment of the Agricultural Adjustment Administration in 1933 and subsequent farm legislation were further steps in the direction of encouraging cooperative effort among the farmers.

The rapid expansion in volume of sales handled by cooperatives resulted in their emergence as "big business" enterprises occupying dominant positions in their respective fields. Threats of monopoly powers exercised by some of these cooperative associations led to proposals that they should again be subjected to antitrust legislation. Also, during 1947–1948, measures were introduced providing for the taxation of cooperative association earnings.

Objectives of Cooperatives. Perhaps the most important objective of the cooperative association is the substitution of orderly marketing for the dumping of farm products—a practice that too often accompanies individual enterprise in marketing. When a farmer acts individually, he is often forced by a lack of cash or sufficient storage facilities to sell most of his fruit or grain as soon as it is harvested. The effect of large shipments, greatly in excess of the momentary needs of the market, has been to reduce prices to a point below the average that might have been received were the sale of the product spread over a greater period of time or over a larger geographical area. The bargaining power of the farmer is strengthened when he joins a cooperative association. Individually he is neither so skillful a bargainer nor so powerful financially as the buyer. Organizations have helped to eliminate many trade abuses and have given the producer equal or superior bargaining power in the market.

Cooperative associations have not been content merely to regulate the flow of goods so as to obtain more favorable prices. Many of them have been exceedingly active in sales promotion and in stimulating consumer demands. Some have developed direct contacts with the retail trade and have conducted extensive national advertising campaigns. Grad-

ing and trade-marking of products have resulted in higher qualities and in a decided preference on the part of the consumer for goods so branded.

Economies in marketing are an important purpose in the formation of cooperatives. Instead of the costly less-than-carload lots, solid trains of merchandise are shipped, resulting in considerable savings in freight costs. Grain elevators operated by cooperative associations usually handle a

TABLE 15.—FARMERS' COOPERATIVE SELLING ASSOCIATIONS *

Product	Number of associations	Membership	Sales
Cotton	530	266,000	$ 178,000,000
Dairy products	2,214	726,000	1,294,000,000
Fruits and vegetables	916	162,000	784,000,000
Grains, beans, rice	2,285	484,000	1,286,000,000
Livestock	661	695,000	730,000,000
Nuts	46	46,700	200,000,000
Poultry and products	160	130,600	225,000,000
Tobacco	12	122,000	27,000,000
Wool and mohair	130	122,500	35,000,000
Miscellaneous products	446	140,200	76,000,000
Total	7,400	2,895,000	$4,835,000,000

* The above figures for 1944 from *Agricultural Statistics*, 1946, U. S. Department of Commerce.

greater volume than do private elevators and thus derive the benefit of lower costs per bushel. Cooperative marketing associations were an important influence in the reduction of acreage to prevent overproduction long before the government bureaus took these steps in attempting to find a solution for the farm problem. Standards have been raised through improved methods of horticulture and by grading all lots received. In addition, various marketing services are provided at minimum cost, including transporting, warehousing, insuring, and financing.

Corporate Organization of Cooperatives. Whereas the earlier local organizations were to a large extent simple membership pools, many of them were later incorporated, and at present most of the cooperative associations are corporations. Membership in the incorporated association is represented by the ownership of one or more shares of stock. Unlike the ordinary corporation, however, control is democratic, since each member has an equal vote. Earnings, instead of being divided entirely on the basis of

stock ownership, are divided largely on the basis of the value of the individual's business done through the cooperative.

Weaknesses of Cooperative Marketing. Although cooperatives have been responsible in no small measure for better marketing, better grades, and higher standards in the selling of agricultural products, they have not always been successful. Some of the promoters of large centralized associations have been too sanguine in their promises to members or have attempted to operate on too ambitious a scale. Each year, many new cooperatives are formed and hundreds of others go out of existence. In many cases, an association gives up its individual existence in order to become part of a larger organization in which the farmer members have less power or control. In some instances, the farmers of a community stop raising the product that the cooperative has been formed to market, and because of this fact there is no further need of an association.

Some associations go out of business because they were poorly planned or because of a lack of capital. Other associations are discontinued because of an inadequate volume of business, because of competition that they cannot meet, or because of a lack of intelligent educational work among members, and a few because of dishonest officers or employees. However, many associations have ceased to function because of inefficient management or lack of cooperation among the members. Most agricultural cooperatives have the weaknesses of large organizations which depend upon the loyalty of thousands of members whose allegiance cannot, in the nature of the case, be secured through ironclad agreements.

It must be remembered also that abolishing the middleman does not eliminate the need for his functions. A highly efficient distributing organization may function more smoothly and cheaply than one organized by the farmers themselves. However, despite these weaknesses, the cooperative organizations, with the aid of the government, have expanded rapidly and will probably continue to grow in importance in the marketing of agricultural products.

Questions and Problems

1. Many types of agencies are employed in the marketing of raw materials. State the functions and forms of compensation of selling agencies in each of the following raw products: coal, steel, cotton, cucumbers, hides, wheat. Distinguish between the agent and the broker, the commission merchant and the jobber.

2. A carpenter buys a pound of nails. Describe the steps in the marketing of this product from the ore to the manufacturer.

3. Compare the marketing of anthracite coal with that of bituminous coal. What are captive mines?

4. The Bethlehem Steel Company builds ships and bridges and makes steel for wire and nails. Explain the marketing methods for each of these.

5. Describe the marketing procedure in the primary market of a product like cotton.

6. What products are sold in terminal markets? In auctions? Explain the system of trading in these markets.

7. How do you account for the growth of marketing cooperatives as compared with consumer cooperatives?

8. What advantages do marketing cooperatives offer their members? How do cooperatives differ from ordinary corporations with respect to purpose? Control? Sharing of profits? What are the weaknesses of cooperatives that caused many to go out of business or to lose members?

9. Discuss the legal status of cooperatives with respect to the antitrust laws, taxation, corporate powers.

10. Although the consumer is usually far removed from primary markets, he is closely affected by them. Explain.

CHAPTER XVII

WHOLESALE AND RETAIL TRADE

The Importance of Middlemen. The discussion in the previous chapter was confined chiefly to the marketing of raw materials the bulk of which are sold to producers for further processing. In other words, attention was directed primarily to basic industrial markets for minerals and for agricultural staples. The greater proportion of trade in the United States, however, consists of a large variety of manufactured or partly transformed goods sold to industrialists and of finished manufactured and agricultural "consumer products." As in the case of raw materials, many types of market structures have developed in connection with the distribution of these commodities (depending upon varying requirements for transportation, assembly, financing, and other specialized services).

In some classes of producers' goods, the gap between producer and industrial consumers is a small one and requires the services of very few middlemen—if any. Especially is this true in the case of equipment involving special installations or made in accordance with customers' specifications. Manufacturers frequently deal directly with the purchasers of products of this description and give attention to their individual needs. Occasionally branch offices or affiliated sales and service agencies handle this trade.

A large assortment of products that enter the channels of distribution do not, however, lend themselves to this simple, direct method of dealing between producer and consumer. They must be distributed among hundreds of thousands or millions of consumers, many of whom might be located at great distances from the centers of production. The physical problems of shipment and storage and the special needs of some classes of buyers further complicate the situation when mass distribution occurs.

In the distribution of certain manufactured products, such as textile piece goods, the several stages of processing, from the spinning of thread to the final retail sale of the dyed or printed fabric, may involve a still more complicated system of middlemen. Do all these distributors serve a useful function, or are they unnecessary intermediaries who add materially to the cost of doing business? What do they do to justify their position in the marketing scheme?

What the Middleman Does for the Producer. Middlemen have often been blamed for the great difference between cost of production and final selling prices. They have been accused repeatedly of performing unnecessary functions, of increasing marketing costs, and of taking profits the elimination of which would result in substantial savings to the ultimate consumer. The only satisfactory defense of the wholesaler's position in the marketing system lies in the nature of his service in the distribution of merchandise and in the proof that such service, instead of increasing costs, really effects economies. Manufacturers have frequently found that wholesalers render them services worth more than the savings that might be effected by direct selling to retailers. A brief consideration of the marketing problems of certain classes of producers will serve to illustrate this point.

Specialization on the farm and in the factory results in the production of great quantities of single items that constitute only a small part of the retailer's stock in trade. He may require a large collection of miscellaneous items to meet the needs of his customers or wish to have shipments of goods at infrequent intervals, although production is maintained at a fairly steady rate. Moreover, most retailers operate on a relatively small scale, and many are financially weak; they require goods in small lots on convenient credit terms. This means that the one who supplies them with merchandise must possess adequate storage facilities, must have an ample supply and a large variety of merchandise on hand for quick delivery, and must offer financial assistance in the form of credit.

Few producers who distribute through retailers can afford to organize and maintain sales forces large enough to be able to sell directly to the retail trade. A large salmon cannery, for instance, turns out only one product—canned salmon. This comes in various grades and sizes, each of which would probably constitute but a small and relatively unimportant item in the regular stock of a retail grocer. A cannery would have to develop a marketing organization entirely out of proportion to the value of its sales in order to supply retailers with their current needs. Most canneries turn the entire season's output over to a wholesale distributor who puts his own brand or label on the can. The salesman for the wholesale grocery house takes an order that might consist of many kinds of soap; a large variety of canned fruits, vegetables, and fish; coffee; cereals; flour; and confectionery.

Similarly the salesman for the drug or hardware wholesaler has literally hundreds of items from which his customer can choose to make up a comparatively small order. There are in the United States approximately 1,400 towns with a population of 2,500 to 5,000 and over 13,000 villages with less than 2,500 inhabitants each. About one-third of the population

lives in other rural sections.[1] The retail merchants supplying this trade operate on a small scale and buy in small quantities. It is not uncommon to find, on a retail merchant's hardware bill amounting to $75, items from 20 or more different factories.

According to the National Wholesale Dry Goods Association, an analysis of one day's business of a middle western dry-goods wholesaler indicated that 88 orders received from the road called for 1,849 items supplied by 1,121 different manufacturers. They averaged 21 items and 13 manufacturers per order.

The wholesaler relieves the manufacturer of the necessity of having a large sales force. He makes possible a greater degree of specialization and mass production and frees the producer from the burden of handling small quantities of different goods. He buys in quantities, receives carload lots, and distributes certain classes of goods with other goods, thus effecting savings in freight.

Wholesale merchants store stocks of seasonal goods from the time of production until the merchandise is demanded by the retail trade. This leaves the manufacturer free to devote his resources to production activities. The wholesale distributor often pays cash or advances money to the manufacturer and thus relieves him of the necessity of extending the long credit terms that many retailers require.

Distributors' salesmen know the buyers and are familiar with their buying habits. When a new product is introduced, there is less sales resistance encountered by the representatives of the local wholesaler than might be experienced by the producer seeking independent distribution. Superior delivery services, handling of sales returns, allowances and adjustments, and special attention to unique customer requirements are further services offered to producers by these middlemen.

How the Wholesaler Serves the Retailer. To the retailer, the services of middlemen who handle the goods of certain classes of producers are of utmost importance. Should some of these retailers attempt, for example, to buy even a part of their stock directly from the makers, they would be faced with a difficult task. In 1939, a period not affected by war or postwar production, there were in the United States approximately 50,000 manufacturers of food and kindred products, 20,000 manufacturers of apparel, and over 9,000 manufacturers of drugs and drug sundries. To visit but a small percentage of these firms, to receive their catalogues, or to see their salesmen would be almost impossible.

The wholesaler's salesman sometimes offers valuable suggestions regarding the display of goods; he may take back slow-moving items and exchange them for those which have proved to be good sellers or suggest brands to

[1] U. S. Census Bureau figures for 1940.

replace other brands. Often he cooperates with the retailers by offering them "specials" or "leaders" which will enable them to compete with a local chain store.

In short, the wholesaler offers the independent retailer numerous types of goods in convenient quantities, quick service, favorable credit terms, valuable merchandising aids, and assistance in combating the competition of the chain store.

Types of Wholesale Middlemen. Thus far in the discussion, the middlemen between producers and retail distributors have been referred to under the blanket term of *wholesaler*. In a very broad sense, the term wholesaling describes the functions of all those establishments which sell to retailers, to wholesale merchants, and to industrial consumers. Within this category, there are, however, many specific varieties of distributors, some of which deserve special attention.

Mill Agents and Sales Agents. Manufacturers frequently wish to control the prices and terms of sale of their products and yet relieve themselves of the burden of selling their products to the trade. The mill agents or manufacturers' agents supply this need. They sell part of the output of certain manufacturers with whom they establish continuous relations. Usually they are given a fairly large, though restricted, territory of operations—each agent serving an exclusive geographical area. They generally place their orders at factory prices, receiving as compensation a commission on all sales in their territory. Such agents represent several noncompeting mills or factories in order to round out their lines and reduce their selling expenses. Their chief function is selling, although some of them also warehouse the products that they handle. Few of them offer additional services. Their principal customers are other wholesalers, jobbers, large retailers, or those who are in a position to purchase in case lots.

Closely identified with mill agents, but differing from them in certain respects, are selling agents and commission houses, such as those found in highly specialized textiles and hosiery trades. One distinguishing feature of these middlemen is that they generally sell the entire output of a given line of goods for one or more mills. Similar to the mill agents, they maintain continuous relations with the producers and sell on a commission basis. Unlike these latter middlemen, however, they offer additional services such as the extension of credit, advertising, and sales promotion. Moreover, they are seldom restricted in their selling territory and have full authority with respect to the establishment of prices and terms of sale.

Wholesale Merchants. Used in the narrower and more conventional sense, the term wholesale merchant serves to designate the middleman who distributes products to retailers and to large consumers. These merchants

are sometimes known as "service wholesalers or full-function wholesalers" and perform all the principal wholesale functions.

They buy merchandise outright and sell on their own account. They maintain places of business including warehouses for the storage of surplus merchandise required by their communities. In most of the trades, they usually sell to dealers by means of salesmen who call upon the trade regularly. They extend credit and make deliveries. They assemble certain lines of merchandise in large lots and redistribute them in small quantities. In some trades, particularly where the merchandise is of a perishable nature or derived from unstandardized production, the wholesale merchants must perform the function of grading and standardization. Finally, it is necessary that the wholesale merchants assume the risk incident to their type of business activities.

Some wholesalers carry more general lines than others who have a tendency toward specialization. Among the former is the hardware wholesaler, who includes in his stocks hardware, cutlery, crockery, table and shelf oilcloth, and automobile accessories. In a similar manner, the wholesale grocer may, in addition to regular lines of canned goods and package goods, sell butter, cheese, flour, coffee, tea, sugar, and smoked meats.

The tendency toward specialization among retailers has its counterpart in the *specialty wholesaler*. Instead of the general lines described above, some wholesalers handle coffee and teas only; others, paints and painters' supplies; and still others, automobile tools and parts exclusively. In the petroleum trade, such wholesalers are known as "bulk tank stations." When wholesalers confine themselves to a few specific items instead of to broad general lines, they have the usual advantages of specialization. It makes possible expert knowledge, a larger assortment of the goods carried, and better service to the retailer. The salesmen, because they sell only a few items, know their merchandise thoroughly and are in a better position to understand the demands of their customers.

Like all other types of business establishments, wholesalers vary widely in size, importance, and scope of operations. Some are small firms, distinctly local in character, catering to the needs of retailers in a restricted area. Others are national in scope. The latter market goods under their own brands and trade-marks; examples of this type in the grocery line are R. C. Williams & Company, Austin, Nichols & Company, and Francis H. Leggett & Company. In the dry-goods field, important national wholesalers are Butler Brothers and Carson Pirie Scott & Company.

Jobbers and Distributors. Although the terms *wholesaler* and *jobber* are often used interchangeably, a differentiation is sometimes made between the two, both as to stocks carried and as to merchandising methods. The merchandise jobber supplies the general store and for that reason has to

carry an assortment of lines rather than varieties of one particular class of goods. Some jobbers sell dry goods, notions, hardware, and drug specialties. It is not unusual for the same jobber to carry groceries, tires, and farm implements. The types of goods carried in stock are determined largely by the needs of their customers. The same salesman may, in that way, offer the retailer the greater part of the goods that form his stock in trade.

Merchandise jobbers sell regularly the products of some factories, but a good part of their stock in trade consists of odd lots, or "jobs." One advantage of this type of wholesaler is that the business can adjust itself more readily to changes in demand.

Because the term *jobber* seems to imply haphazard merchandising of odd lots, there has been a tendency to drop it in favor of *wholesaler*, especially among those middlemen who handle staple brands of merchandise and who deal regularly with the same manufacturers. In certain lines, however, wholesale merchants frequently operate under the name of jobbers and no distinction is drawn between the terms.

Industrial distributors who specialize in the distribution, servicing, and installation of machinery and equipment for manufacturers, construction contractors, and transportation companies also perform a wholesale function. Most of their sales are made to industrial consumers or to merchants for use rather than for resale and are frequently closely associated with the producers of such supplies and equipment.

Other Types of Wholesalers. Many other types of middlemen who perform a wholesale function might be cited. Some wholesalers, in addition to distributing the goods that they handle, engage in manufacturing operations to a limited extent. In the textile trades, in particular, this is done by a group of middlemen known as *converters*. They purchase gray goods from the textile manufacturers and bleach, dye, print, or starch these cloths for wholesalers and retailers in finished piece goods or for the cutting-up trades. Occasionally the style risk in printed fabrics is assumed by these middlemen, although some of them work on a custom-order basis. Many of the manufacturing operations that they handle are given out on jobbing contracts.

Brokers and commission merchants are sometimes classed as wholesalers. It is their function to arrange for the closing of transactions between buyers and sellers. They differ, however, from most wholesalers in that they do not take title to the goods which they buy or sell. Brokers seldom even take possession of the goods. They merely arrange for a transfer of title and receive a commission or fee based upon the value of the goods that they handle for their principals. Commission merchants, on the other hand, may be called upon when occasion requires it to condi-

tion, sort, or warehouse the goods that they sell. They receive shipments of the commodities on consignment and are usually paid a percentage commission of the selling price of the products sold.

Wholesalers engaged in international trade perform a variety of functions. Export agents or exporters specialize in selling in foreign rather than in domestic markets. They sell the entire output of a mill or of several mills; they are often given exclusive selling rights in one or more countries; or they may simply buy large lots of goods from many different manufacturers, without establishing any continuous relationships with them. Their sales are largely to importers, wholesale merchants, and industrial consumers abroad rather than to the foreign retail trade. Importing agents perform essentially the same functions as do sales agents in domestic trade, except that they represent foreign producers.

Cooperative Wholesalers. Within recent years, the independent retailer has experienced keen competition from department stores, chain stores, and mail-order houses. In order to overcome the disadvantage of higher prices due to indirect buying on a small scale, many retailers have formed cooperative buying associations. These function in most respects like other types of wholesalers except that the usual wholesale profits revert to the customers as dividends on purchases. Cooperative wholesalers and purchasing agents tend to specialize in the goods required by their members. Usually only staple lines are handled, especially those which offer larger discounts for quantity purchases.

Decline in Importance of Middlemen. In some lines of industry, the wholesaler has rendered himself almost indispensable both to the producer and to the retailer. Yet there is a growing tendency toward the elimination of middlemen, even in the grocery, dry-goods, and hardware lines. More manufacturers are tending toward direct selling, and more retailers are buying from original rather than from secondary sources.

The causes for the declining volume of sales of wholesalers are varied. The predominating influence is the growth of chain stores and large department stores whose operations are on a sufficiently large scale to permit direct purchases from manufacturers. Another factor is the continued activity of retailer cooperative buying societies. In farm products, cooperatives have made large inroads into the sales of wholesale distributors.

The shift in trading areas has weakened the dry-goods wholesaler by lowering the sales of the small-town retailer and the country store. Automobiles and good roads have enabled people to travel greater distances to do their shopping. Many who live on farms and in small towns now drive to cities and make their purchases in department stores.

The growth in advertising led many manufacturers to build up a great demand, which eliminated the need for salesmanship or sales development

on the wholesalers' part. The manufacturer thus approached the public directly by opening distributing branches at convenient points. This policy has been limited to certain lines of goods, depending upon the extent to which the manufacturer is capable of supplying all or most of the necessary stock of a retailer. In such trades as automobiles, hats, men's clothes, and shoes, the entire merchandise of a retail shop can be supplied by a single producer. This has led to direct selling and to the establishment of company-owned retail chains on the part of some manufacturers. On the other hand, in the hardware, grocery, drug, and stationery fields, the wholesalers have continued to remain fairly strong, even though certain manufacturers in these lines have established independent distribution. This is because of the many other products which these stores are forced to carry.

A final reason for the tendency on the part of certain producers to assume the distributive functions of the wholesaler is that they desire more specific attention to the sale of their particular products. Wholesalers are accused of selling competitive goods side by side and of failing to "push" a given product sufficiently. Occasionally they *do* emphasize one product more than another in their selling. This antagonizes the producer whose commodities are being sidetracked, and he seeks independent distribution.

Measures Taken by Wholesalers. Wholesalers have not been unaware of the trend toward direct manufacturer-retailer dealing. They have tried various expedients so as to revive and build up declining sales. Some have established private brands, which they advertise and offer as "leaders"; others have gone so far as to organize groups of stores into syndicates. Examples of the last case are the Royal Scarlet Stores and the American House Groceries, which, although individually owned, feature the products of a particular wholesaler and in appearance resemble chain stores. The Clover Farms Stores Corporation, a chain initiated by an Ohio wholesaler, has a membership of over 2,500 stores owned by independent grocers and meat merchants. The organization serves a territory reaching from Maine to Kansas, and the members are supplied through five wholesale depots located in the leading distributing centers.

Several wholesalers have altered their selling policies—restricting their lines to a smaller number of wisely chosen items and embarking upon an aggressive sales campaign in offering these commodities. They have succeeded in proving to many producers serving large numbers of small retailers that they are capable of handling the distribution of their products more efficiently and at less cost than the producers themselves could do it. This is particularly true of local wholesalers who attend to the wants of their respective territories and give retailers quicker service than they could obtain if they ordered directly from the producers.

Moreover, the wholesalers, aware of renewed efforts which usually accompany a rise in prices to "cut out the middlemen," have taken steps to unite in order to defend their interests. This movement toward a more united front among middlemen in the secondary markets has arisen as a result of their failure to cope individually with the problems of direct selling by the manufacturers and of direct buying on the part of large retail combinations.

The wholesaler as such, however, is not doomed. For many products, he still constitutes the only adequate factor in distributing goods; and in many instances, a sufficient volume of sales can be secured most economically only through the jobbing system of distribution. Small orders and emergency demands are thus reduced, and production schedules can be stabilized. The place of the middleman in marketing procedure is largely determined by the importance of his services and the relative costs at which they are offered. Just as industrial or productive efficiency has been stressed in the past, the future will undoubtedly see an increasing emphasis upon greater efficiency in distribution.

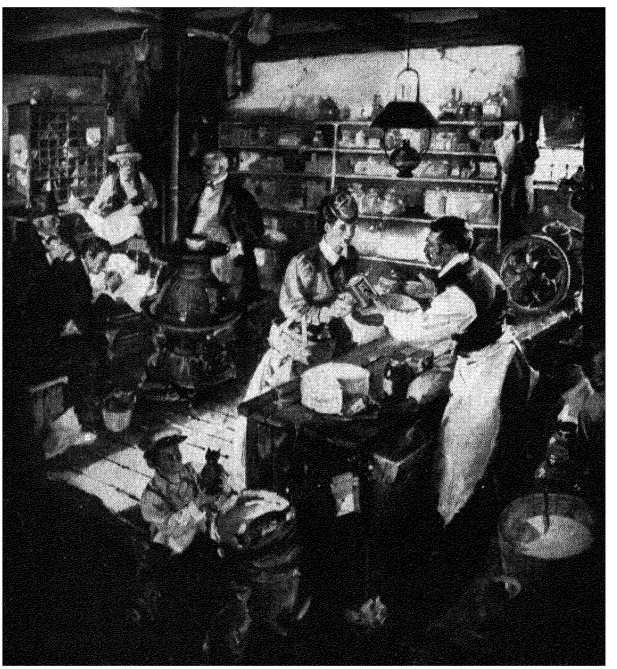
Retail Trade. *Changes in Retail Selling.* The selling of goods to consumers used to be a simple process. The general storekeeper kept a variety of merchandise that he believed satisfied his customers. His stock ranged from groceries and dry goods to farm implements and hardware. His was a miniature department store. Since he could not sell a sufficient volume of one type of goods, he had to carry a wide range, with small quantities of each. His purchases were infrequent, and he did not change the character of his stock for years.

The general store of 50 years ago, neighborly and picturesque with its jumbled stocks of bulk groceries, notions, shoes, clothing, and hardware, would probably dismay the consumer of today out to buy food for the family table. In its stuffy, gloomy interior, vegetables and fruits were available only when in season locally. Sugar, salt, potatoes, dried apples, and beans in open bags had no protection from pollution. Everyone's hands dug deep into the open cracker barrel. The molasses barrel was infested by flies. Dried fish and cheese lay exposed on the counter. Pickles were dipped out of kegs. As refrigeration was unknown, tubs of butter and lard were kept in the damp cellar. There were a few cans of "cove" oysters, salmon, tomatoes, corn, peas, and peaches.

There are still many survivors of this type of retail store, particularly in rural districts and in sparsely populated areas. Limited local needs, coupled with low purchasing power, prevent the spread of additional retail facilities to these sections.

With the growth of large urban communities, opportunities for specialization naturally arose. The general merchandise store was replaced by

single-line stores and specialty shops catering to the needs of limited groups of customers. As population increased, it became possible for several retailers, handling identical merchandise, to do business in the same neighborhood. Enterprising merchants expanded their scale of operations, either by enlarging their outlets or by opening branch establishments.



The retail store of 50 years ago. (*Courtesy of Jones & Laughlin Steel Co. Newman-Schmidt photo.*)

Others saw the possibility of mass retail distribution by maintaining central storehouses of commodities which they could readily ship in many directions upon the receipt of written orders from customers. The latter tendencies gave rise to large-scale retail units in the form of department stores, chain stores, and mail-order houses. This process of integration, particularly in the case of the department stores and mail-order concerns, led to a restoration of a "general merchandise" type of outlet, with the exception that within these larger sales organizations there is found a high degree of separation of sales into specialized divisions.

These movements, coupled with the general improvements that occurred in transportation and communication facilities, have greatly intensified competition in retail trade. Consumers do not have to rely upon one or two local stores in purchasing their goods. Dozens of retail outlets are ready to serve them.

The buyer has been taught to insist upon specific brands. (*Courtesy of Container Corp. of America.*)

The parcel post enables mail-order houses to render prompt deliveries of merchandise which can be selected from well-illustrated catalogues. Large metropolitan department stores extend their free delivery service to a radius of 50 miles or more. It is comparatively simple for rural buyers to take a bus or to drive their cars to the nearest shopping centers. The automobile has brought the city closer to millions of rural dwellers.

Motion pictures and newspapers reveal the latest style trends to the residents of the smallest town. There is no marked difference in the clothing of the city dweller and the farmer, and this applies especially to

women, for whom style has a strong appeal. No longer are they fully satisfied with the good old staples sold from time immemorial by the local retailer. Style has become more important than long-wearing qualities; and unless their local dealer can keep up with the rapidly changing times, many of them do their shopping in the city.

Moreover, a single line of merchandise does not always suffice. Today, the retailer has to sell what his customer wants and demands. Whether he likes it or not, he must keep on hand many brands of the same commodity. Coffee, soap, tobacco, butter, oil, sugar, and even oranges are no longer sold as *such*. The buyer has been taught to insist upon specific brands and to accept no substitutes.

To review even briefly the characteristic features and methods of operation, not to mention the problems of these many classes of retailers, would be far beyond the scope of this volume. Consequently, the remainder of this chapter will be limited to a short summary of the characteristics of a few of the major types of retail distributors.

The Unit Store. *Types of Unit Stores.* Both numerically and from the standpoint of aggregate sales, the independent store is still the most important form of retail outlet. The majority of such stores are owned by individual proprietors, although many of them are operated by partners or are corporate in form. The identifying characteristic of this type of establishment is that it is not connected with any other sales unit. However, where two or three branch stores are maintained, the business is still considered an independent, rather than a chain, store.

"Neighborhood stores," or those established in local business districts, are of this type. In fact, unless they are chain stores, they fit this description. They vary widely in kinds of merchandise sold, which may be groceries, drugs, stationery, hardware, dairy products, bread, jewelry, shoes, haberdashery, dry goods, confectionery, etc. They vary also with reference to volume of sales and with respect to the quality and prices of the merchandise handled. Some operate as "bargain stores"; others as one-price establishments. Certain stores carry a general clothing line; others sell women's wear exclusively. Some provide elaborate services, dressing rooms, and ornate fixtures; others offer few or no conveniences apart from their function of providing a market place.

Advantages of the Unit Store. The opportunity of the smaller independent retailer to establish personal contact with his customers and to adjust his lines to their tastes is one of the major advantages that he may realize in competition with larger scale retailers, particularly the chain stores which specialize in standardized or fixed lines of advertised goods.

The neighborhood store generally sells "convenience goods." The owner knows the needs of his local market. Except where retail codes, local

ordinances, or merchants' associations in a community forbid it, the independent retailer usually arranges his business hours. He may open his shop for a few hours on Sunday mornings; on week-day evenings his goods are available long after his chain-store competitors have closed. Moreover, the proprietor of a local independent store is usually personally acquainted with his customers and therefore has a strategic hold upon their patronage. A liberal credit policy, prompt deliveries, and a satisfactory line of merchandise, coupled with his acquaintance with the desires and prejudices of each customer, account for his ability to survive in the face of the keen price competition offered by his large-scale competitors.

The typical independent retailer has a small total overhead cost. On a unit basis, his overhead cost per dollar of goods sold is frequently higher than that of his large-scale competitors, particularly when business is active. During periods of depressed business conditions, however, when sales fall off, the heavy aggregate overhead of the large department store, which depends upon mass selling, usually results in losses that are relatively higher than those suffered by the smaller shop. It is difficult for the larger organization to make sudden sweeping readjustments in its fixed costs. The unit store, with low overhead expenses, is therefore more flexible under changing market conditions.

The independent retailer is sometimes aided by the manufacturer of advertised brands. Slogans such as the following are familiar to those who read cards in cars or in trains: "Patronize your naborhood grocer—he sells only the best"; or "Your naborhood druggist is more than a merchant." Monarch Brand food products are advertised as sold "only by independent dealers, never by chain or department stores." E. R. Squibb & Sons, Parke-Davis & Company, and other manufacturers extol, in their advertising, the qualities and virtues of the neighborhood druggist.

Why large manufacturers of advertised goods do this is obvious. The unit store has no competing product of its own; it sells only advertised brands of package goods or bulk goods for those who prefer lower prices. Unlike the chain or department store, the independent dealer does not push his own brand, for he has none. The customer in a chain drugstore who asks for aspirin or milk of magnesia will be given the store's own product, unless he insists upon a specified brand. The A & P stores sell their own bread and advertise the merits of their own coffees, and this is true of many products carried by the large chain grocers. In a few cases, independent dealers agree to carry a single manufacturer's line of goods exclusively. This gives them the full benefit of the producer's advertising and other cooperative sales measures that he may adopt.

Weaknesses of the Independent Retailer. Certain marketing experts consider the unit store with its inefficiencies, high unit costs, wasteful methods'

and general incompetence responsible for many of the high costs to consumers. The most important weakness of the independent storekeeper is in buying. He buys in small quantities and has to pay higher prices. He often requires long credit terms. His sales area is usually a local one, and therefore the advertising media that he can use effectively are limited. In his efforts to give service and to carry adequate quantities of each type of goods, his operating expenses are frequently very high.

Despite his desire to please his customers, he is not necessarily a good manager. Many of the unit stores are established by individuals who have had no previous experience. In fact, such enterprises are often operated by persons who have shown little efficiency elsewhere and who become storekeepers with the hope of recouping their personal fortunes. During periods of depression and unemployment, there is a noticeable increase in the number of new retail establishments. People out of jobs, unable to find work in their usual lines of employment, open grocery, stationery, or other retail stores, hoping to make a living before their savings dwindle away completely.

Poor management is evidenced in many ways. The location of the store is chosen haphazardly rather than as a result of scientific study. Bad credit policies, poor selection and arrangement of stocks, inadequate sales promotion, and frequently a total absence of accounting records are typical defects of the independent retailer.

The independent storekeeper appoints himself manager of his store and, in so doing, seldom submits himself to a critical examination of his fitness for the job. He may have a disagreeable personality, be garrulous or surly, and lack neatness or have a physical impediment that will repel customers. He may be inefficient or careless. The chain-store manager, on the other hand, is carefully selected. He is chosen and trained because, in the opinion of a personnel manager or expert, he has the qualities that will attract customers rather than repel them. If he does not, he is dismissed or transferred to make way for someone with the desirable qualifications. Many independents are thus doomed to failure before they start. The business mortality rate among them is very high.

The Chain Store. When several stores operate under one ownership and management, they are classed as chain stores, although, as has been previously noted, stores with only two or three branches have more in common with the unit store. Chain-store organizations sometimes reach gigantic proportions—often consisting of hundreds or even thousands of retail outlets. Not all lines of business are equally adaptable to chain-store methods of selling. Standardization of product, quick turnover, a minimum of personal service, and cash-and-carry sales methods are conditions ordinarily found in successful chain-store operation. By far the greatest

volume of business done by chains is in foods; yet food chains control less than 35 per cent of the total retail trade in these lines. On the other hand, the smaller sales total of chain variety stores represents more than 86 per cent of the business in this field.

The growth of chain stores has been rapid, particularly in the larger cities. In smaller towns and under rural conditions, chain-store development has been slower because of local demands for service, particularly credit. Most chains are unwilling to develop these services. This might explain the fact that growth in the South was not quite so rapid as in the North. In recent years, a noticeable decline in chain stores occurred, chiefly as a result of unfavorable legislation.

Size and Importance. Chain stores account for almost 22 per cent of the total retail sales. For example, in 1946, total retail sales came to 96 billion dollars, of which almost 21 billion dollars was done by chain organizations. The following table shows some of the retail categories and the percentage of business done by chains in each group: [1]

TABLE 16.—PROPORTION OF RETAIL TRADE HANDLED BY CHAIN STORES

Type	Retail sales for 1946, millions of dollars	Percentage done by chains in each type
Total retail sales	$96,672	21.7
Variety stores	1,760	86.4
Grocery and combination	18,493	34
Drugstores	3,572	23.4
Restaurants	12,975	5

The volume of business and size of chain organizations can be judged from the following facts concerning a few of the outstanding chains:

Among the food chains, the A & P is the largest. Operating 5,597 stores, its annual sales are approximately one and a half billion dollars, which makes it the largest retailer in dollar volume in the country. In addition to warehouses and bakeries, it owns

Three cheese-processing plants.
Two milk plants and a creamery (Whitehouse Milk Company).
Six general food factories (Quaker Maid Company).
Four salmon canneries (Nakat Packing Corporation).
Nine coffee-roasting plants (American Coffee Company).

[1] Figures from Standard & Poor's, *Industry Surveys*, Apr. 25, 1947.

The Melville Shoe Corporation operates 526 Thom McAn and 10 John Ward stores. It owns the J. F. McElwain Company, a manufacturing subsidiary with 11 plants. Its total annual sales average approximately 60 million dollars.

Among the variety stores, the largest is the F. W. Woolworth Company which owns 1,971 stores in the United States, Canada, and Cuba, in addition to its stores in Great Britain and Germany. Annual sales of the American stores average about 500 million dollars.

There are many other types of chains, including such well-known firms as Davega, United Whelan, D. A. Schulte, and others. The large mail-order houses, in addition to mail-order sales, also own stores in many cities.

Advantages. Chain stores enjoy the advantages of large-scale merchandising. They eliminate many middlemen, commonly assuming several wholesaling and manufacturing functions, and thus buy or produce at low prices. By specializing in certain lines of goods and restricting themselves to the purchase of goods in greatest demand, buying is put on a scientific and economical basis. Most chains operate on the principle of small profits and quick turnover. They leave slow-moving items or those with special appeals to competing businesses. Depreciation in inventories, heavy markdowns, and other similar expenses are thus reduced to a minimum.

Although not all chain stores enjoy the advantages of large-volume buying to the same degree, their sales generally, whether they consist of groceries, drugs, hats, shoes, or the large variety of goods sold in the Woolworth stores, are great enough to result in distinct economies in buying, shipping, and other merchandising functions.

Furthermore, inasmuch as the number of important executive positions in a chain organization is small relative to total volume of sales, it is possible for these companies to engage the services of the most competent men to guide and direct the business without unduly raising overhead costs.

Advantages in store location are due not only to the employment of skilled experts but also to the great financial strength of most chain stores which enables them to acquire desirable properties. Sites are chosen scientifically according to estimated sales volume. Studies are made of the number of people who pass at different hours, the direction in which they go, and how many of them are men, women, and children. Some of the chain stores, in order to secure the benefits derived from growing neighborhoods, make it a practice to purchase the property outright or to take long-term leases. The United Cigar Stores Company, Schulte Retail Stores, and the Childs' restaurants have in the past sometimes realized more from their real estate holdings in certain areas than from their merchandise sales. During periods of depression, long-term leases and property

titles may, however, prove to be decidedly disadvantageous and result in tremendous losses.

There are certain important selling advantages that the average chain store has over the unit store. Since articles are standardized and often conspicuously priced, they require little or no sales effort. Low-salaried clerks replace more expensive or skilled sales help. In the 5-and-10-ct. stores, for example, the girls employed need no more skill than to put the article into a paper bag and to ring up the sale on a cash register. Those stores which do require skilled managers or clerks choose their personnel carefully. The personnel manager is himself an expert and often uses scientific tests and methods in hiring help.

Another distinct advantage of the chain store is that risks are reduced. A wide distribution of sales does not limit the store's profits to one locality where the entire organization might suffer from conditions that are purely local in character. A local strike or shift in population will seriously affect the business of a unit store but will have little effect on a chain organization, whose stores are scattered over a wide area.

Chain stores can use advertising on both a local and a national scale. They advertise in newspapers, national magazines, and over nation-wide radio hookups.

Weaknesses of Chain Stores. Whereas buying gives the chain store one of its strongest advantages, it also presents important difficulties. Tremendous quantities of goods are bought at low prices, but it is difficult for a central buying office to determine accurately the merchandise needs of individual stores. These vary with local tastes. The separation of selling and buying functions makes it difficult to place the responsibility for unsatisfactory results. Some stores overcome this disadvantage by allowing store managers to choose their own goods within limits. Another way is to have the buyer visit the different stores in order to study local conditions, consult with store managers, and sometimes aid them in a sales campaign.

It is obvious that the chain-store manager has less flexibility in adjusting prices to meet varied conditions than has the individual retailer. Chain stores do not, as a rule, give the service that individuals give, and many customers insist upon this service and are willing to pay for it. Many alert retailers, while retaining their own advantages, copy some of the chain store's methods. They use an advertised article as a leader to attract those interested in prices.

Attacks against Chain Stores. The resentment against chain stores on the part of individual storekeepers, wholesalers, and certain manufacturers resulted in legislation distinctly detrimental to chain-store growth. Charges were made that the chains obtained rebates, allowances, and special prices

which independents were not getting. Furthermore, they were accused of unfair buying practices such as the use of dummy brokers or agents, which resulted in price concessions through the sharing in fees and commissions.

A number of states passed laws imposing special taxes on chain stores to which independent stores were not subjected. The Indiana graduated tax on chain stores (one of the first of this class of legislation) was upheld by the United States Supreme Court in May, 1931. This decision resulted in renewed activities in many states to foster further antichain-store legislation. A more serious blow was dealt to chain stores by the state of Louisiana when, in 1934, it passed a law taxing chain units. This tax was based, not on the number of stores that a company had within the state, but upon all the stores owned by a single chain. For example, the A & P had 15,082 stores [1] in the United States, Canada, and elsewhere but only 106 were in Louisiana. Under the Louisiana law, it had to pay $58,300 to that state, based upon its total number of stores. The constitutionality of the law was upheld by the United States Supreme Court in 1937 on the grounds that when the legislature deemed it necessary to mitigate the evils of competition between single stores and chains, it was at liberty to do so directly or by resort to the type of tax provided for in law. Several other states have since passed this type of graduated license tax on chains.

The federal Robinson-Patman Act amending the Clayton Act was designed primarily to protect small wholesalers and jobbers against the competition of chains and mail-order houses. The law requires a seller to extend to all customers who buy from him, in the same quantities, the same net prices on goods of the same kind and quality. Furthermore no commission, allowance, brokerage compensation, or anything of value is permitted to be paid over and above open discounts to any customer or his agent, direct or indirect. The Federal Trade Commission may fix quantity limits where it finds purchasers in greater quantities are so few as to render discounts unjustly discriminatory. Differentials in price can, however, be justified on the basis of economies in selling, transportation, or manufacturing costs.

Therefore, although the law does not completely prohibit quantity discounts to mass distributors engaged in interstate trade, it makes it necessary for them to prove their eligibility to lower prices in terms of savings in advertising, freight, warehousing, etc., that they afford the supply houses. Special concessions wrested from manufacturers, chiefly through the use of pressure of large-scale buying power, are illegal unless it can be shown that such discrimination is not injurious to competitors and their customers.

[1] As a result of replacing small units with large combination supermarkets, the number was reduced to 5,597 units.

This type of legislation has caused a number of chains to work out several courses of action. One plan is to turn their units over to the managers on a lease or agency basis. The stores then function independently as unit members of a voluntary chain which are supplied by the parent company warehouses. Another system is to sell the units with the understanding that the purchaser of the store will make an agreement to buy most or all his stock from the chain, which would act as wholesale distributor. The effect of these tendencies would be to draw important leaders in the chain-store field into the wholesale business. With their broad manufacturing and producing connections, their warehouses, and distributing branches, these concerns are in a position to compete successfully in any given territory with the independent distributors who may be operating there.

Department Stores. Earlier in the chapter, mention was made of the effects of the automobile and good roads upon merchandising methods. The rapid development of transportation facilities and the electrification of the local divisions of steam railroads have helped to bring the country shopper closer to the city. This, coupled with the tendency toward an increase in size of urban communities, has resulted in a growth in department-store sales. In addition, many of the larger department stores, in order to retain this new trade, have extended their delivery services over large suburban and rural areas. Approximately 15 per cent of urban retail business is handled by department stores.

Marketing Advantages of Department Stores. Modern department stores are comparatively large retail outlets, which offer many lines of merchandise—each class of goods being separated into individual "departments" and sold in distinct sections of the building. In other words, they are integrated "shopping institutions" which make available to the buyer a series of specialized markets under one roof.

Like the chain store, the department store enjoys the advantages of large-scale business. The entire annual output of a plant may be purchased and sold under the private brand name of the store. Manufacturers, eager to obtain large outlets for surplus products where ready cash or prompt payments are assured, sometimes offer goods to department-store buyers at advantageous prices. Other manufacturers, in order to keep their factories running, supply department stores with goods at prices lower than those offered to wholesalers. Many large stores maintain their own buying offices in the important European marketing centers so that purchases are made as directly as possible.

Department stores employ experts—buyers, advertising and merchandising men, accountants, statisticians, and personnel officers. Even junior executives and minor assistants are frequently college-trained people.

Highly paid executives are engaged to manage the bigger stores, which require the very best in merchandising ability. Efficiency methods are used in controlling inventories, checking orders, packing, delivery, and all clerical details. It is also possible to effect economies in the use of mechanical equipment, fixtures, and display material. In addition, many centralized departments, such as the accounting and credit divisions, the advertising department, and the shipping division, are capable of serving the entire store—thus eliminating the necessity of duplication.

The merchandise handled is so widely diversified that the risk is well distributed. Even during periods of depression or financial dullness, a modern department store has a fair amount of business activity. Some stores boast that they offer the individual almost everything that he needs from eyeglasses to electric refrigerators and from cut flowers and plants to clothing, jewelry, and automobile tires. All are housed under one roof and can be purchased with a minimum of inconvenience.

Most stores offer a wide range of services. Free delivery, charge accounts, money-back policies, telephone shopping, mail-order departments, and employment of expert shopping guides and interpreters are only a few of the means used to attract and to hold customers. Many department stores have rest rooms, children's playrooms, concerts, lectures, and motion pictures.

Recent Trends in Department-store Merchandising. In many stores, merchandising managers and their assistants have, to a large extent, displaced the buyer in importance. The merchandising manager has jurisdiction over several floors including many departments. He sets the policy for each department, and to the buyer are left the mechanical details of locating merchandise sources and placing orders. The buyer is left very little discretion as to either quantity or price; and in some stores, all orders have to be approved by the merchandise manager.

Buying is thus placed on a basis of scientific selection, instead of remaining a matter of personal skill, as was the case in the past. The merchandise manager marshals his figures on operating costs and overhead expenses and sets limits based on the data supplied by the store's accountants and statisticians. As a result, the personal element, "pull," influence, and petty bribes of the past have been eliminated to a large extent in the modern department store.

Another reason for this has been the increase in what is commonly known as "chain department stores." The ownership of several large stores by a holding company or the control by one store of several others, strictly speaking, does not classify these as chains, but this grouping of stores has tended to centralize merchandising, financing, and deliveries.

There are several outstanding examples of the latter groups: R. H. Macy & Company, Inc., of New York, owns and controls Macy's, San

Francisco; John Taylor Dry Goods Co. of Kansas City, Mo.; La Salle & Koch in Toledo; Davison-Paxson Company in Atlanta; and L. Bamberger & Company in Newark. Gimbel Brothers, Inc., in addition to its stores in New York, owns subsidiaries in Philadelphia, Pittsburgh, Milwaukee, and other parts of the country. The Associated Dry Goods Corporation of New York owns Lord & Taylor, C. G. Gunther's Sons, James McCreery & Company, the Thos. J. Stewart Company, and other large department stores in the East and the Middle West. Each of these stores, unlike the chain organization, has its own president, manager, and merchandising and executive staffs. Each does its own advertising and is operated as a separate unit. Further mention of chain department stores will be made later in the chapter.

The tendency to combine still further into "superbuying" units led to the formation of Associated Manufacturers of America as a buying pool for some 200 leading department stores of America. This enabled them not only to obtain greater bargaining advantages in terms of price but to develop special styles, novelties, and other unique sales-building features because of their huge buying power.

Disadvantages of the Department Store. In former days, the man who managed a department store either owned it outright or was a part owner. He personally supervised the business that he had built up. Today, many large department stores, as has been explained in preceding paragraphs, have absentee owners and appointed presidents. No longer does the name of the store signify the real owners, and often the change has not been for the better.

In some organizations, presidents and other executives are changed so frequently as to have a demoralizing effect on the personnel. The manager of a department may be known to his superiors and enjoy their full confidence; but when the president or general manager is changed frequently, his status becomes so indefinite that there is a loss of confidence on the part of the staff.

Ownership and management, because of the size of the store, are separated from contact with customers by a force of minor executives and routine workers. These often lack initiative; they are unable or unwilling to make decisions; each is motivated, to a certain extent at least, by self-interest at the expense of the store; each would like to safeguard his job or to obtain more pay or promotion. There is a tendency in large organizations to shift responsibility, to "pass the buck." This is a problem which challenges the skill and ability of the personnel officer, as was discussed in a previous chapter.

The overhead cost of the department store is tremendous. This, coupled with a high operating cost, raises unit costs considerably unless sales are sufficiently large. The services rendered by department stores to their

customers often prove to be a handicap instead of an advantage. Customers abuse these privileges, and stores, fearful of losing business, do nothing to correct the abuses. Much of the high cost of doing business is due to slow payments, unjust returns, and unreasonable demands for deliveries. The cost of packing and delivery sometimes equals the gross amount of the sale.

Extreme cases have been cited of the woman who buys a dress for a special occasion, wears it, and then, the occasion having passed, returns it on one pretext or another. Stores find that the charge customer is usually a more frequent offender in this respect than is the cash purchaser. It is an easy matter, when an article is charged, to tell the store to send for it and credit the account. The cash buyer wishes to avoid the annoyance of taking the article back personally and going through the "red tape" of getting a refund.

R. H. Macy & Company, Inc., has overcome some of these abuses by selling for cash only. What would ordinarily be a handicap is featured in the store's advertisements which read, at the first of every month, "We post no bills—no one is in debt to Macy's." This store's advertising also claims that it sells cheaper because it sells for cash.

The Mail-order House. The mail-order house was, in the past, the department store of the country dweller. In thousands of families the Sears, Roebuck & Company or Montgomery Ward & Company catalogues were, and as a matter of fact still are, the shopping bible. All goods are sold by mail and shipped to the customer. Sales are generally for cash, and payment accompanies the order. An exception is made in the case of sales of costly articles, where installment payments are accepted.

Like the department and the chain stores, the mail-order house buys goods from wholesalers and manufacturers and, in some cases, makes its own products. Some of the large mail-order houses tend to limit their lines so that the goods carried are not quite so general as the merchandise lines of department stores.

Prices charged by mail-order houses are usually lower, and a much larger variety of goods is offered than is ordinarily found in local stores. Another important reason for the growth of the mail-order house is the extension of the parcel-post service. The post office now accepts larger and heavier packages, and commodity rates are varied so that the mail-order house can give quick, low-priced delivery service.

A good illustration of the growth of the mail-order business is shown by the increase in sales of Sears, Roebuck & Company. In 1912, sales amounted to $77,116,000. In 1929, gross sales amounted to $443,452,640. In 1933, a depression year, gross sales came to $289,289,547. Sales for 1947, a comparatively good year, were almost $2,000,000,000.

Since the sales appeal is made by mail, attractive-looking catalogues are prepared. The copy is written by experts who experiment with different types, with the aim of making the language simple, descriptive, and appealing. Mailing lists are kept up to date and are carefully checked.

To overcome the reluctance of buyers to purchase unseen articles, liberal guarantees are given and a generous money-back policy is maintained. Purchases are often made from manufacturers who are loath to see their products sold at cut prices. This results in the branding of goods with the trade-mark of the mail-order house. Many articles made by independent manufacturers are given such characteristic brand names as Seroco or Wardway.

The mail-order house has the advantages and disadvantages of a large organization. Compared with the local store, it offers a greater variety of goods at substantially lower prices. This is especially true of style goods. Sales are nation-wide and so are not subject to specific local conditions like those encountered by the department store or the independent retailer in a given city. Warehouses are located where ground rents are low, since they need not be in the midst of an expensive business or shopping center. No costly floor space or fixtures are required, nor is there need for display or elaborate showrooms. Efficient, highly paid and trained sales help are replaced by comparatively low paid stock and order clerks.

Doing business by mail also has disadvantages not encountered by the other types of retail establishments. In the first place, the printing and distribution of elaborate catalogues alone involve a tremendous cost, which is of a recurring nature, as new catalogues must be issued to stimulate sales. In some lines, it is difficult to sell without letting the buyer see the goods. Articles like shoes, gloves, and clothing must be fitted or tried on by the person when purchased. If these do not fit or if they look different to the buyer from the way he had expected, heavy costs of returned merchandise result. Furthermore, customers might not like the delays that must ensue when goods are purchased by mail. Finally, the sale of style goods is difficult to handle through the use of printed catalogues because rapid changes in fashion are likely to occur.

Although the mail-order business is essentially a cash business, it has become necessary to extend credit and to sell on installments. Sales of furniture, pianos, radios, and similar articles are now made, to a large extent, on time payments. This frequently exposes the mail-order firm to a higher degree of risk than if its sales organization were located nearer the buyer's residence.

The same factors that have cut the sales of the rural store have also affected the mail-order house. Automobiles, improved transportation, and good roads have enabled buyers in rural sections to go to department

stores for many of their purchases. These people are no longer so dependent upon the mail-order house as they were in the past. As a result, Montgomery Ward & Company, Sears, Roebuck & Company, and some of the other large mail-order firms established display rooms, retail outlets, and department stores in many cities.

Other Types of Retailing. *Chain Department Stores.* The J. C. Penney Company was one of the originators of the chain department store and now controls approximately 1,600 units. Other examples of large chain department stores are the Allied Stores, Federated Department Stores, and the Interstate Department Stores. This represents a combination of all the varieties of modern tendencies in large-scale retailing. The J. C. Penney Company started in a small way as a local store, operated by J. C. Penney. By degrees, several branch stores were opened and the variety of merchandise handled by them was increased. Through the stimulus afforded to store managers by means of a very liberal system of profit sharing, Penney soon was able to develop a nation-wide chain of department stores. The many advantages of large-scale buying and centralized direction and control naturally arose, and before long the company was able to assume the complete middleman function, between producer and consumer, for hundreds of different products. Sales of this company in 1933—a depression year—were in excess of $178,000,000, and net sales for 1945 were $500,000,000.

This type of retailing has, however, met with varying degrees of success. It was thought that the advantages of central control would result in many economies; but in several instances, the results were otherwise. In addition to retaining the executive staff in each store, new and highly paid executives were added to the superstructure in most cases, and the result was not greater efficiency but greater expense. The central organization had to be superimposed on the existing store organizations. Such a structure, with its complications and absentee control, often proved to be more of a handicap than a help.

A number of these chain department stores were organized by men who were promoters rather than merchants. Overcapitalized at the start, their unit costs and expenses were considerably higher than those of the component stores before their combination. Although total sales increased in some cases, the comparative cost of doing business was greater. Perhaps these earlier disadvantages will be eliminated in the future. The development of these merchandising giants is still too new to make possible a sound forecast with respect to their ultimate success.

Supermarkets. Another class of retail market that is growing in importance in some parts of the country is the supermarket. The chief characteristic of this type of retailing is the volume of business, particularly

in convenience goods, conducted under one roof. Several varieties of these stores may be distinguished: (1) the large combination food market in which space is rented to concessionaires dealing in noncompeting merchandise, (2) the large combination market where noncompeting departments are operated by merchants who pay a percentage of their gross sales in lieu of rent, and (3) large food markets, usually operated by chain stores, with separate departments for meats, groceries, fruits and vegetables, bakery goods, and dairy products.

Although the supermarket specializes in food and cheap bulky products usually sold in neighborhood stores, people have been known to travel to them for considerable distances. Attracted by the low prices quoted in these markets, consumers are willing to undergo inconveniences in doing their shopping there. Most of these stores operate on a cash-and-carry policy and on the principle of self-service.

Direct Manufacturer-to-consumer Sales. Many firms sell directly to consumers on a house-to-house basis, without the intermediary of any middleman, either wholesaler or retailer. The outstanding firm doing this type of business is the Fuller Brush Company, Inc., with an annual business of about 15 million dollars. Milk and ice cream companies also distribute their products in this way. Vacuum cleaners and sewing machines are often sold by company salesmen. The cost of doing business is high, but then all middlemen with their profits and expenses are eliminated —these functions being assumed entirely by the producers.

Manufacturer-retailer Sales. There are various manufacturer-controlled retail establishments. In automobile sales, for instance, exclusive agencies for definite territories are under complete control of the manufacturer. Prices, conditions of sale, quality, guarantees, and financing are all determined by the policies of the manufacturer and are carried on uniformly by the various retail distributors of the particular make of car. Shoes, clothes, hats, and electric appliances are also sold in this fashion.

Questions and Problems

1. If you were a manufacturer, what advantages would there be in selling directly to retailers? If you produced such items as drugs, hardware, or packaged foods, why would you be likely to sell through wholesalers? What services can the wholesaler render the manufacturer?

2. Why do retailers try to buy directly from manufacturers? If you sold any of the aforementioned products, why would most of your purchases be from wholesalers?

3. What types of wholesale middlemen are found in the textile industry? In raw cotton? In food items? In novelties?

4. Explain why there has been a steady tendency toward the elimination of the wholesaler. Why has this been only partially successful? What specific services have

wholesalers offered in order to preserve their position as middlemen (*a*) with reference to the manufacturers, (*b*) with reference to retailers?

5. Why did the transition in the United States from a seller's to a buyer's market produce revolutionary changes in methods of wholesale and retail distribution?

6. Compare the general store of the past with the modern store as to types of merchandise, packaging, sales methods, efficiency. Would you like a return to "the good old days"?

7. Give the relative advantages and disadvantages of the unit store and the chain store. Discuss legislation tending to restrict chain-store growth. Does the public benefit or lose from such laws?

8. Contrast the unit store with the department store. How does the alert retailer manage to prosper in competition with his large competitors? What advantages has the independent retailer over the department store? What are some of the newer trends in department-store ownership and operation?

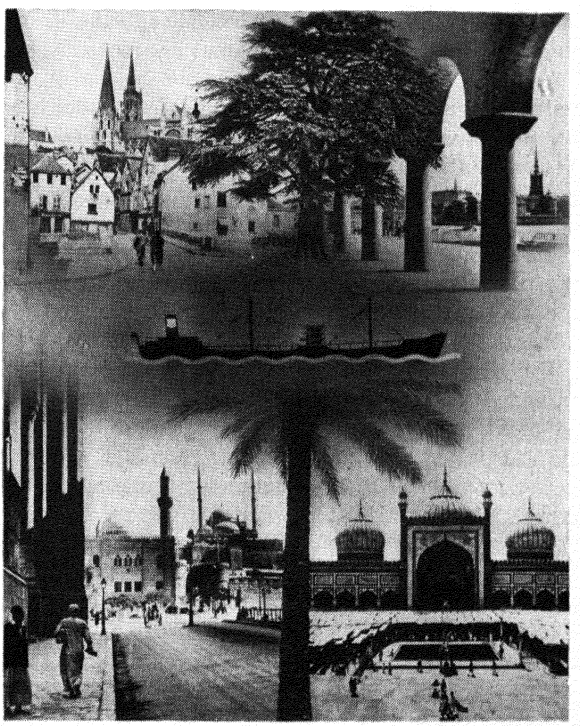
9. Changes that caused declines in the business of the country store also affected the sales of mail-order houses. What factors were responsible for declines in mail-order sales? What new developments have greatly increased the business of such firms as Sears, Roebuck and Montgomery Ward?

10. Despite the importance of middlemen in large-scale business, there are outstanding examples of large manufacturers who sell directly to the consumer. What are illustrations of such direct sales in your community? Do you think that these firms are at an advantage, or would they do better by selling through the usual trade channels?

CHAPTER XVIII

FOREIGN TRADE

Importance of the Foreign Commerce of the United States. Many varieties of American goods, familiar to the public through daily use and



American goods are well known in practically every part of the world. (*Courtesy of Socony-Vacuum Oil Co.*)

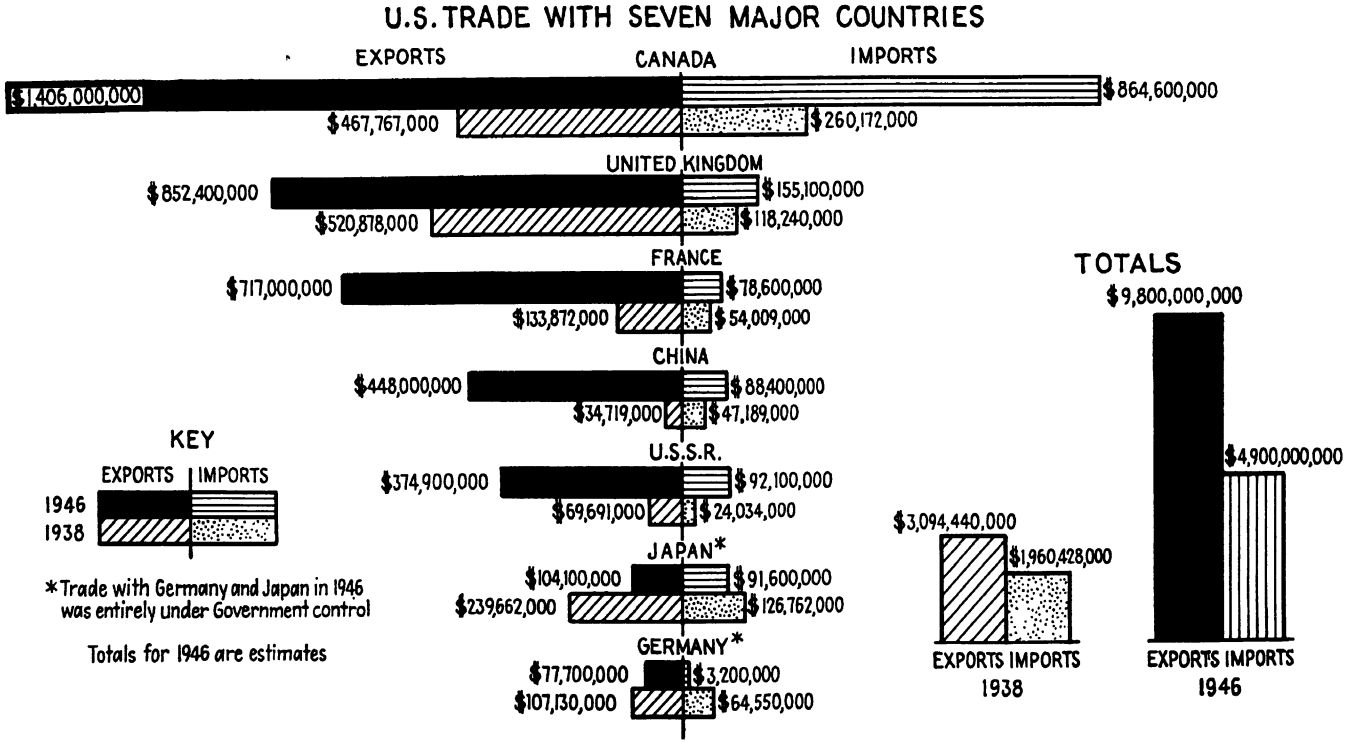
extensive advertising, are fairly well known in practically every part of the world. Examples of the extent of American foreign trade are so numerous that only a few instances, by no means exceptional or outstanding, will be mentioned.

Although France is regarded as the home of cosmetics, perfumes, and soaps, Paris shops sell many brands of American soaps, shaving creams, and dentifrices. Palmolive and Ivory soaps, Colgate's and Mennen's shaving creams, and practically every well-advertised American tooth paste are as common in Parisian department stores and apothecary shops as are the native products. American automobiles are found on the streets of most of the cities and towns in the world, and the Ford car is commonly seen on the roads of Palestine, the Near East, China, India, and North Africa. The 5-gal. Standard Oil kerosene can is a familiar and important part of the household equipment of many families in South America, Africa, and China.

The inflow of merchandise from other countries to the United States is equally significant and demonstrates the great interdependence among the nations of the world. The American automobile industry, for example, uses materials that are imported from over 50 different countries. Rubber from the Straits Settlements, chrome ore from South Africa, nickel from Canada and Peru, antimony from China, logwood from Haiti, kapok from Sumatra, and linen thread from Ireland are some of the products that go into an American-made car. The paint industry requires linseed oil from Argentina; castor oil from Brazil; tung oil from China; pigments from Belgium, Spain, France, and Canada; and natural resin from all over the world. Raw wool comes from Scotland, Syria, Russia, India, Argentina, and many other nations. Canada supplies about 75 per cent of the asbestos used in the United States. Argentina is the greatest source of supply for sole leather, and Australia for kangaroo skins. Raw silk, coffee, tin, furs, hemp, straw braid, pearl, agate, and ivory are only a few of the products brought into the United States from the far corners of the earth. Nor is the import trade restricted to raw materials. Fine laces from Belgium, woolens from England, artificial flowers and china from the Far East, oriental rugs from Sarouk in Iran, handkerchiefs and toilet goods from France, and tulip bulbs from Holland are some of the foreign specialty goods demanded by American buyers.

There is hardly a domestic manufactured product, among either consumers' or producers' goods, that does not depend in some way upon imported material for its quality, its marketability in quantity, its lower price, and, in many cases, its very existence. Industry, in turn, relies upon export trade to provide outlets for its large productive capacity.

Normally, sales to foreign countries are approximately 10 per cent of our total production, but this figure leads to an erroneous impression as to the importance of foreign sales. In some products, this margin spells the difference between prosperity and ruin. In 1938, for example, the last year of foreign trade unaffected by war conditions, exports in each of the follow-



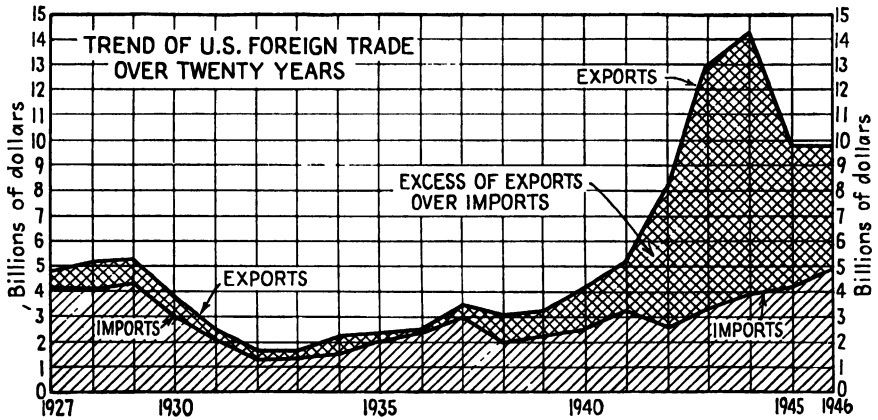
(Data from The New York Times, January, 1947.)

ing lines accounted for more than 10 per cent of total domestic production of the particular product (the figures in parenthesis are the percentages of total production exported):

Crude Materials. Phosphate rock (51.5), cotton (30.5), tobacco (29.4).

Foodstuffs and Beverages. Linseed (49.4), dried fruits (36.2), canned sardines (29.4), rice (21.0), fresh pears (15.9), canned salmon (13.8), canned asparagus (13.2), canned fruits (13.0), wheat (12.2), lard (11.7).

Semimanufactures and Finished Manufactures. Refined copper (53.1), paraffin wax (46.3), gum turpentine (42.6), carbon black (40.8), gum resin (38.0), borax (35.9), crude



(*The New York Times.*)

sulphur (35.6), aircraft and parts (26.8), office appliances (22.3), carbons and electrodes (21.8), printing and bookbinding machinery (18.2), agricultural implements and machinery (17.0), biologic pharmaceuticals (15.3), industrial machinery (14.4), dental instruments and supplies (14.3), automobiles (14.1), benzol (13.3), goat and kid upper leather (12.8), refined lead (12.0), radio apparatus (11.8), caustic soda (11.4), refined mineral oils (10.6).

Cordell Hull, when Secretary of State, said:

There is a direct and unmistakable connection between business activity and the volume of exports. Our Cotton Belt, our Tobacco Belt, our Wheat Belt, our corn-hog industry, our fruit and vegetable growers, our lumber producers, our machine manufacturers and many other branches of our production cannot prosper unless they have adequate foreign markets for their surplus output. Deprive them of such markets and their purchasing power shrinks and with it the whole nation's purchasing power declines. . . .

A peaceful world is possible only when there exists for it a solid economic foundation, an indispensable part of which is active and mutually beneficial trade among nations.

Foreign markets will continue to grow in importance because of the expansion of American production facilities. For example, although the steel

industry's postwar production of about 15 million tons annually was the greatest in its history, this was inadequate to supply domestic needs for sheet and strip steel. To meet this demand, the industry increased its annual capacity by approximately four million tons. The automobile industry, with a projected annual production of six and a half million cars and trucks, could have absorbed this additional production alone. But 14 other industries, running at peak levels, were allotted the major share of the steel produced.

What will happen when these enormously increased facilities catch up with a demand that was abnormal and that will finally level off? Then, unless the producers of automobiles, refrigerators, washing machines, and gas ranges find new markets, both domestic and foreign, economic collapse and unemployment will face American industry. Foreign markets can help to cushion any drastic readjustments.

Why Seek Foreign Markets? Manufacturers are often loath to seek foreign markets when there are so many sales opportunities near at hand. Their attitude generally is "why seek foreign markets when the home country is so large?" Their individual sales might represent so small a percentage of the total domestic business that they would prefer to expand their domestic markets first. Even comparatively large firms may regard foreign markets with some misgivings, because the attempt to serve them seems to present so many new problems. Some manufacturers are reluctant to enter the export business because of the difficulties presented by strange languages, currency differences, tariffs, transportation charges, credits, and foreign exchange rates. Yet the problems arising in foreign trade need not prove more troublesome to the capable businessman than the question of the further development of domestic trade. There are many distinct advantages, even for the comparatively small firm, in developing foreign sales to supplement the domestic market.

A Means of Leveling Seasonal Fluctuations. Countries south of the equator offer particular advantages to those industries having marked seasonal variations. Argentina, Uruguay, Chile, South Africa, New Zealand, and Australia have their coldest weather in July and August, and the Christmas season occurs during their summer months, for in December and January these countries experience their warmest weather. The American manufacturer who produces seasonal items will find that such countries will order most heavily during his slack season and, conversely, few foreign orders will come when he is busily engaged in meeting the domestic demand for his goods.

A Stabilizing Factor during Local Business Disturbances. Whereas business depressions are generally world-wide in their effects, there are lesser disturbances in business that are frequently much more localized in char-

acter. Domestic sales are affected by strikes, unseasonal weather, droughts, floods, bank failures, political disturbances, or many other factors that might upset the equilibrium of business. During such periods, companies that have developed foreign markets may receive orders which are particularly welcome because of the domestic slump. When business is slow in this country, it is not necessarily bad in France or Venezuela or New Zealand.

Less Competition. Competition may not be so keen in foreign markets as it is at home. Business rivals may, because of a lack of knowledge or because they lack the initiative, keep out of markets where an investment of effort would bring good results. Of course, competition of another sort is encountered in the foreign market: that of large foreign producers. American textile firms compete for Latin-American business, for example, with important British exporters.

Demand for American Goods in Foreign Markets. As has been noted, American products enjoy a certain amount of popularity in other countries because of lower price, unique characteristics, or superior quality. People of other countries are not all poverty stricken, as some businessmen mistakenly suppose. American periodicals, magazines, and motion pictures have indirectly created a demand for American products in foreign countries. Many foreign markets present surprisingly rich fields for sales development. "Made in U.S.A." has for some products come to be considered a mark of quality. Typewriters, fountain pens, hosiery, clothing, automobiles, canned goods, and hardware are almost unrivaled when both quality and price are taken into consideration.

Good merchandising methods have a universal effect, and the same ability and resourcefulness that produce results in this country will also succeed in foreign markets. It is true that methods must be adjusted to the business customs and peculiarities of the prospective markets just as they are adapted to the markets and groups within the domestic area.

Methods of Securing Foreign Trade. *Export Commission Houses.* There are various methods of developing export sales, but the quickest and simplest way is to form contacts with the buying agencies of foreign firms that are established in many of the large cities in the United States or with export houses equipped to handle all phases of foreign trade from sales promotion to shipping and financing. Such business resembles domestic sales in most respects. Just as the large chain and department stores maintain buying agencies abroad, so foreign firms of all types maintain similar offices in the United States.

The export commission house acts in several capacities: as the foreign sales agent of an American firm, as the buying agent for a foreign firm, or as a trader on its own account. The first two types of operations are

generally on a commission basis; the last on a basis of outright sale. When the export commission merchant arranges to represent a manufacturer in a specific country, he is occasionally given the exclusive agency; *i.e.*, he is credited with all sales to that country whether received directly or indirectly. His sales effort on behalf of the manufacturer does not always bear immediate fruit; it is only fair therefore that inquiries or orders coming from this territory be credited to his account.

Connections with such firms are made in several ways:

1. By inquiring at the offices of the foreign consuls in this country. They may be in a position to recommend reliable commission merchants who ship goods to their respective countries.
2. By inquiring at a branch office of the Bureau of Foreign and Domestic Commerce.
3. By inquiring at several of the export organizations to be mentioned later in the chapter.
4. By advertising or consulting advertisements in newspapers like *The New York Times*, *Journal of Commerce* (New York), and *New York Commercial* and in various periodicals (see illustration on page 388).

When a suitable firm is found and mutual agency arrangements have been concluded, the manufacturer supplies the commission house with samples, catalogues, description of goods, and price lists. These are forwarded to the foreign office or representative of the commission house. In return for granting the exclusive representation to a specific territory, the manufacturer should demand that the commission house handle no goods of a competitive nature.

There are several advantages in selling through export firms. It is simple and can be arranged in less time than other methods. The export commission house relieves the manufacturer of the necessity of operating his own export department. It looks after all foreign correspondence and makes all arrangements for shipping, forwarding, insurance, and customs details. It often assumes the credit risks and relieves the manufacturer or merchant of the fear of loss through fluctuations in exchange or delayed payments.

Many of the large wholesalers and manufacturers of groceries, drugs, cosmetics, and other articles do business in this way. The distributors of well-known brands send samples and price lists to some of the New York export commission houses. The latter forward these to their foreign agents who solicit business. When sales are made, the distributors deliver the goods to the pier in accordance with the exporter's instructions. They send their invoices to the exporter and are paid by him. In many cases, they do not know the names of the customers who buy their products, since all correspondence and dealings take place through the export commission house.

calling all Manufacturers
EXPORT NOW!
FOREIGN DISTRIBUTION TODAY IS YOUR INSURANCE
AGAINST STIFFER DOMESTIC COMPETITION TOMORROW!
There are unlimited profit opportunities in the fast-tightening market where you can undertake unlimited export sales and handle them no differently than any local transactions.
WE TAKE ALL RESPONSIBILITY FOR . . .
Exchange fluctuations
Credit risks
Contract guarantees
Packing problems
Shipping hazards
Tariff rates
License regulations
Bill payments
Promotion costs
Extra expenses
LET US BE YOUR FOREIGN DEPARTMENT!
WE SELL YOUR GOODS . . . WE SHIP YOUR GOODS . . . WE PAY FOR YOUR GOODS . . . In American Dollars
Berlang TRADING COMPANY INC.
123 William Street, New York City

Unless he has an exclusive territory arrangement, the exporter will, if possible, try to avoid disclosing the name of the client to the manufacturer. When the goods do not bear well-known trade-marks, he may try to keep the client from knowing the name of the manufacturer. He will frequently put his own brand and trade-mark on samples and goods.

Although the method of dealing through an export commission house may bring quick results, avoid risks, and appear to be an easy way of obtaining business, it is in many respects unsatisfactory. In some lines, it results in too many intermediaries between the seller and the final customer: the export commission merchant, the foreign agent, the foreign salesman, and perhaps a foreign wholesaler and retailer. Either commissions and profits are split too many ways to make the business profitable, or the ultimate cost is raised excessively. Furthermore, the customer belongs not to the manufacturer but to the export merchant or his agent. There is no guarantee of repeat sales. The agent, either here or abroad, on the basis of samples and prices received, places his order with competing firms who offer a better price. Therefore, business is apt to be haphazard and intermittent and shows no promise of future development and growth.

Directly Controlled Business. A manufacturer or merchant conducting a large and growing export business may find it to his advantage to establish his own export department and to place it in charge of a person thoroughly conversant with every aspect of foreign trade. Such a department can devote all its time to the development of the firm's trade in foreign lands. It would be in full charge of correspondence, sales promotion, shipping, exchange, packing, routing, preparation of documents, and all other details connected with exporting. If the business warrants a larger personnel, employees can easily be obtained who are experienced and trained in handling the various technical details.

Since no one method is always the best, a firm with its own export department will often develop its business along many lines. It may circularize foreign firms who are likely to be interested in its products, or it may send experienced salesmen to foreign territories, there to establish branch offices, appoint agents, equip showrooms, and arrange for consignment of goods.

Advertising in international periodicals like the *American Exporter*, which is printed in four languages, and in foreign newspapers and periodicals can be used to advantage. If the product lends itself to poster or novelty advertising, these can be used to even a greater degree in some foreign countries than in the United States. Large oil refiners and makers of office equipment, rubber goods, household appliances, chewing gum, and breakfast foods have, in accordance with the size of their business, used the methods described here to develop foreign markets. In many cases, they

own and operate branches, agencies, and subagencies in the principal cities of the world.

Foreign Representatives or Agencies. Only a large firm can justify the operation of directly owned foreign branches. Smaller firms cannot spare the capital needed to establish and equip branch offices. They can, however, develop a profitable export business by arranging connections directly with foreign importers or with reliable sales representatives situated in the important marketing centers in foreign countries. Sales are made to the importer or on a commission basis through the foreign representative.

TYPICAL ADVERTISEMENT OF FOREIGN REPRESENTATIVE

EXPORT TO

South Africa and the Rhodesias

Business executive on a short visit to the States would like to meet principals interested in representation in South Africa.

This is a fine opportunity for manufacturers of repute who have no sales organization in Africa to introduce their merchandise into the Union and Rhodesia.

Write in confidence to Box Y 7947 Times.

Business done in this way entails a minimum of expense and can be developed to fairly satisfactory proportions. The foreign agent sells directly to the customer, pays his own expenses, and works on a commission basis. He is frequently chosen by means of correspondence, and business can go on for years without manufacturer or agent ever meeting personally. Samples, catalogues, or descriptive literature are sent to the agent and used by him to obtain orders. He should be chosen after careful investigation as to his responsibility, both financial and moral.

Choice of a Foreign Representative. The Department of Commerce supplies accurate and timely information on all phases of foreign markets. The departmental publications prove an invaluable aid to exporters and manufacturers. Businessmen are advised as to market procedure and sales possibilities and are put in touch with prospective clients and agents. Private marketing services and the foreign departments of commercial banks are also helpful. The following excerpt from an advertisement shows the type of help that banks offer to businessmen interested in developing foreign sales:

Latin America is a profitable market, but an ever-changing one. Now you can readily acquire the up-to-the-minute information so necessary to your business in

that area. An Irving specialist again is there assembling data on general conditions, trade possibilities, import and export regulations and other such essential facts.

If you now do business or plan business south of the border you will want these new Irving Trade Analyses. They are yours for the asking.

The names of suitable agents and representatives both here and abroad can be obtained by communicating with organizations like the American Manufacturers' Export Association and the National Association of Manufacturers. American chambers of commerce established in many large foreign cities and trade associations in the United States often prove of value to businessmen who seek their advice in this connection.

American consuls and commercial attachés and also American ambassadors and ministers situated in foreign capitals are usually ready to serve businessmen who seek to develop new markets. Foreign ambassadors and consuls located in this country are both courteous and helpful. Names, statistics, and advice that can prove of great value may be obtained on application to such foreign representatives or their trade commissioners. Those seeking foreign-trade information do well to utilize all possible sources, direct and indirect, private and official.

Selection of Markets. The first step in the development of foreign sales is the choice of a market. This depends upon a careful study of statistics and certain types of nonquantitative data. The nature of the product (*i.e.*, whether it is intended for industrial or consumer use, its cost, whether it can be sold only to well-to-do buyers or to everybody, if its sale is affected by climatic conditions) is the important consideration that guides the businessman seeking marketing information.

In a general sense, it is important to know to what countries the product in question is already being exported. If the article is women's silk hosiery, the prospective exporter would want to know the value of American exports of hosiery, which countries buy most, sales prospects in undeveloped markets, and the comparative distances of the various markets (in time rather than in mileage). The concentration of population, wealth per capita, tariff rates, climate, and freight rates are all important considerations in the sale of hosiery.

The exporter should know the style trends, customs, and habits of the prospective customers. The volume of shoe sales in the country will also be a guide to what percentage of the populace will wear hosiery. Another guide in seeking markets for both shoes and stockings is the percentage of literacy. Where compulsory education exists, there is a decided increase in the demand for shoes and hosiery. A list of religious and patriotic holidays and holiday customs is of interest to the businessman, since such factors have an important influence on sales.

Peculiar Characteristics of Foreign Markets. Methods of doing business vary not only with the country but also with the product. In some industries, there are well-established procedures peculiar to the business itself. Methods of marketing cotton in Liverpool and wheat in the grain markets of Europe, for instance, have been well defined by custom. Procedure in the handling of these commodities varies considerably from methods employed in the marketing of machinery, petroleum, and lumber.

Many different classes of middlemen are found in these markets, depending upon the functions required in the distributive process. In some industries, trade practices have become so fixed and groups of merchants so firmly entrenched that it is practically futile for an American firm seeking foreign trade to attempt to make any marketing arrangements other than those already established.

The exporter must adapt his methods of doing business, within reason, to the peculiar requirements of each country. How business methods vary from domestic practice is interestingly shown in the following account, as reported before the Second World War by the American Trade Commissioner in Tientsin: [1]

> In selling products in China, it must be remembered that a certain amount of social relationship between foreigners and Chinese is necessary. The foreign representative who does not meet his dealer socially and entertain him fails to recognize one of the most important features of relationship with his customers. Most of the successful traders in China try to get their staffs and their Chinese customers together at least twice a year. There has long been a saying among experienced foreign merchants that business in China is done largely over teacups. The bulk of the country's trade is in the hands of the conservative merchant of the old school, to whom a leisurely chat over a cup of tea and a cigarette or a cigar continues to be the accepted method of doing business. . . .
>
> The Chinese, as a whole, love to be amused; there is probably a higher percentage of professional entertainers in China than in any other country in the world. Social contacts are needed in China much more than they are in Europe or in the United States. The Chinese tea houses are patronized more than the club-houses of the West and many important transactions are consummated in those tea houses after going through the entire performance of drinking, smoking and gossiping about the trade.

The peculiar requests of the foreign representative or customer must not be disregarded as silly idiosyncrasies. Peculiar climatic conditions, production methods, local laws, customs requirements, or ingrained superstitions and beliefs on the part of his customers may occasion these special demands. It is important to remember that people abroad must not be

[1] Marketing American Leather in China, U. S. Dept. of Commerce, *Trade Information Bull.* 728.

expected to change their ideas and their methods every time a new article is offered them. Their habits and prejudices are frequently very strong, and many of their merchants are content to continue buying what they have always bought and to insist upon this, even though new and decidedly superior goods are available. To educate such buyers to a change in demand is usually a long, tedious, and often unsatisfactory process; very often it cannot be done at all. Therefore, it is generally better to try to please them by meeting their requirements, provided, of course, that to do so does not impair the character or detract from the value of the goods offered for sale.

Certain producers have found that goods going to China must not be packed in white paper for the Chinese are very superstitious and white signifies death or ill luck, while red and yellow stand for happiness and prosperity. Also, to the Chinese, every symbol has a peculiar significance; one object may signify prosperity, and another starvation. The manufacturer who expects to do business in China would do well, if his goods bear trade-marks, designs, or pictures, to consult authorities as to whether or not these have any special significance that might affect sales.

Another outstanding country of peculiar traits is India. The Hindu religion forbids the use of any article bearing the picture of anything created by God. Goods bearing pictures of trees, animals, sun, mountains, etc., are therefore taboo. Designs must be geometric in order to avoid offending any religious belief.

Other Aspects of Foreign Trade. *Packing.* The exporter should familiarize himself with the various means of transportation from the port of shipment to ultimate destination. In this way, he can guard against flimsy and insufficient packing which would not protect his merchandise sufficiently in transit. Cases must be strapped and sealed, and bales should be lined with waterproof paper.

South American orders generally specify that goods be packed in paper bundles and bales. Goods like men's shirts and hosiery, which generally come in cartons and cases, must be repacked for export. Duties are based on gross weights, and packing in paper and in burlap bales not only will lower the duties but will effect savings in freight. To reach interior points, it is often necessary to load the goods on burros or llamas, so maximum weight specifications must be carefully observed. Protection must be afforded against moisture, since the winter season in the tropics is one of very heavy rains. Goods subject to spoilage by heat should be well insulated when the shipment is destined for areas of warm climate.

Trade-mark Regulations. Trade-mark laws are not universally recognized; and in some countries, trade-mark piracy is common. In the United States, the owner of a trade-marked article is protected through American

registration. This does not protect him in other countries, where anyone may register and therefore own any trade-mark, even though he does not manufacture or sell the article. In such countries, it has been a common practice on the part of unscrupulous individuals to register in their own names well-known American trade-marks and then sell them back to the real owners or effectively keep their goods out of the market.

Codes and Cables. Cable messages provide a means for rapid communication with merchants in foreign countries. Rates are quoted on a "per word" basis and vary considerably for different countries. The exporter can decrease his cable expenses by the use of codes. For instance, a message might be condensed into two five-letter words as follows: ABVRE, meaning (in Bentley's Five Letter Code) "we accept" and UPHVA "50 tons." Both phrases are then combined to make one word of 10 letters: ABVREUPHVA. The recipient of the cable splits each word into two five-letter words for decoding. As a rule, code words are limited to 10 letters.

Several codes are popularly used by exporters: Bentley's, A.B.C. (in several editions), Western Union, and Lieber's. The exporter's letterhead should state the names of the codes that he uses; generally his agents and customers will inform him as to which codes are available to them. Phrases in the codes are alphabetically arranged, and the exporter seeks the expression that best conveys his message. The recipient of the message will decode it by looking the words up in the code book. The words are alphabetically arranged and can be found without difficulty. The standard codes have editions in Spanish, French, and German, so that the exact meaning of the message is conveyed to the recipient in his own language. Firms that do a considerable amount of cabling cut their expenses by the use of private codes. These are arranged to meet their needs better than the standard codes. Some ingeniously arranged private codes permit the use of four sentences or phrases, plus a check for accuracy, all in one word of 10 letters.

It is the practice of firms entering the export field to register their cable address. This does away with the need for including the exact name and address of the addressee. Since in a cable there is a charge for every word, including name and address, the economy of such a registration is apparent. Two words, the cable address and name of the city, replace the four or five that would otherwise be used. A cable address like INAPCO, New York, is sufficient address for a cable to the Inter-allied Products Corporation, Empire State Building, New York City. In recent years, the radiogram and the overseas telephone have become popular for business transactions with foreign agents when the element of time is of great importance.

Steps in Export Procedure. The following is a brief outline of the technicalities usually associated with export shipping:[1]

1. *Shipper's Export Declaration.* In shipping to foreign countries and noncontiguous territories of the United States, a special declaration of the merchandise and its value must be filed in triplicate with the U. S. Collector of Customs at the port or border point.

2. *Consular Invoices.* Many countries require consular invoices and their certification by accredited representatives of such countries to permit of their use in the country to which shipment is going.

3. *Commercial Invoices.* The usual form of invoice used in domestic business may not suffice to cover export shipments. An invoice covering an export shipment must be explicit and describe merchandise fully, not using abbreviations. Also in many cases, a special form of invoice on special blanks, sometimes in the language of the country of importation, and its legalization by proper officials are required.

4. *Certificate of Origin.* It is necessary to furnish certificates of origin in addition to consular invoices for goods destined to certain countries.

5. *Bills of Lading.* Each country has its own regulations as to these instruments. Some countries require the bills of lading to be taken to their consulates for legalization.

6. *Forwarding the Documents.* It is essential that documents be presented to consuls for legalization in ample time to provide their going forward at the time of shipment.

7. *Accuracy Is of Prime Importance.* Inaccurate statements as to weight, description of merchandise, etc., may result in the imposition of heavy fines. Some countries insist on the description's being in harmony with their customs tariff.

Government Interference with Foreign Trade. In the United States, shipments of goods may be made from one state to another with little or no interference. The guarantees embodied in the federal Constitution have resulted in the creation of an immense domestic market, free from any kind of interstate customs duties and only slightly hampered by certain forms of restrictive legislation.

International trade, on the other hand, does not enjoy this same freedom of movement. Both in the import trade to the United States and in the American export business, merchants are confronted with various duties, embargoes, commodity quotas, bounties, and many other forms of restrictive or regulative legislation.

The United States has traditionally been a nation with high protective tariffs on imports; and as a result, the import business in certain commodities has been severely curtailed, if not completely eliminated. Although there is no corresponding export tax in this country, American merchants seeking foreign markets are affected by the customs levies and other control measures enacted by foreign countries. This has arisen chiefly from the need for revenue and from the desire on the part of nations to become economically self-sufficient. The latter goal has caused the spread of the use of high protective tariffs and embargoes so as to encourage, protect, and preserve certain domestic industries.

[1] These factors are discussed further in Chaps. XIX and XXV.

Development of the Tariff Problem. To American farmers, industrialists, and merchants, the tariff represents a many-sided problem. In the early part of the nation's history when economic pursuits were largely of an agricultural character, exports consisted chiefly of raw materials and imports of finished manufactured products. England and other large importers of raw materials from the United States admitted most of these products duty free. The United States, in turn, permitted the majority of the foreign goods to enter the country free of duty or else subjected them to relatively low revenue tariffs.

As the economic development of the nation continued, however, and new manufacturing enterprises sought to establish themselves, a demand arose for "protective" legislation in the form of tariffs to shut out the competition of well-established industries abroad. Particularly was this the case after the Napoleonic Wars. Artificial restriction of foreign goods, which had been caused by the wars, encouraged American producers to set up manufacturing establishments. The influx of European goods after the war threatened these "infant industries" and led to the passage of the first protective tariff. Besides being a popular measure among the manufacturers who supported it, it was regarded by the government as a satisfactory device for the raising of much-needed revenue. The southern agriculturists, on the other hand, opposed the tariff—partly because they wished to be free to buy manufactured goods at the lowest prices obtainable and also because they feared foreign retaliation in the form of tariffs on American agricultural exports.

From these beginnings, the tariff in the United States developed into one of the most important subjects of economic controversy. Moreover, the spread of similar policies among other nations and the rise of reciprocal agreements and retaliatory measures complicated the problem and helped to intensify the many factional disputes that arose among American businessmen.

Conflicts of Interest. *Changing Attitudes toward Tariffs.* Many changes have occurred in the industrial map of the United States since its tariff policy was first ushered into being. The undeveloped frontier of the West has disappeared; manufacturing activity has expanded rapidly; domestic markets have continued to absorb an increasing quantity of the agricultural output; and manufacturers, having saturated domestic markets, have sought foreign fields for the distribution of their products.

This has resulted in a considerable number of shifts in viewpoint among American producers on the subject of governmental restrictions or regulations of international markets. Where business has expanded to foreign fields, the import duties or restrictions imposed on American goods by nations such as Canada, England, France, Russia, Italy, and the Latin-

American countries have a direct bearing upon sales. Furthermore, infant industries have matured; and in some lines of business, production costs are now lower than those of foreign competitors. A reduction of tariffs on raw materials would still further lower the cost of production in these industries. This would enable them to compete even more successfully in foreign markets. Agriculturists, lumbermen, and mineral producers who serve a limited domestic market, on the other hand, favor the tariff as an effective barrier against cheap imports from abroad. So also do manufacturers who cater exclusively to a protected domestic market.

Group Interests. There is thus clearly a conflict of interests among American producers with reference to the tariff policy of the United States. Certain producers are dependent upon some variety of governmental protection. Temporary aid, in the form of bounties, embargoes, or tariffs that will reduce foreign competition, is sometimes defended as necessary in order to induce investors to start in some new lines of business or to encourage those who have ventured into these fields. Coal tar dyes, rayon, and potash were new American products that received encouragement in tariff legislation after the First World War. It is contended, however, by producers using these materials that once new industries of this type have become firmly established, there is little need for further protection. It is charged, for example, that E. I. du Pont de Nemours & Company, one of the largest American producers of the above-mentioned products, could successfully withstand foreign competition without benefit of the high American tariffs on these goods.[1]

Certain industries, particularly those requiring the employment of a considerable amount of hand labor in the production process, have higher costs of production than do their foreign competitors. These industries, for the most part, have grown up under the protection of a high-tariff policy. To withdraw this protection by suddenly removing or sharply reducing the tariff would be, they contend, nothing short of disastrous.

American farmers, buying most of their supplies in a protected market, have demanded that they also receive protection on products that are sold mainly in the home market. Sugar beet growers and producers of cane sugar, maple sugar, tobacco, raw wool, and flax straw receive the benefit of protective duties on imported products. In the 1930 tariff, a schedule of 114 paragraphs covering many varieties of farm products was included, thus assuring the farmer of protection against imported commodities that might possibly compete with him in the home market.

[1] In the Tariff Act of 1930, coal tar dyes were charged a duty of 45 per cent ad valorem and 7 cts. per pound; potash salts, from 1 to 25 cts. per pound; and rayon, 45 cts. per pound minimum, plus ad valorem rates.

However, a large body of producers, as has been noted, feel that their interests would be furthered by a reduction or removal of the tariff rather than through continued increases in import duties. This may be accounted for by the fact that existing tariffs raise the costs of their raw materials or supplies. Cornelius A. Wood, former vice-president of the American Woolen Company, typified this attitude in the following opinion on the tariff:

> Free wool would enable us to export cloth into foreign markets and at the same time materially reduce the price of cloth in our own. The average suit of clothes contains some three pounds of wool or wool derivative. The raw material represents approximately 60 per cent of the cost of a yard of cloth. The average cost per yard is not over $2.50 and the average suit contains about 3½ yards. The duty on wool of 34 cents a pound [reduced in the tariff of 1930 to 27 cts. a pound] has an obvious adverse effect from the point of view of every American farmer, laborer, capitalist, who buys a suit of American clothing and also upon the chances of American manufacturers to meet foreign competition abroad. . . .
>
> To sum up, then, our prosperity depends upon keeping our mills operating at capacity through disposing of their surplus products, by leveling the inequalities of international as well as domestic prices by establishing them on the most natural basis, by encouraging the free exchange of commodities between debtor and creditor nation.

The board of directors of the Standard Oil Company (New Jersey) stated the position of their company toward the tariff problem as follows:[1]

> The Company believes that restrictions on world trade and foreign exchange which cut nations off from supplies—especially those supplies which are the breath of economic existence—are among the important pressures which drive peoples toward excesses of nationalism and toward war. Jersey is on the side of increased world trade and reduced restrictions. In no field is this more important than in the field of oil.

It was shown earlier in this chapter that commodities produced in excess of domestic requirements must find world markets to ensure stability. To the extent that imports of a country are restricted, the abilities of foreign buyers to purchase the products of that country will be correspondingly impaired. If a country does not buy, it cannot sell. Furthermore, such tariff measures are likely to invite reprisals and retaliation on the part of other nations. Consequently, producers of short-staple cotton, wheat, corn, copper, and automobiles are less enthusiastic in their support of high protective tariffs than are other American industrialists. The first to suffer as a result of the Smoot-Hawley tariff were American farmers and manufacturers who sold an important part of their product in foreign countries.

[1] Standard Oil Co. (New Jersey), *Ann. Rept.*, 1945.

Other groups of producers whose costs are raised by a general tariff, through an increase in labor and materials costs, but whose selling prices are unaffected, see little advantage in the tariff. Many enterprises in this class sell their commodities or services exclusively in a domestic market and are not affected by competition from abroad. Chief among them are the railroads and public utilities, the local building trades, hotels, and mercantile distributors.

Types of Tariffs. When the conflicting points of view of various industrial groups are carefully examined, it can be seen that a completely harmonious national tariff policy is practically impossible. At best, a tariff law represents a series of compromises after a long and careful study of evidence relating to competitive conditions and to comparative industrial costs. It is usually highly colored by political considerations, and specific items in the schedule of duties are often inserted as a result of the pressure exerted by dominant or powerful interests.

Three important aims can be detected in modern tariff legislation, *viz.*, revenue, protection, and bargaining power.

Revenue Items of a Tariff. The revenue features of a tariff law seldom cause as much controversy as do its other aspects. When duties are levied primarily for revenue purposes, there is not so much interest in discouraging the importation of certain products as there is in collecting revenue on those coming into the country. Various commodities classed as luxuries, such as silk opera hats, pearls, diamonds, precious and semiprecious stones, are singled out for purposes of revenue taxation. Other articles, not produced in the United States or else produced only on a small scale, also serve as revenue items. These include such products as olive oil, manganese, and spiegeleisen.

Tariffs for Protection. It is difficult to isolate the revenue from the protective features of the tax on many articles; for even if the article is not produced in this country, a tax on it may lead to the use of American-made substitutes. The purpose of the tariff in the United States has become primarily that of protection. When the protective feature of a tariff functions successfully, it nullifies or decreases the revenue feature: The more successful a protective tariff is in preventing imports the smaller will be the government's income from such sources. The main purpose then of a protective tariff is not to raise revenue but to keep out foreign competition.

A protective tariff is thus placed on necessities as well as on luxuries. It may tax heavily articles in common use such as sugar, wool, and buttons. Some articles are taxed to protect farmers; others to protect the manufacturer. Examples of the former are wool taxed from 22 to 27 cts. a pound; flax straw, $3 per ton; onions, 2½ cts. per pound; garlic, 1½ cts.

per pound; white or Irish potatoes, 75 cts. per 100 lb.; peanuts, not shelled, 4¼ cts. per pound; lemons, 2½ cts. per pound; whole milk, fresh or sour, 6½ cts. per gallon.

A few random examples of items that protect the manufacturer are pig iron, $1.12½ per ton; china, porcelain, etc., 60 per cent; cotton yarn, from 5 to 37 per cent, depending upon the fineness; wool cloth, 60 per cent; cigars, cigarettes, etc., $4.50 per pound and 25 per cent ad valorem.

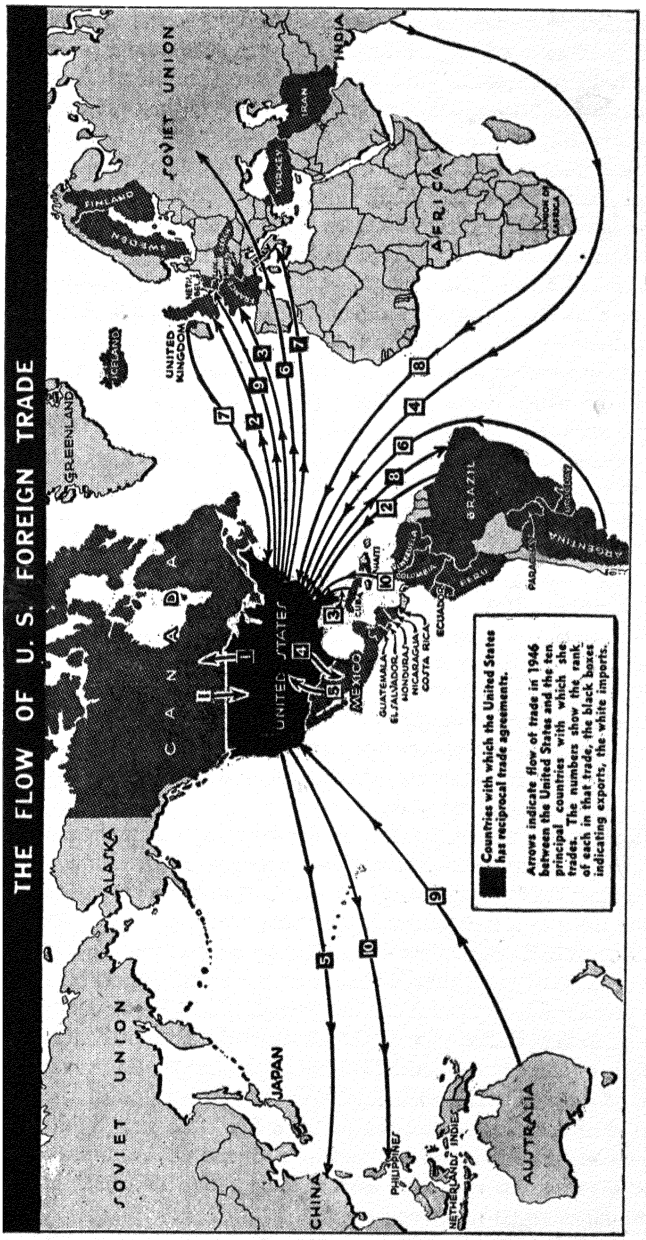
Bargaining Tariffs. Sometimes governments employ the tariff as a means of bargaining in their diplomatic relations with other countries. They may do this by enacting very high tariff rates and then making special concessions from these levels in return for certain trade advantages or for a guarantee of general tariff equality. They also adopt the principle of raising tariff rates above the normal schedule to merchants of those nations which refuse to make satisfactory tariff agreements. In this way, the government can protect those industries which suffer from undue discrimination on the part of foreign countries. For instance, Par. 1650 of the Tariff Act of 1930 stated that various types of coal and coke should come in free of duty, *with the provision* that any country which imposed a duty on these products when imported from the United States would have an equal duty imposed on such articles coming from it into the United States. The act further provided (Sec. 338) that "the President when he finds that the public interest will be served thereby shall by proclamation specify and declare new or additional duties."

This feature of tariff policy was brought into still greater prominence with the passage of the Reciprocal Trade Agreements Act in June, 1934. This act gave the President the power to negotiate with foreign powers for desirable trading relationships by enabling him to raise or lower existing duties 50 per cent without reference to the Tariff Commission or to Congress. The Trade Agreements Act of 1945 gave the State Department power to reduce still further the rates of duty that were already reduced by trade agreements and prepared the way for further agreements to reduce tariffs and for international trade conferences on trade regulation.

According to a statement issued by American economists:

> The Trade Agreements Program is a means by which we and foreign countries agree to relax the barriers in both directions, so that trade in both directions can expand to the benefit of producers and consumers in both countries. This expanded trade results in a net gain in production and consumption in both countries, which stimulates economic activity through their economies.

The formula followed under the act is quite simple. American buyers desire certain foreign goods; a foreign country needs specified American products; both countries agree to reduce their barriers against each other with respect to these items. The result is a reciprocal trade agreement.



(*The New York Times, Jan. 26, 1947.*)

Following the enactment of this legislation, agreements of this kind were successfully negotiated with Belgium, Sweden, Canada, France, Finland, Great Britain, and most of the nations of Central and South America. The effect was to recover, in part, some of the trade with these countries that had been lost in previous years.

The trade pact with Belgium serves as an excellent illustration of the reciprocal tariff reductions made under these treaties. American tariff concessions of 50 per cent or less were made on 47 items coming from Belgium, including cement, plate glass, iron bars, steel ingots, plates and sheets, asbestos shingles, shotguns, photographic plate, cordage, special linens, handmade lace, hair felt, paints and chemicals, grapes, endives, and chicory. Belgium, in turn, cut her duties from 15 to 80 per cent and reduced or removed quota restrictions on 22 imports from the United States, the most important of which were passenger cars, automotive parts, light office machines, radio sets, tubes, rubber hose, linseed-oil cakes, silk stockings, women's dresses, meat, oatmeal, grapefruit, and pears. Concessions in general were so planned as to cause the least injury possible to American producers. Thus, although liberal reductions were made in duties on Belgian steel, Belgium, in turn, favored the automobile industry which is steel's best domestic customer.

Tariff Rates. Most tariff acts consist of two parts, *viz.*, the schedules of dutiable goods and a free list. The attitude of the American government has generally been that necessities in common use which are not grown or produced in this country should come in free of duty while those articles which in any way affect domestic business through competition or which provide a ready source of revenue should be taxed. Thousands of items appear on the free list, including products such as coffee, cacao beans, crude rubber, tea, chalk, and raw silk.

Specific and ad Valorem Duties. In drawing up a comprehensive schedule of rates, several important features must be considered. First, the method of assessment; this may be *specific* or *ad valorem* or a combination of both. A specific duty is a flat charge of so many cents or dollars for each unit (by bulk or weight) regardless of value. An ad valorem duty is one levied as a percentage of the value of the goods. Writing paper, for instance, is subject to a specific duty of 3 cts. per pound, plus a 15 per cent ad valorem tax.[1] Ad valorem duties possess the merit of always representing the same proportion of the current market value of the goods. However, since the amount of duty changes with fluctuations in the value of the goods, ad valorem duties sometimes prove to be inequitable and tend to produce uncertainties, especially when contracts or purchases are made far in advance or when they extend over a long period of time. Even under

[1] In the United States 1930 Tariff Act.

stable conditions of trade, the likelihood of an increase in the amount of duty, because of a rising market at time of delivery, and the inability to figure at the time of contract on a definite landed cost of the goods, duty paid, introduce an element of uncertainty into all transactions.

Ad valorem duties offer inadequate protection in many cases. The cost of producing a commodity is made up mainly of two items: labor and raw materials. Protection is needed against the former item, yet it is the latter that to a large extent determines the amount of duty. The cost of labor is more or less stable, whereas the prices of raw materials fluctuate, causing a fluctuation in the duty when that is fixed on an ad valorem basis. Moreover, at times when foreign exchange fluctuations so affect prices as to reduce the costs of articles considerably, an ad valorem rate results in correspondingly lower duties. Conversely, when foreign exchange forces prices up, the importer bears an undue burden, since the rise not only affects the foreign price of the articles but also causes an increase in the duty.

Graduated Rates. Other important considerations in a tariff schedule are the general base scale of duty and the relative treatment of grades varying from the base rate, the rates for partially finished goods, unassembled parts, varying sizes in the same grade, and any other features peculiar to the commodity for which protection is sought.

In general, a manufacturer needs the greatest protection on those items for which labor costs are highest. When the important part of the cost consists of the raw materials, little or no protection is required. Businessmen, therefore, might want a tariff so graduated that the rate is quite low where foreign competition is negligible but which rises as the manufacturing advantages of foreign firms outweigh their own. These latter advantages are generally due to relative labor costs in foreign countries compared with wages paid in American industry. The comparison involves not only money wages but also hours of labor and standards of living. A flat rate, the same for all grades of a commodity, does not take into consideration the varying proportions of labor costs in each grade. Such a rate offers general protection, but it is more likely to apply where there is no need for a tariff. On the other hand, where there is a genuine need for protection, it may prove too weak to offer much support.

Certain tariff schedules, if they are to afford adequate protection, must therefore be graduated. This requires a careful study of comparative costs in the important producing countries. In short, to know what protection is required and where it will be of greatest benefit, a businessman must be familiar not only with his own costs but also with the costs of production in those countries which offer important competition. He can then offer evidence to the legislature or to the Tariff Commission to sup-

port his demands for a more scientific determination of the tariff rate structure.

An example of a graduated tariff is that on cotton yarn:

> *a.* . . . not bleached, dyed, colored, combed, or plied, of numbers not exceeding number 90, 5 per centum ad valorem and, in addition thereto, for each number, three tenths of one per centum ad valorem; exceeding number 90, 32 per centum ad valorem,
>
> *b.* The same when dyed, colored, combed or plied 10 per centum ad valorem and in addition thereto, for each number, three tenths of one per centum ad valorem; exceeding number 90, 37 per centum ad valorem.

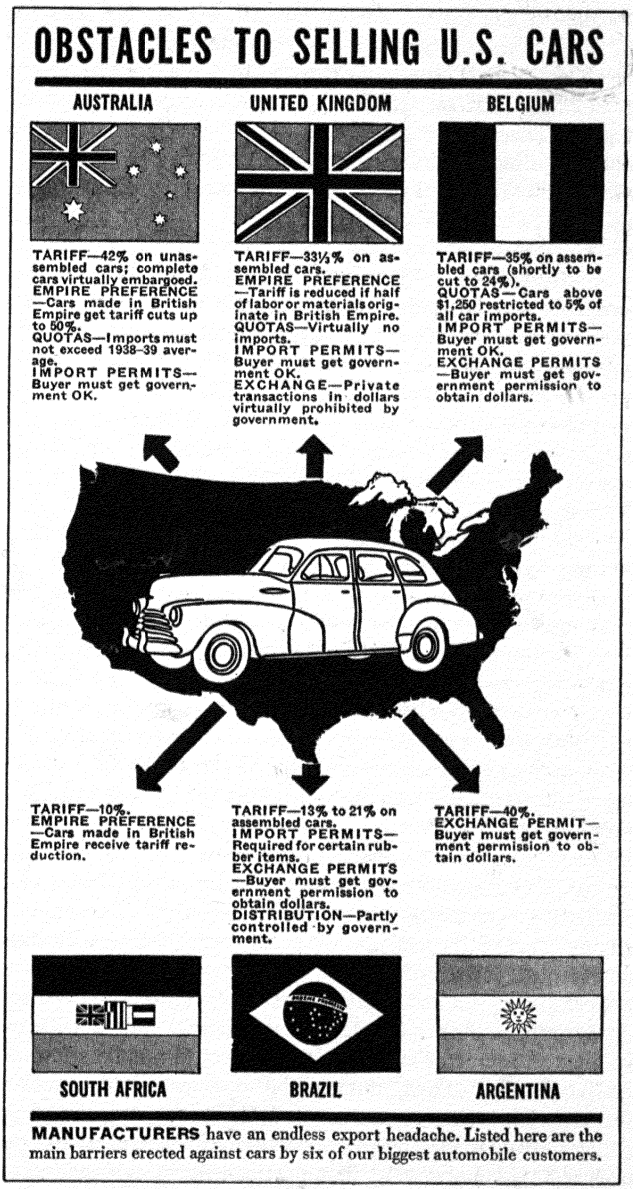
The higher numbered cottons require a greater amount of skilled labor in their production. Furthermore, the added costs of labor for dyeing and combing operations account for the higher duties on these yarns.

Trade Barriers of Foreign Countries. So far the discussion has centered largely upon the tariff policy of the United States and the attitudes of American producers and merchants toward protective measures. To American exporters, the trade-control measures of foreign countries are of the utmost importance. The illustration on page 405 shows the restrictions on one American export product.

These barriers take many forms. A transaction between a willing buyer in one country and a willing seller in another may be prevented because the tariff of the buyer's country creates an added cost too great to be borne, because the paper work required for export or import is so burdensome that the deal is not worth while, because the buyer cannot get an import license, because the buyer cannot acquire the seller's currency to make a payment, because importation is restricted by the buyer's country to a quota that has been exhausted, or because it is forbidden altogether. Or the seller may discover that the tariff of the buyer's country discriminates against him in favor of sellers located elsewhere.

All these restrictions and the red tape connected with them have undoubtedly prevented many business transactions, cut down the total of world trade, and reduced to that extent the benefits that trade might bring to all the parties concerned.

Foreign Tariffs. After the First World War, the desire among nations for self-sufficiency, coupled with the many monetary disturbances, unemployment, the needs for revenue, and the demands for protection from foreign competition on the part of domestic producers, led to a considerable increase in import duties in almost every commercial nation in the world. Even England, which had traditionally followed a limited free trade policy, was forced to adopt a general tariff. The Imperial Economic Conference at Ottawa in 1932 resulted in a considerable extension of tariff systems throughout the British Empire. Advances in prevailing duties were common in continental Europe, and year after year saw further up-



(Courtesy of Time, Inc.)

ward revisions in the rates. In the Orient and among Latin-American countries, similar adjustments were made in tariff schedules.

Exchange Controls. The adoption by most governments of some form of direct exchange control exerted a powerful regulative influence over foreign trade. These measures of control are usually operated through a central bank or other specially constituted authority which undertakes to regulate the allocation of the nation's available supply of foreign exchange. At times, such restrictions are introduced in order to protect domestic currencies, to prevent an outflow of gold, or again to correct dislocated balances of international payments. However, the chief reason for exchange controls has been the attempt to conserve a supply of foreign exchange admittedly insufficient to meet all demands. Continued adverse trade balances result in a steady drawing down of foreign credits; and in the absence of foreign loans sufficiently large to bolster up the supply of available exchange, it becomes necessary that banks and merchants get government permission to obtain dollars or other foreign currencies in settlement of their obligations. The obvious effect of this in most countries is to restrict the financing of imports to that trade considered most essential to the country's welfare and to deny traders the freedom of buying whatever they want and wherever they please.

Import Quotas and License Restrictions. Quotas and license regulations involve the setting of quantitative limitations on specific goods that a given country will import. An import quota system prescribes the volume or quantity of imports of each class of merchandise that will be allowed to enter the country during a specified time period. Shares in these quotas are generally assigned to the principal competing export countries, either through a trade agreement or by government fiat. Such quotas are changed at frequent intervals and function independently of tariff schedules.

License restrictions are arrangements that require a nation's importers to obtain special licenses for the privilege of importing a stated quantity of foreign goods. By means of this device, the flow of commerce can be regulated in terms of its national economic significance. Licenses might be readily issued for commodities of greatest necessity, for example, whereas permits to import luxury items are more difficult to obtain. Occasionally import license regulations are closely linked with exchange-control plans; an importer lacking a license would not be allowed foreign-exchange payments. Thus, during the postwar reconstruction period when nations were trying to protect their dwindling supplies of dollar exchange, they sharply restricted all import permits requiring dollar payments.

Controls of this type were at first particularly in evidence in such centrally directed economies as Germany, Italy, and Soviet Russia. However,

the exigencies of the war and postwar periods brought about a widespread adoption of these methods by many nations of the world.

Other Trade Controls. Other familiar devices employed by various governments for regulating the trade passing across their borders have included export subsidies, government price-control plans, the legalization of cartels, import embargoes, blocked currency systems, and different types of barter agreements with other nations. All these measures have had the effect of interfering with the free flow of international trade. After the Second World War, there was a trend among some nations to increase rather than to lessen these restrictive policies. Canada and Argentina, for example, assumed national control over all exports of wheat. Great Britain arranged to purchase all cotton and wheat through a single government agency and, at the same time, assumed control of the West African cocoa trade. In her drive to rebuild an export market and to restore her shattered financial position, Great Britain placed severe restrictions on imports. Many American exporters, who had sold in the British markets in the past, found themselves shut out or permitted to make only token shipments.

Stabilizing World Trade. Trade barriers are imposed because they serve or seem to serve an important purpose other than the expansion of world trade. Within limits, they cannot be avoided or completely forbidden; but when they become too restrictive and especially when they result in discrimination among countries or interrupt previously established business connections, they create bad feeling and destroy prosperity. It is eminently desirable that the governments of the world should cooperate in an effort to break down these barriers and to evolve rules for the promotion of international commerce. True, such action might ultimately involve important shifts within our own domestic economy, but the end results cannot help being constructive.

Trade-treaty conferences among 23 nations at Geneva in 1947 resulted in a multilateral agreement affecting a large part of United States trade. Under the treaties, all the participating nations traded tariff reductions or promised relaxation of import restrictions. The United States agreed to reduce tariffs on 3,500 import items; in return, other nations offered to cut or freeze duties on specified American products. The tariff reductions, effective January 1, 1948, for a period of not less than three years, were regarded in trade circles as a major step in a program to expand world commerce by dropping trade barriers.

To further promote international cooperation, committees working under the Economic and Social Council of the United Nations were organized to establish an international trade organization. The Bank and Monetary Fund were established to aid in stabilizing currency and credit.

The International Trade Organization is designed for the purpose of achieving a long-range program to stimulate production, employment, and the exchange of goods and services throughout the world. Trade delegations from 62 nations met at Havana in 1947 to adopt a charter and to formulate plans for future action.

The Bank for Reconstruction and Development was organized in 1946 with an authorized capital of 10 billion dollars. Original subscriptions totaled about 8 billion dollars among member nations, 40 per cent of which was subscribed by the United States. This capital is held as a reserve, the bank raising cash for its loans by offering its securities to the investing public. It uses these funds for reconstruction loans or to finance projects that will develop the borrowing country's economy. It is expected that this flow of funds will promote employment, trade, and the economic advancement of nations.

The International Monetary Fund is intended to keep the value of international currencies in a steady relation to one another. This is the world's first venture into the realm of global currency regulation. The object of the fund is to provide flexibility by cooperative effort rather than by unilateral action as in the past. Its machinery enables a nation to secure foreign-exchange credits to meet temporary requirements for maintaining the stability of its exchange rates. In this way, the former sharp fluctuations, uncertainties, and ruinous spirals of currency devaluations might be avoided. Naturally a program of such scope will face numerous problems and operational difficulties, but these, in time, should be solved satisfactorily.

The lessons of two world wars have led people to believe that freedom and prosperity in other parts of the world are essential to their own peace and prosperity, that economic peace is inseparable from political peace. From the standpoint of the United States as the leading creditor nation, there must be a broad program of financial assistance and cooperation to promote relative monetary stability and to aid world reconstruction. On the other hand, there must also be a freer flow of commodity imports to this country; for in the long run, the exchange of goods—to be healthy—must settle itself. This means lower tariffs and the gradual elimination of practices that restrict international trade. World stability is closely linked with the policies and acts of the United States and of the major countries comprising the United Nations.

Questions and Problems

1. Despite the vast resources of the United States, there is hardly a product made and used in this country that does not in some way depend upon imports. What imports are essential to our industries to maintain our standard of living? Describe the steps taken during wars and emergencies to offset shortages of imported goods.

2. Our exports may be only 10 per cent of our total productivity; but without foreign markets, industry would be seriously affected. Why is this 10 per cent so important? Give examples where reduced foreign sales would cause serious loss.

3. What advantages do foreign markets offer to manufacturers who have not fully exploited the domestic market?

4. If you were interested in immediate export business, how would you go about procuring it? How would you obtain market information? The names of prospective buyers? What methods would you use to develop business of a permanent nature?

5. While there is a world-wide demand for well-known American products, foreign markets, nevertheless, present peculiar problems. Give examples showing some of the peculiarities of foreign markets that would require different procedures from domestic methods.

6. If you were an exporter, what details other than selling would require careful consideration? Discuss the importance of each of the following: packing, correspondence, cables, telegraph, codes, advertising.

7. Why have some American corporations established manufacturing plants abroad despite the fact that their American factories are producing below full capacity?

8. Show that the tariff is not an unmixed blessing to an American manufacturer. In what ways does a high protective tariff harm those whom it is supposed to aid? What is the effect upon labor? Upon the consumer? Do you think that American business has benefited from the reciprocal tariff agreements? Justify your stand on this question.

9. Show how currency depreciation and unstable foreign exchange interfere with foreign trade. What other barriers are there that prevent the free flow of commerce between countries?

10. How will the Bank for Reconstruction and Development and the Monetary Fund help to stabilize international trade? What are the other steps planned under the auspices of the United Nations to facilitate world trade? Why is the promotion of international trade an important factor toward peace and stability?

CHAPTER XIX

TRANSPORTATION AND STORAGE

Transportation—Its Importance in Marketing. The original Standard Oil Company is said to have attained its dominant position in the petroleum industry, not so much because of the ability of its organizers to refine oil more cheaply than could their competitors, but because they were able to obtain cheaper transportation. The advantages in the field of transportation were a principal factor in the rapid progress of this company from 1870 to its dissolution in 1911.[1] So also, at present, the United Fruit Company owes its dominant position in the importation of bananas in part to its ownership of extensive plantations in Central America but more particularly to its efficient operation of a line of steamers especially equipped for the transportation of bananas.

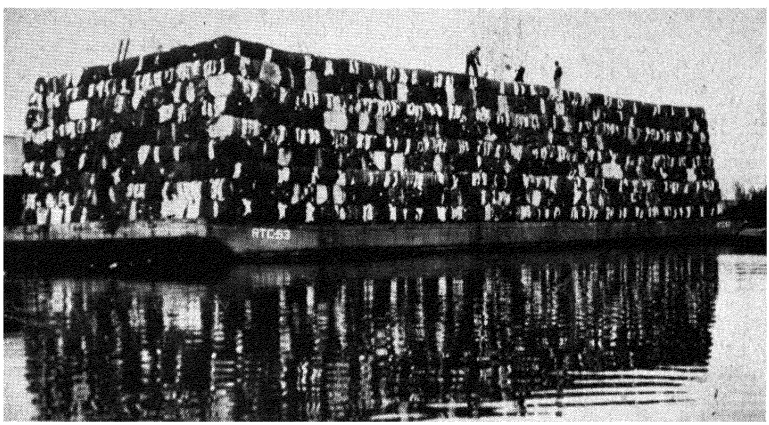
The large grain area and the corn belt of the Middle West could not be developed until cheap transportation facilities opened the way for the products of these sections to reach the eastern markets. Although original settlers found the plains extremely fertile and desirable for agricultural use, the cost of shipping the produce limited operations to local needs until improved means of transportation were provided. Before rapid rail shipments and refrigerator cars were made available, meat supplies in excess of purely local requirements had to be discarded because of their perishable nature. Today, the large national packers are able to ship fresh meats to markets hundreds of miles from the packing houses. Transportation facilities enable northern city dwellers to enjoy fresh fruits and vegetables throughout the winter months. Lettuce, celery, tomatoes, radishes, cucumbers, and strawberries were at one time strictly seasonal products, obtainable on the North Atlantic seaboard only in the spring and summer. These products now come from California, Florida, Puerto Rico, and South America in quantities and at prices that make them readily available in all city markets throughout the year. The daily supplies of milk in American cities are made possible because of the great advances that have been made in shipping facilities.

To a great extent, modern methods of production and systems of marketing are based upon economical and efficient transportation. Production,

[1] SEAGER, H. R., and C. A. GULICK, "Trust and Corporation Problems," p. 111, Harper, 1929.

whether in manufacturing, mining, or agriculture, would never have grown to its present scale were not the facilities for distributing the products over a wide area so highly developed. The growth of large urban communities, the localization of industry, and the specialization of production in various sections of the country have depended largely upon adequate means of transportation.

Shipping Facilities. The railroads have long been considered the leading carriers of freight in the American transportation system. Other shipping

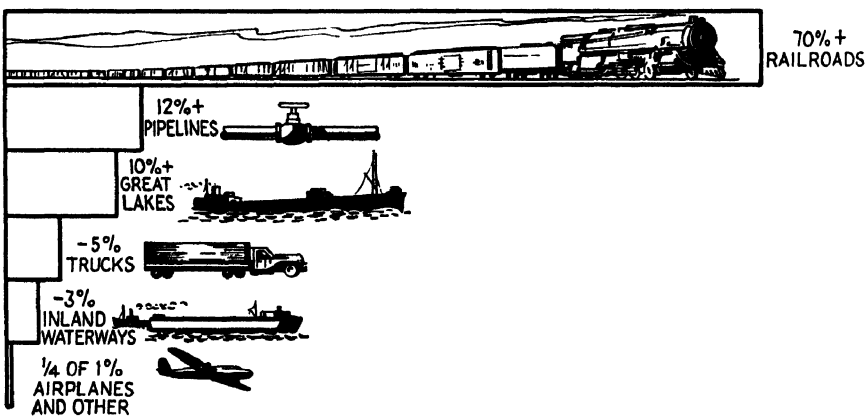


The traffic carried on the waterways consists mainly of bulky products. A bargeload of 3,000 bales of cotton on the Mobile River. (*Courtesy of A. H. Garside, New York Cotton Exchange.*)

facilities also play an important part in the movement of goods. There is a wide use of water transportation on the rivers, lakes, and canals, as well as in the coastwise trade and foreign shipments. The traffic carried on the waterways (as far as domestic trade is concerned) consists mainly of bulky products such as iron, coal, grain, lumber, stone, and building materials, which are shipped on river boats, canal- and flatboats, and lake steamers. In the coastwise trade, freight steamers or specially designed boats, such as oil tankers, handle most of the shipments. In exports and imports, the ordinary freighters or the combination freight and passenger steamers carry the bulk of the cargoes. Barges and lighters are used in the harbors of seaports or wherever they meet the particular requirements of the shipper. The automobile truck has become a very important agency of transportation in domestic trade and, with the further construction and improvement of highways, will undoubtedly retain its position in that field. Pipe lines for the movement of petroleum, gas, and water must

also be included as important supplements to inland shipping facilities. Airplanes are to an increasing extent becoming regular carriers of certain types of domestic freight shipments. The chart shown below indicates the rank of the various types of carriers. Intercity freight transportation in 1944 amounted to more than 1,000 billion ton-miles. This freight was moved in approximately the proportions shown on this chart.

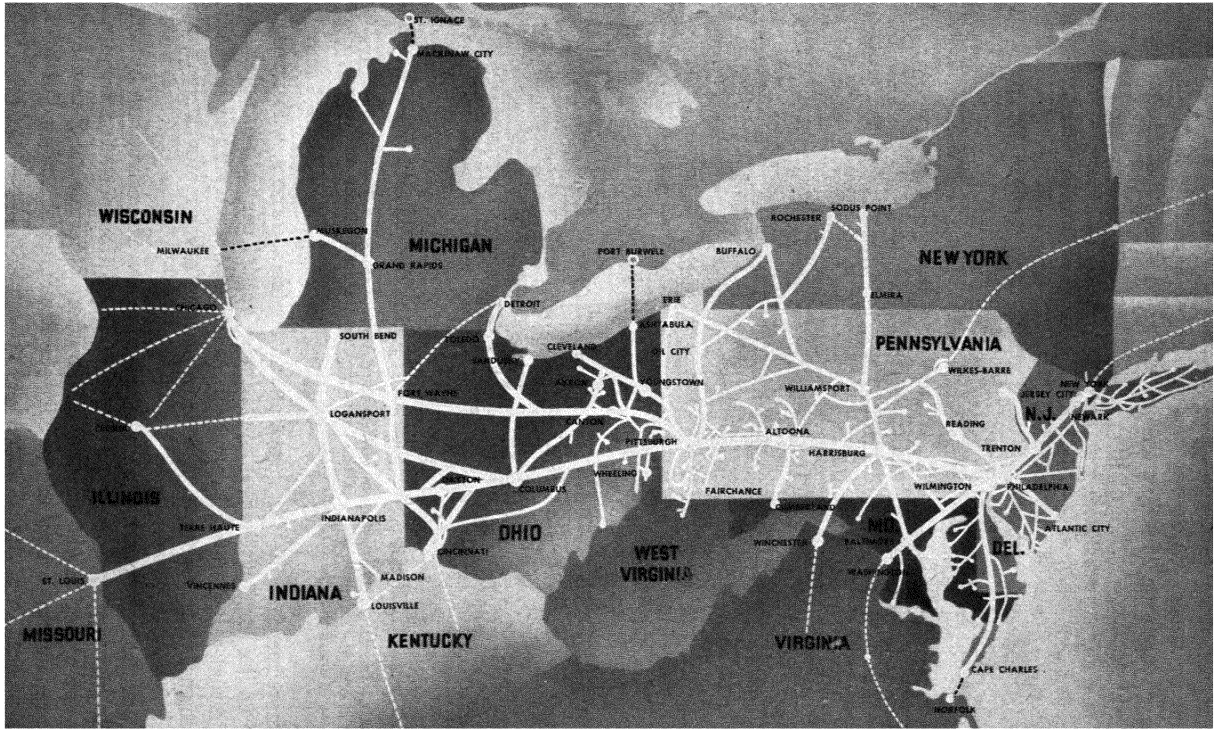
Railroads. The railroads stretch across the United States in a network of large and small lines aggregating approximately 225,000 miles and carry on the average from two to three billion tons of freight per annum to all



Relative importance of carriers in handling the nation's freight (1944).

parts of the country. The present equipment of the railroads enables them to give flexible service. They are prepared to handle bulky goods and small wares, liquid products as well as dry goods, perishables and non-perishables, and slow- and fast-moving freight. Moreover, in view of the existing and potential competition of other carriers, some of the larger trunk lines have acquired subsidiaries in the steamship and water-haulage business, trucking companies, and airplane lines. Consequently, they are prepared to offer practically all services given by their competitors. Any consideration of domestic transportation problems therefore relates primarily to dealings and relationships with American railroads.

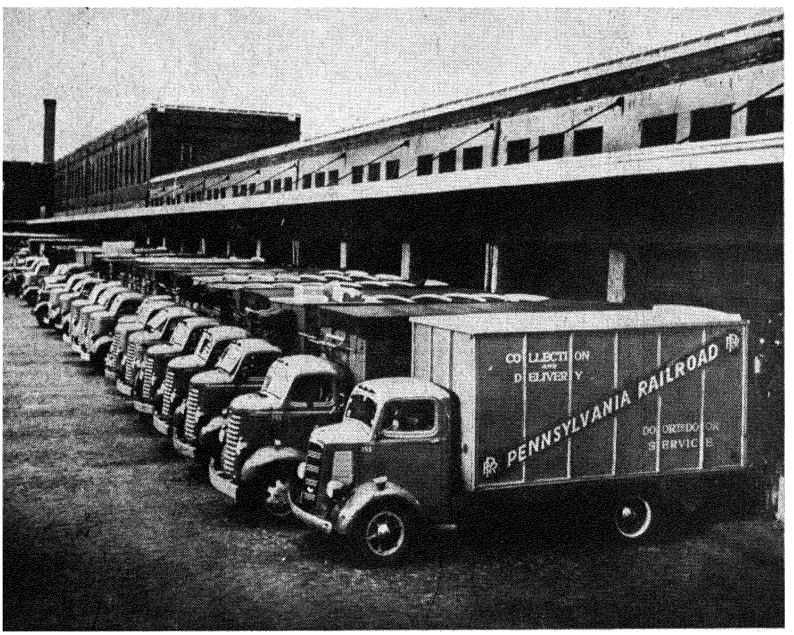
Trucking. Approximately six million trucks are in use in the United States in the transportation of both package goods and bulk shipments. In an average year these trucks haul freight aggregating close to 60 billion ton-miles. Some lines of business depend heavily upon truck transportation. For example, 65 per cent of the nation's crushed stone and 57 per cent of its sand deliveries are carried by trucks. Over 55 per cent of the livestock receipts at stockyards arrive on trucks, and some 75 metropolitan



Part of the huge network of railroad lines that stretch across the country. Depicted above is the Pennsylvania Railroad system whose main track totals 10,682 miles. (*Courtesy of Pennsylvania Railroad Co.*)

areas, representing 25 million people, receive virtually all their dairy products by truck. Moreover, some areas are accessible only via motor highway; more than 25,000 communities depend solely upon motor trucks for freight service.

Truck owners are classified as private carriers, *i.e.*, those who operate trucks in connection with their own business; common carriers, who



Most of the larger railroads are now offering store-door delivery and factory pickups. Above is one of the great fleets of the Pennsylvania Railroad pickup and delivery trucks. (*Courtesy of Pennsylvania Railroad Co.*)

transport merchandise for shippers; and contract carriers, who transport merchandise for individual shippers under special contract or agreement. In addition, there are local cartage firms that operate within or near cities and towns, in transshipping goods to or from other motor carriers, railroads, vessels, or warehouses.

In general, shipments by rail or water are less expensive than by automobile highway, but the advantages of truck transportation frequently offset the higher freight charges. Even where other means of transportation are employed, they are usually supplemented at some point by the use of trucks. A pamphlet issued by the American Trucking Associations,

Inc., makes the claim that "everything Americans eat, use, and wear comes all or part way by truck."

The principal advantages of shipping by truck are speed and flexibility. The shipper is provided with door-to-door service, with a minimum of handling, and the goods can be dispatched immediately upon being loaded onto the truck. Regular trucking service between large cities ordinarily provides a higher degree of dependability than is afforded by rail shipments which, for the equivalent distance, are subject to delays both in transit and at terminals. The truck is limited, however, in the quantity that can be shipped at one time. Delays also arise because of breakdowns or road congestion. The latter difficulty is overcome to some extent by making intercity shipments at night when there is less traffic on important arteries.

Rail, steamship, and airplane lines benefit from truck feeder service and frequently operate their own fleets of delivery trucks (see illustration). The larger railroads, to meet trucking competition, now offer store-door delivery and factory pickups. In other words, they supply trucking service to the railroad terminal at one end and from the terminal to the consignee at the other end of the line.

Water Transportation. Shipping by boat, especially when canals and inland waterways are used, is much slower but cheaper than rail shipments. However, in some cases, shipments by rail may be quite as slow because of long delays in the transfer of merchandise or freight cars from one line to another. In many cases, the freight car is joined to a mixed train which bears a variety of goods destined for different parts of the country. Breaking up and remaking the train all along the way retard the movement from the point of shipment to destination. Shippers near any of the southern ports like New Orleans or Galveston or near the eastern ports like Savannah or Charleston find that steamer shipments are direct, fast, cheap, and dependable. Steamship lines connect these ports with New York and offer regular service. Many shippers use the Panama Canal in preference to the railroads for coast-to-coast shipments.

Those cities located at or near the Great Lakes find it convenient to use the steamers that provide regular service on many routes. Coal, flour, grain, iron ore, copper, and lumber are shipped in large quantities via the Great Lakes. The possibilities of this water-borne traffic will be vastly widened by the proposed St. Lawrence waterway, which has been the subject of negotiation between the United States and Canada for a long time. One of the important limitations of water shipment in the North, however, is that during the cold months canals and rivers freeze, with the result that they are closed to navigation for such periods.

Express and Car-loading Companies. Where shipments consist of package and case lots and where speed counts, the parcel post and express

companies play an important part. The former limits shipments by both weight and bulk and so can be used only by those whose products are not too heavy or bulky. The express companies offering national service were combined into the Railway Express Agency, Inc., which offers a fast but more expensive service to shippers of package and case goods. Express companies pick up packages at the door of the sender and deliver them to the door of the customer. Unlike freight shipments, express cars are attached to passenger trains, thus resulting in quicker service.

A similar service, but at lower rates, since ordinary freight rates are charged, is offered by the many car-loading companies, like the Universal or the Acme. By packing solid cars or train loads to each destination, these companies provide a faster and more direct service than that offered in the ordinary freight shipments. The companies make their profit through the differences between carload rates and less-than-carload rates.

Pipe Lines. In the transportation of petroleum, the cheapest and most important means of shipment is the network of pipe lines running from the producing areas to seaports and to refineries. There are over 140,000 miles of these oil pipe lines in the United States, and through them flow annually over 1,700 million barrels of petroleum.

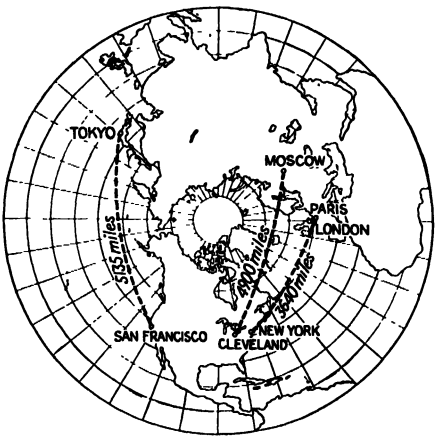
Major trunk lines out of the mid-continent fields carry the oil south to the Gulf coast, where there are large refineries and also terminals for re-shipment of the oil by tanker to the refineries on the Atlantic seaboard. Other trunk lines extend north to the refineries in Missouri, Illinois, and Indiana, and still others reach east to the great refineries at Bayonne, N. J., Philadelphia, and Baltimore. Oil produced in Texas is thus shipped by pipe line to the New York harbor. Natural gas is also sent by pipe line over great distances. There are approximately 210,000 miles of these interstate natural-gas lines.

Most of the pipe lines are owned by the important oil and public-utility companies, but in interstate commerce they are common carriers and come under the jurisdiction of the Interstate Commerce Commission. In many states, intrastate pipe lines are regarded as common carriers subject to regulation by state commissions.

Air Transportation. The use of air transportation for conveying the products of industry is becoming increasingly important. Aviation's shrinkage of time and distance has brought the countries of the world closer to each other today than were the principal cities of the United States 50 years ago. Air routes shorten the distance between states and continents, and more and more passengers and freight are moving over these shorter routes (see map). World relationships need no longer be keyed to circuitous and slow-paced routes of surface travel, obstructed by natural barriers of terrain and sea. Air power has forced a change in geographic thinking.

People must view all countries of the world as neighboring nations and must see their relationships in terms of air miles and air travel time.

On a relative basis, shipments by air were still negligible in the late 1940's. However American industries had just begun to see the potentialities of this newer method of transportation. One company was shipping cases of tomatoes from Las Vegas, Nev., to Rochester, N. Y., by air; another was flying blooded cattle to Colombia and Peru; and still another sent plane loads of pianos in order to ensure deliveries on its Christmas



This map dramatizes the difference between geography in terms of surface travel and air transportation. For example, the distance by air from Cleveland to Moscow (4,900 miles) is not much more than from New York to Paris (3,640 miles) and is shorter than that between San Francisco and Tokyo (5,135 miles).

sales. Motion-picture films from Hollywood and flowers from California and Florida are a regular feature of air freight. Advertising cuts for newspapers, scientific instruments, and drugs are also examples of commodities frequently shipped by this most rapid of modern transportation facilities. Many small articles are regularly sent via air-mail parcel post or air-mail express. As air cargo ships are built with larger carrying capacities and as economies in costs of operation are achieved, there will be an ever-growing tendency to use this service, particularly where speed of shipment is essential.

The Traffic Manager. For the convenience of the shipper and for the purpose of soliciting new business, railroad companies maintain traffic departments. These departments are ready to supply advice and information to shippers on the subject of rates for the shipment of all kinds of commodities from one point to another. They also become acquainted with the industrial requirements of the firms using their transportation facilities and are therefore in a position to adjust their service to the needs

of the shippers. All adjustments, freight claims, and settlements for losses arising in shipment are handled through these departments.

A company whose shipments are sufficiently large to warrant specialized attention to the problems related to the transportation of their products maintains its own traffic department. The department is under the direction of a traffic manager, who is usually assisted by a number of clerks and technical aides. The traffic manager should know not only all the shipping facilities available but also the comparative advantages of each: the cheapest, the fastest, the most dependable, the most convenient, and the safest. He must know when to use one method of shipment and when to use another. He arranges for the needed car supply in rail shipments, for barges and floats when goods are picked up from a pier or water-front warehouse, or for steamer space when the goods are destined for a foreign port. He must naturally be familiar with all shipping requirements and the correct preparation of shipping documents. He is directly responsible for the packing, loading, and routing of the product so that the shipment moves to its destination with the minimum of delay and at the lowest cost. In addition, such matters as reduction of loss and damage claims, marine insurance, and negotiations with carriers for the most favorable rates, all fall within the scope of the traffic manager's duties.

When firms are large enough to require the use of entire steamers or to own cars especially adapted to their purposes, like tank cars or gondola cars, the chartering of ships or equipment is also one of the functions of the traffic manager.

Freight Rates. The decision on the part of the traffic manager in the choice of some method of routing a given shipment depends on two major elements, *viz.*, time and cost. If speed is essential, then a somewhat greater shipping expense is entailed. When the time of arrival of a shipment is not of particular importance, greater economies in transportation can be worked out by skillful routing. This may involve a choice of water carriers or a combination of rail and water facilities or special shipping arrangements with railroads relating to the physical movement of the goods.

To do this, it is necessary to be thoroughly acquainted with the various shipping facilities available and to know the costs of transportation on the different types of carriers. Freight rates cannot be quoted on the same basis for all types of merchandise. Some products are bulky and cheap; others are small but heavy; still others are very valuable. The rate that applies to raw silk cannot be applied to cotton; wheat receives a rate different from that on coal or cement. Nor can the cost of handling the freight be used as a basis for determining the rate. It may cost a railroad as much to transport a carload of sand as to ship a carload of books; but if the railroad attempted to charge as much freight on the sand as it does on the

shipment of books, the sand could not be shipped by rail. Conversely, if the charge for the books or other traffic were as low as that for the sand, the railroad would not cover costs. Consequently rates must be adjusted to "what the traffic will bear"; *i.e.*, rates must be based in part upon what the service is worth to the shipper, and the rate schedule should be so devised that in the aggregate the revenue from all shipments will be greater than the costs to the railroads.

Commodity Classification. In order to achieve this goal, it is necessary to classify goods according to various criteria for the purpose of determining which goods should bear higher freight rates and which products should be given special consideration in the form of low freight charges. Some of the bases used in deciding upon the classification of commodities for this purpose are value, weight, bulk, or volume; whether raw material or finished product; whether liquid or dry, loose or in bulk; whether knocked down or set up and how packed. In addition, the season at which the goods are shipped, the specific car requirements, the cost of rendering special services in loading and unloading, the risks of damages, or the dangerous nature of the goods are considered.

At present, the United States is divided into three general freight-classification areas known as the "Official," which covers the territory east of the Mississippi River and north of Virginia; the "Southern," which comprises the section east of the Mississippi River and south of the Official territory; and the "Western," which covers the remainder of the country. By mutual agreement, the several railroad-freight associations have established classification numbers on commodities shipped in these territories. In addition, there are also state classifications on freight shipped within the borders of these states but not applying to interstate trade. Certain commodities are not classified within any special group but are given special freight rates per se. All other commodities are given a characteristic freight classification number. Uniform freight rates then apply to all commodities within a stated group. Tables 17 and 18 illustrate some of these classifications.

It will be seen that goods are assigned characteristic numbers or letters known as *ratings*. Each group obtains a different rate in cents per 100 lb. on indicated mileage of transportation.

Preferential Rates. Markets for many products are, to some extent, determined by relative rates. If the distance principle of determining rates were the sole factor in deciding the costs of shipments, the development of production and marketing would be changed considerably. California oranges could not possibly compete with Florida fruit in the eastern markets if they were not given a rate somewhat near the same as that paid by Florida shippers, despite the greater distance of the shipment.

Anthracite coal moving westward from Philadelphia would have to be quoted at prohibitive prices if preferential rates were not established for such shipments. Steel sent from Gary to New York for shipment to Brazil is given a special "export" rate as compared with rates quoted for shipments to New York for domestic use. This is intended to give American producers a better opportunity to compete in world markets, and it stimu-

TABLE 17.—FREIGHT CLASSIFICATIONS AND RATINGS

(For selected commodities)

Products	Official	Southern	Western
Automobiles:			
L.c.l. *	1½	1½	1½
C.l. † min. wt. 12,000 lb.	2	2	2
Bituminous coal:			
L.c.l.	4	5	4
C.l. packages or bulk, min. wt. 40,000 lb.		6	10
Cotton:			
L.c.l. in bags	1	3	1
Min. wt. c.l. in bags 20,000 lb.	4	6	3
In bags or bales (not compressed)	2	1	1
In bags or bales (compressed)	4	1	2
Iron and steel:			
L.c.l. (pig iron or steel objects)	4	6	4
C.l. 50,000 lb.	6	10	10
Meats (in carcasses or part carcasses):			
L.c.l. (in baskets or loose)	1	1	1
Min. wt. c.l. 21,000 lb.	3	4	3

* L.c.l. denotes less-than-carload lots.
† C.l. denotes carload lots.

lates a larger amount of rail traffic to seaboard cities. Not only are products classified, therefore, for the purpose of establishing differential freight rates, but individual market conditions are studied and the special shipping problems of individual classes of producers reviewed. As industrial and commercial situations change, corresponding adjustments are made in the freight-rate structure.

The practice of establishing these variable rates for almost identical transportation services appears to discriminate in favor of certain products or geographical sections, to the disadvantage of other commodities or areas. The Interstate Commerce Act made provision for just and reasonable charges and specifically forbade discrimination among localities, classes of freight, and connecting lines. It also ruled that a greater charge

TABLE 18.—RAILROAD FREIGHT RATES BY FREIGHT CLASSIFICATIONS AND RATINGS *

(Cents per 100 lb.)

From	To	Classification	Rates in cents per 100 lb. classes							
			1	2	3	4	5	6	R25	R26
Chattanooga, Tenn	Boston, Mass.	S	213	181	149	117	96	85	75	64
	New York, N. Y.	S	196	167	137	108	88	78	69	59
	Philadelphia, Pa.	S	187	159	131	103	84	75	65	56
	Baltimore, Md.	S	180	153	126	99	81	72	63	54
Chester, Pa.	Boston, Mass.	O	92	78	64	46	32	25	64	51
	New York, N. Y.	O	58	49	41	29	20	16	41	32
	Philadelphia, Pa.	O	34	29	24	17	12	9	24	19
	Baltimore, Md.	O	54	46	38	27	19	15	38	30
	Norfolk, Va.	O	82	70	57	41	29	23	57	45
Cheyenne, Wyo	Boston, Mass.	W	333	283	233	183	125	150	108	100
	New York, N. Y.	W	327	278	229	180	123	147	106	98
	Philadelphia, Pa.	W	320	272	224	176	120	144	104	96
	Baltimore, Md.	W	315	268	221	173	118	142	102	95
	Norfolk, Va.	W	323	275	226	178	121	145	105	97
Chicago, Ill.	Boston, Mass.	O	154	131	108	77	54	42	108	85
	New York, N. Y.	O	152	129	106	76	53	42	105	84
	Philadelphia, Pa.	O	145	123	102	73	51	40	102	80
	Baltimore, Md.	O	140	119	98	70	49	39	98	77
	Norfolk, Va.	O	151	128	106	76	53	42	106	83
Chillicothe, Ohio	Boston, Mass.	O	140	119	98	70	49	39	98	77
	New York, N. Y.	O	123	105	86	62	43	34	86	68
	Philadelphia, Pa.	O	115	98	81	58	40	32	81	63
	Baltimore, Md.	O	104	88	73	52	36	29	73	57
	Norfolk, Va.	O	120	102	84	60	42	33	84	66
Chippewa Falls, Wis.	Boston, Mass.	W	204	173	143	112	77	92	66	61
	New York, N. Y.	W	200	170	140	110	75	90	65	60
	Philadelphia, Pa.	W	200	170	140	110	75	90	65	60
	Baltimore, Md.	W	194	165	136	107	73	87	63	58
	Norfolk, Va.	W	210	179	147	116	79	95	68	63
Cincinnati, Ohio	Boston, Mass.	O	148	126	104	74	52	41	104	81
	New York, N. Y.	O	136	116	95	68	48	37	95	75
	Philadelphia, Pa.	O	127	108	89	64	44	35	89	70
	Baltimore, Md.	O	116	99	81	58	41	32	81	64
	Norfolk, Va.	O	127	108	89	64	44	35	89	70
Circleville, Ohio	Boston, Mass.	O	140	119	98	70	49	39	98	77
	New York, N. Y.	O	123	105	86	62	43	34	86	68
	Philadelphia, Pa.	O	115	98	81	58	40	32	81	63
	Baltimore, Md.	O	104	88	73	52	36	29	73	57
	Norfolk, Va.	O	120	102	84	60	42	33	84	66
Clairton, Pa.	Boston, Mass.	O	126	107	88	63	44	35	88	69
	New York, N. Y.	O	104	88	73	52	36	29	73	57
	Philadelphia, Pa.	O	94	80	66	47	33	26	66	52
	Baltimore, Md.	O	89	76	62	45	31	24	62	49
	Norfolk, Va.	O	113	96	79	57	40	31	79	62
Clarendon, Pa.	Boston, Mass.	O	114	97	80	57	40	31	80	63
	New York, N. Y.	O	101	86	71	51	35	28	71	56
	Philadelphia, Pa.	O	96	82	67	48	34	26	67	53
	Baltimore, Md.	O	94	80	66	47	33	26	66	52
	Norfolk, Va.	O	120	102	84	60	42	33	84	66
Clinton, Iowa	Boston, Mass.	O	172	146	120	86	60	47	120	95
	New York, N. Y.	O	167	142	117	84	58	46	117	92
	Philadelphia, Pa.	O	160	136	112	80	56	44	112	88
	Baltimore, Md.	O	155	132	109	78	54	43	109	85
	Norfolk, Va.	O	166	141	116	83	58	46	116	91

* Excerpt from a Memorandum of Class Rates issued by the Pennsylvania Railroad.

Explanation of Abbreviations and Reference Marks.

O—official.

W—western.—Classes 6, R25, R26 are classes A, B, and C, respectively.

S—southern.—Classes R25, R26 are classes 7 and 8, respectively.

could not be made for a short haul than for a long haul over the same line in the same direction. The administration of this law was placed in the hands of the Interstate Commerce Commission. This body has investigated thousands of individual cases, has conducted hearings, and on the basis of its findings has rejected or upheld different rate structures. Its interpretations of the law have been sufficiently liberal to cause railroad tariffs to depart considerably from a strictly proportionate schedule of charges on a weight or on a mileage basis. A stricter application of the principle of uniformity in the determination of freight charges would probably have the effect of reducing the number and volume of commodities comprising railway freight traffic.

Preferential rates, however, have long been regarded by southern industrialists as discriminatory. For example, a 1,000-lb. shipment of blankets shipped by rail from Dallas, Tex., to Muncie, Ind.—a distance of 900 miles—involved freight charges of $14. The same consignment, originating in Fall River, Mass.—also 900 miles from Muncie—cost the shipper only $10.60. This gave the New England shipper a decided advantage over his Texas competitor. In 1945, in order to narrow some of these differentials, the Interstate Commerce Commission ordered a 10 per cent increase in rates in all states lying north and east of the Ohio, Potomac, and Mississippi rivers and lowering them a like amount in the South and Midwest. The changes in railroad class rates affected about 20,000 articles but did not apply to the commodity rates under which bulky raw materials like coal, lumber, grains, cotton, and sand are shipped. The latter constitute the bulk of railroad freight tonnage.

The Interstate Commerce Commission's action was only a first step in the implementation of a 1940 Congressional directive to eliminate discriminatory rates between regions and territories. It issued the class-rate order as an interim ruling while the nation's railroads undertook a complete reclassification of commodities as a possible basis for further equalization. The reclassification is not yet complete.

Railroad-tariff Schedules. Freight rates are published in "tariff books." Charges for transportation are quoted in terms of the various "classifications" and for individual unclassified commodities. Local rates relate to the shipment of goods from one point to another on a single line. "Joint" or "through rates" usually apply to shipments moving along several lines and are quoted as a result of joint agreement among the railroad companies carrying the traffic. All these rates are published and remain fixed until replaced by new schedules. All interstate rates are subject to regulation and review on the part of the Interstate Commerce Commission which has sweeping rate-making powers.[1]

[1] See Chap. XXII.

Important economies are effected by obtaining "through rates," *i.e.*, rates covering the distance from the point of shipment to the ultimate destination. But many commodities have to be processed en route to their destination. Cotton, for instance, is often unloaded in transit to be classed and graded; or if destined for export, it must be put under a high-compression press before it is loaded on boats. Western wool is scoured and graded at St. Louis or Chicago on its way to the East. Railroad ties are often unloaded and treated at creosoting plants. Lumber is seasoned at intermediate points. If the shipper were compelled under such circumstances to pay the total of the two rates, it would cost him considerably more than one through rate from the original shipping point to the final market. By an "in-transit" arrangement with the carrier, he can obtain these special shipping privileges, which often result in a substantial saving in freight.

There are important differences in rates between carload shipments and less-than-carload (l.c.l.) lots. For example, the rate on asbestos shingles from Chicago to Emporia, Kan., may be 77 cts. per hundredweight in less-than-carload quantities but only 47½ cts. per hundredweight in full-carload amounts. Emphasis is thus placed upon economy in utilizing available space in the making of shipments.

Routing. The choices made in routing a given shipment of merchandise have an important bearing upon the costs of the transportation, the time consumed, and the various services that are available. The most direct route can be selected, or for certain reasons a more circuitous shipment may be desirable. Sometimes important savings are effected by a change in the manner of shipment. A good illustration of this is found in the transportation of petroleum from Bayonne, N. J., to Long Island City, N. Y. The carload rate in drums comes to about 1.05 cts. per gallon; shipments by tank car would reduce this to about 0.75 cts. per gallon; but the use of a tank barge or lighter would bring the rate down to about 0.35 cts. per gallon. These are important differences when bulky products are handled.

In the case cited above, however, relative advantages in costs of loading and unloading and in speed of delivery must also be considered. The final routing plan selected is usually the result of a careful estimate of the comparative advantages of several alternative methods. In industries involving large numbers of shipments of several varieties and to many different destinations, the work of determining the proper routing plans is one of the most important and difficult of the duties of the traffic manager. Hundreds of thousands of dollars in freight charges can be saved by a large company through a careful consideration of shipping arrangements.

If speed of shipment is desired, arrangements are made in advance for the number of freight cars needed, so that the railroad will have them on hand for prompt loading. The most direct route is not necessarily the fastest. The selection of a more roundabout method of shipment which avoids heavily congested centers or which eliminates the delays occasioned by the necessity of switching sometimes saves considerable time.

During harvesting time when heavy shipments of cotton are made, delays in transit may run into several months—causing great embarrassment or loss to merchants and mills. To avoid this, cotton has been shipped to certain concentration centers where "cotton trains" are made up and are dispatched to mill centers or to seaports under a guaranty of delivery within a specific number of days.

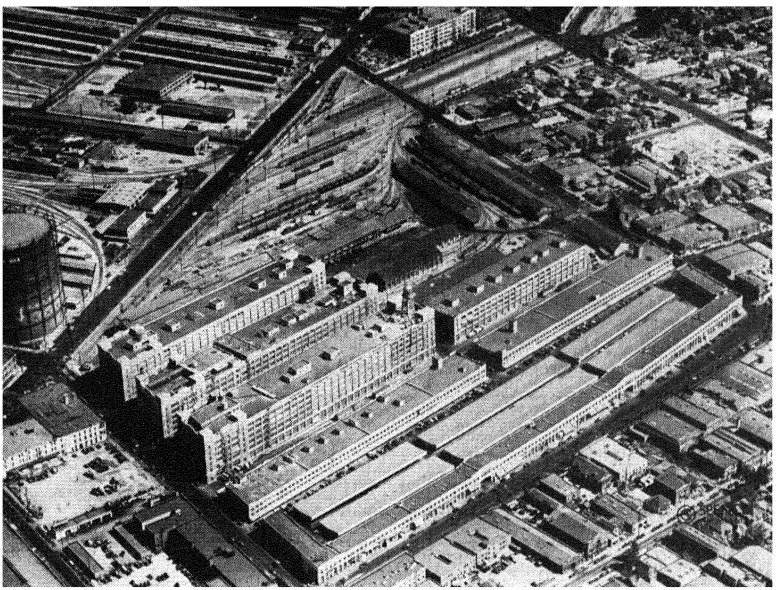
Terminal Services. The consignee is in most cases required to call for the cargo at the terminal. He is required to pay the cartage to his plant or warehouse. This item is quite an important part of the expense of shipping. If the consignee has a railroad siding or if he chooses a warehouse with a railroad siding, this cost is eliminated, for then the goods are unloaded from the car directly into the plant or warehouse. Where water-front facilities are available, the freight rate may include free lighterage. In that case, a plant or warehouse on the water front receives its goods directly from the lighter or car float, thus effecting a saving in cartage. Ferry car service and drayage are other terminal facilities sometimes provided by the carrier to the shipper.

The consignee is usually allowed 48 hours to unload a freight car. In order to prevent undue detention of freight cars held for loading or unloading, any delay beyond the free time allowance results in charges levied against the shipment. Such charges are called *demurrage* and are quoted at such rates as $2 a day per car for the first four days and $5 a day per car for each succeeding day. This is not to be confused with special arrangements previously mentioned, whereby a railroad may be willing to store in transit a shipment that is scheduled to move slowly to some point of destination with the option of the railroad to route in the most convenient manner possible.

Special terminal facilities are available at certain of the large warehouses. The Union Island Terminal, the New Jersey freight terminals, and the Bush Terminal in Brooklyn may be cited for illustration. Piers and facilities for the unloading of more than two dozen steamships simultaneously are provided at the Bush Terminal. Railroad tracks and platforms for loading and unloading trucks are also provided. A complete service of storage, packing, shipping, receiving, and delivery of freight is thus afforded.

The Bill of Lading. In arranging for the movement of freight, certain shipping papers must be prepared. The most important of these is the bill of lading. Blank forms of these instruments are provided by the rail-

roads and are usually prepared in triplicate. One copy is retained by the railroad, and two copies are given to the shipper, who keeps one for his own files and sends the original to the consignee if the "straight" form is used. The bill of lading should contain the name and address of the consignee, the quantity of goods (500 bags or 40 cases, etc.), kind of goods,



Southern Pacific's Los Angeles Wholesale Terminal occupies 21 acres centrally located in Los Angeles. Low buildings and sheds in the foreground accommodate wholesale produce merchants. Four large buildings beyond are occupied by wholesale firms, a refrigerating company, and other tenants requiring large floor space, including Southern Pacific's affiliate, Union Terminal Warehouse, largest certificated warehouse in the city. Tracks of the Southern Pacific and Pacific Electric serve the property. (*Spence Air Photos.*)

gross weights, and approximate valuation. The shipper may use *straight* or *order* bills of lading; the former are nonnegotiable, and the latter are negotiable. To distinguish readily between the two, railroads print the straight bills of lading on white paper and original order bills of lading on yellow paper. Copy sheets of the latter are printed on blue stock. When the nonnegotiable form is used, the consignee need only appear in person or send his agent for the goods; his own delivery order will release the shipment. When, however, the negotiable bill of lading is used, the shipper, his bank, or the shipper's agent retains control even after arrival of the goods, for no one can obtain such a shipment unless he presents the order bill of lading, signed by the shipper.

(Uniform Domestic Straight Bill of Lading, adopted by Carriers in Official, Southern, Western and Illinois Classification Territories, March 15, 1922, as amended August 1, 1930 and June 15, 1941.)

UNIFORM STRAIGHT BILL OF LADING
ORIGINAL—NOT NEGOTIABLE

Shipper's No._____

Agent's No._____

THE NEW YORK CENTRAL RAILROAD COMPANY

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading,

at_____, 194____

from_____

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

(Mail or street address of consignee—For purposes of notification only.)

Consigned to_____

Destination_____ State of_____ County of_____

Route_____

Delivering Carrier_____ Car Initial_____ Car No._____

No. packages	Description of articles, special marks and exceptions	* Weight (Subject to correction)	Class or rate	Check column

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

If charges are to be prepaid, write or stamp here, "To be Prepaid."

Received $_____ to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per_____

(The signature here acknowledges only the amount prepaid.)

* If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the the shipper to be not exceeding

_____ per_____

Charges Advanced:

$_____

_____ Shipper. _____ Agent.

Per_____ Per_____

Permanent postoffice address of Shipper_____

Order bills of lading are often used as collateral in the financing of a shipment or when the shipper wishes to be paid before making delivery, as in c.o.d. shipments.[1]

The bill of lading is the major instrument in a set of shipping documents. It is more than a receipt given by a carrier. It serves a number of purposes: It is a contract between shipper and carrier; it is documentary evidence of title to the goods shipped; it is a routing order; it is essential in the settlement of freight claims; it acts (when negotiable) as collateral in financing the shipment. It also provides evidence when questions arise as to the date of shipment. The "way bill," which usually accompanies the goods sent, lists the packages of merchandise contained in the shipment and can be used for checking the number of articles actually received.

Ocean Shipping. *Procedure.* In shipments by steamer, the bill of lading serves in a capacity somewhat similar to its role in rail shipments. There are, however, some important technical differences which will be noted later. Unlike rail bills, the color and size of the documents are not uniform but vary with the different companies. The United Fruit Company, for instance, uses one color for Atlantic shipments and another for freight destined for the Pacific coast.

Careful attention to detail is of utmost importance in the preparation of documents relating to foreign shipments. A slight error may cause endless delay, red tape, annoyance, and even fines on the customer's part. It is wise, when shipping to a foreign market for the first time, to visit one of the foreign consular offices in the United States in order to obtain full information as to shipping details. Most countries require consular invoices; some require that their consuls certify the bills of lading; and still others demand certificates of origin, which guarantee that the goods were made in the United States.

In exporting a shipment of goods, arrangements are made with the steamship company for sufficient cargo space for the particular sailing desired. Dock receipts accompany the merchandise and are signed by the receiving clerk at the pier. The bills of lading are prepared; some of them require weights in kilograms, and most of them require not only the gross weight but also the net and legal weights. Net weight is the weight of the merchandise only; the legal weight includes the immediate container and the box or carton in which the merchandise is packed; and the gross weight includes the weight of the case or outside wrapper.

The shipper must also file at a United States customhouse an export declaration, a signed copy of which is turned over to the steamship company. Three signed copies of the bills of lading are given to the shipper; and after he has obtained consular invoices and insurance certificates,

[1] This is discussed in Chap. XXIV.

his forms are complete. These, together with his invoice and bill of exchange, make up a set of documents.

The Ocean Bill of Lading. The bill of lading has been called "the backbone of the collateral attached to a commercial draft." Since this is the most important of the set of documents, the shipper should accept only "clean" bills of lading, *i.e.*, those which list no defects or in no way impair title to the goods. Bills of lading are not clean when they contain any qualifying clauses that may reflect on the title to the goods or on the condition of the shipment or contain anything rendering doubtful the responsibility for damage to the goods in transit.

When goods are delivered to the pier in poor condition, in torn bags, broken or unstrapped cases, or leaky barrels, the steamship company has only one adequate protection, *viz.*, to note the condition of the cargo on the bill of lading. In such a case, the shipper employs coopers to put the shipment into a satisfactory condition, so that clean bills of lading can be issued. A shipper should not accept bills of lading that exempt the ship from liabilities which should be assumed by the carrier; otherwise banks will refuse to accept them as collateral, or the consignee might rightfully hold the shipper responsible for damage to the cargo in transit. Instead of the usual phrase "Received in apparent good order," notations like the following impair the value of a bill of lading: "200 bags torn and mended"; "50 cases, in poor condition, shipper's risk."

Freight Brokers and Forwarders. Ocean rates are generally fixed by conferences or pools of steamship companies. Instead of the complicated schedules that apply to rail shipments, there are more general classifications. Rates are quoted per cubic foot or per hundred pounds, steamer's option. All goods are weighed and measured on the pier by company checkers, and the steamship company then selects the rate that will give it the greatest return: by cubic measurement for bulky goods and by weight for heavy shipments.

Firms that have no trained traffic department often avail themselves of the services of freight brokers. The freight broker chooses the steamer, makes arrangements for cargo space, prepares all documents, and completes all shipping and consular details involved in the shipment. A nominal fee is charged for the service, but most of the freight broker's compensation comes in the form of a brokerage paid him by the steamship company.

The freight broker renders valuable service to the firm situated in an inland city when that firm has no office of its own in a port. Such a shipper generally chooses a reliable freight forwarder to act as his agent in all matters pertaining to export shipping.

Ship Charters. There are firms whose space requirements are so large that entire vessels are needed. Unless such shipments are of sufficient

regularity to permit of the ownership and operation of its own line of steamers, a firm will charter a steamer or steamers to suit its purposes. There are four types of ship charters: *bare-boat, gross, time,* and *net* forms.

The *bare-boat* charter is akin to the lease, for a given period, of an unfurnished house, the tenant paying all expenses and defraying the cost of insurance and repairs. The charterer not only pays for all voyage and cargo expenses, insurance, and repairs but engages the officers and crew, pays their wages, and provides their food. In the *gross* form of charter, the owner of the vessel pays all regular expenses incident to the voyage from the time the ship is berthed until the cargo is discharged. The *time* charter is a contract under which the charterer hires the ship, manned, provisioned, and supplied with deck and engine-room stores (but not with fuel) for a given period of time, at a compensation fixed per unit of time, day, week, month, or year. The *net* form is sometimes called a *voyage* or *trip* charter; it is similar to the time form except that the contract is made for a specific voyage instead of for a period of time and that the owner supplies the fuel. Although there are variations in specific charters, most come under one of these four types. The shipper chooses the type of charter that suits his particular requirements.

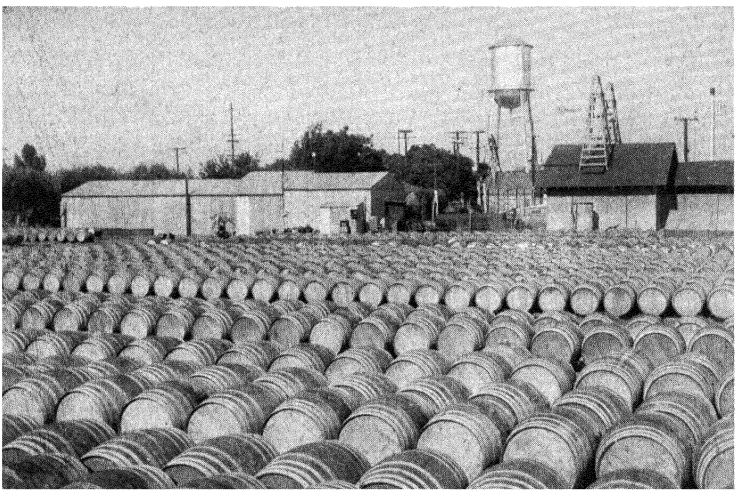
A shipper who is in need of a vessel generally communicates with ship brokers who, being in constant touch with shipowners, can arrange to supply the type of vessel required. The broker also draws up the charter form and advises the charterer concerning technical details and formalities. Ship charters are frequently obtained by shippers of grain, coal, nitrates, lumber, sugar, and ores and by steamship lines that require additional facilities during certain seasons. Petroleum refiners use mainly tank carriers, whereas other types of ships vary from the specially constructed lake boat to the sailing vessel.

Warehousing. *How Warehousing Serves the Producer.* A pamphlet issued by the American Warehousemen's Association contains the following statement:

> Right now you probably know of many existing sales opportunities . . . if only you had spot stocks in marketing centers throughout the country, territories which you would like to develop, but have not cultivated because you have no branch there. And you feel you cannot afford the expense of the manpower to organize a branch. . . .
>
> Send on your goods and your salesmen, and A.W.A. Warehouses will do everything for you that your own branch house could do in the physical distribution of your goods! And they'll do it for less than it would cost you to operate a branch!

Warehousing, then, can aid the producer not only by holding goods in readiness until wanted in certain areas but also in the distribution of goods to customers, and in that way it may eliminate the need for opening up

and operating branch houses. With the aid of such a service, a business can expand its market territory and increase its sales. But this is only one of the many uses that are made of storage facilities. Farm products are produced in quantities during certain seasons, but consumption remains constant throughout the year. The production of eggs during April, May, and June practically equals the production for the remaining nine months. One-third of the butter production occurs between May and August.



Green olives are processed in barrels for months before they are ready for market. (*Farm Credit Administration.*)

Harvests of grain, cotton, wool, hemp, tobacco, and many other farm products occur at the end of their respective seasons, but continuous consumption is made possible by storage until the articles are demanded. Storage is essential, then, where production is seasonal but consumption continuous.

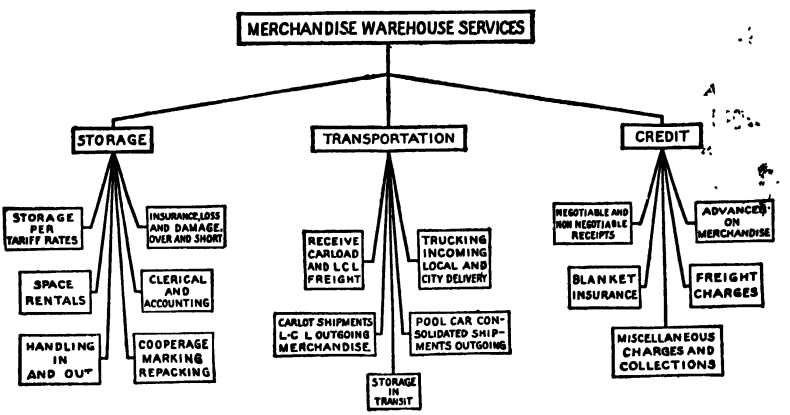
Other products, on the other hand, are made all year round but are in demand only during certain seasons. Numerous plants are engaged in the continuous production of seasonal commodities like agricultural implements, garden tools, blankets, straw hats, rubbers, summer footwear sporting goods, and holiday novelties. Seasonal goods must be produced far in advance of actual need in order to supply the demand promptly.

Some goods are stored for speculative purposes. Market conditions may be unfavorable at the time the goods are available for sale, or the possibilities for increased prices may justify holding a product for later disposal.

Storage is necessary in those cases where goods require conditioning. Bananas, tomatoes, cantaloupes, and other commodities are harvested green and must be stored for ripening; tobacco requires from one to three years for curing; lumber should be seasoned; cheese, smoked meats, and hides also require curing. Warehousing preserves and protects merchandise. The warehouseman assumes responsibility for the goods placed in his custody and must be prepared to deliver them on demand. In order to maintain their identity, goods placed in storage are labeled, marked, and tagged. Many states require that foodstuffs be marked with the dates of entering and leaving cold-storage warehouses.

Bales of cotton must be tagged with information concerning the weight, quality, grade, date of deposit, and serial numbers. Warehouses supply facilities for grading, packing, weighing, and coopering. Some products, when delivered, have to be accompanied by weight certificates; weighing is done by licensed weighers who then certify as to the exact number of pounds of each sack or bale. Invoices for cacao beans, green coffee, and rubber are based on certified weights and are useless without the certificates.

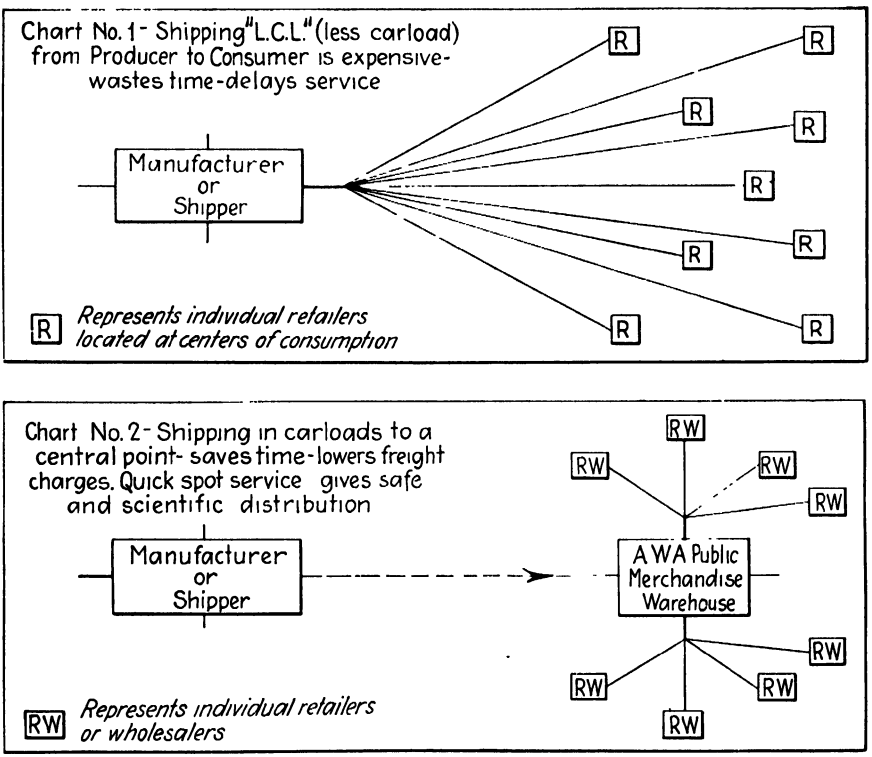
The following chart summarizes the many services offered by the modern warehouse:



Warehousing and Economies in Transportation. The warehouse thus serves as an important link in the physical distribution of goods from the producer to the consumer. Cars of goods may be consigned to a warehouse with orders to make deliveries to the various customers in accordance with the instructions of the seller. These goods can then be assorted and delivered locally or to outlying sections by trucks. Such shipments effect considerable savings in freight, since carload rates are obtained instead of much higher less-than-carload rates, as was explained previously. In addition to the savings in freight rates, there is less danger of theft, pilfer-

age, and breakage in carload shipments. There is a saving in time, since such cars move directly to their destination and can readily be traced or located should any delays occur.

The following is a concrete illustration of the economies in transportation



These charts show economies in transportation offered by warehouse facilities. (*American Warehousemen's Association.*)

effected through the use of warehousing facilities. In this case the savings were sufficient to cover the entire warehouse charges:

Catsup in bottles packed in boxes or crates (twenty-four 14-oz. bottles), weighing 50 lb., is subject to a warehouse charge (in Chicago) of 4.4 cts. for handling in and out and 2 cts. storage per box per month. The total warehouse charge per 100 lb., therefore, allowing for one month's storage, is 12.8 cts., according to the tariff of the Illinois Association of Warehousemen.

If this commodity is shipped from New York City to Rockford, Ill., in less-than-carload quantities, the transportation charges are $1.59 per 100 lb. If shipped from New York to a warehouse in full carloads and in less-than-carload lots to Rockford from Chicago (minimum carload weight 36,000 lb.), the total transportation charges are 56½ cts. plus 45 cts., or $1.01½ per 100 lb. Hence a saving of 57½ cts. per hundred-

weight is effected by central warehouse distribution. If the 13 cts. for storage and handling is subtracted from this, there results a net saving of 44½ cts., or about 22 cts. per box, and after loading and unloading charges are allowed for, there is still a good margin left.

The Warehouse Receipt. When goods are placed in storage, a receipt is issued which bears a complete description of the goods stored. The receipt also shows when the goods were received, the car number, and the accrued

[Approved by the American Warehousemen's Association and the United States Department of Commerce]

Consecutive Number_____

The American Warehouse Company
2121 American Avenue

SEAL OF LEGAL ASSOCIATION OF

America, _____ 192__

This is to certify that we have received in Storage Warehouse, _____
for the account of _____ Ex _____
in apparent good order, except as noted hereon (contents, condition and quality unknown) the following described property, subject to all the terms and conditions contained herein and on the reverse hereof, such property to be delivered to _____ order, upon the payment of all storage, handling and other charges and the surrender of this Warehouse Receipt properly endorsed, in compliance with the United States customs regulations and presentation of custom house permit.

NUMBER	PACKAGES	SAID TO BE OR CONTAIN	MARKS
		NEGOTIABLE	

Storage _____ per _____ per month from _____ 192__
Handling _____ per _____ in and out inclusive.
Lot No. _____ Frt. Bill No. _____ Car Initial No. _____

Advances have been made and liability incurred on such goods, as follows:

This Receipt _____ Weight _____
Cartage _____ Coopering _____
Freight _____ Misc'l Advances _____
Shipped From _____

THE AMERICAN WAREHOUSE COMPANY claims a lien for all lawful charges for storage and preservation of goods, also for all lawful claims for money advanced, interest, insurance, transportation, labor, weighing, coopering, and other charges and expenses in relation to such goods.

The American Warehouse Company

By _____

THIS RECEIPT IS VOID ONLY WHEN ISSUED BY ONE OF THE FOLLOWING OFFICERS

A negotiable warehouse receipt.

charges for services, such as cartage, coopering, weighing, and advances for transportation. The warehouse receipt is either negotiable or non-negotiable. In the latter case, goods are delivered without the receipt, merely on presentation of the customer's delivery order. When, however, a negotiable receipt is issued, the holder of it owns the goods; the warehouse, therefore, will not deliver until the negotiable receipt, properly endorsed, is presented.

The negotiable warehouse receipt is an important instrument in the financing of shipments. It virtually converts stored goods into liquid assets, inasmuch as it serves as collateral given to banks as security for loans.

The value of the warehouse receipt depends upon several factors: (1) the structure and location of the warehouse, (2) the facts set forth on the receipt, (3) the kind and amount of supervision received from disinterested parties, (4) the net free assets of the warehouse company itself, (5) the size and nature of the bond furnished, (6) the integrity and standing of the officials responsible for the operation of the warehouse, and (7) the kind and amount of insurance carried.

Since a negotiable receipt is a valuable document, the paper upon which the receipts are written and the way in which they are marked and issued should be designed to make the counterfeiting of receipts extremely difficult. The U. S. Department of Commerce and the Department of Agriculture have placed rigid restrictions on the issuance of warehouse receipts. With the tendency among retailers to buy in smaller quantities and to increase their rate of turnover, the present-day need for convenient merchandise warehouses to meet the demands for prompt delivery and to supply adequate quantities of goods to jobbers and wholesalers has made the merchandise warehouse an important link in the process of distribution of many classes of commodities.

Standardization and Grading. *Services of Standardization.* Marketing of certain types of products is greatly facilitated and presents fewer problems when these goods are graded or standardized. Standardization is the art or process of conforming to any measure of extent, quantity, quality, or value established by law, general usage, or consent. Just as standardization has resulted in greater efficiency and less waste in production, it has proved to be of distinct aid in the buying and selling of goods.

To do business at a distance, buyer and seller must understand one another without question concerning the type and the quality of goods offered. Sale by description is made possible only through the establishment of definite, well-understood, and generally observed standards and the grading or manufacture of commodities in conformity with these standards.

The need for discussing quality is eliminated when goods are graded into recognized classifications. This tends to reduce some of the evils of high-pressure salesmanship. Moreover, there are fewer misunderstandings and less litigation.

Examples of Standardization. Unfortunately, the average retail consumer has not the knowledge, skill, or experience necessary to judge quality in terms of scientific standards. The employment of accepted trade standards is therefore limited mostly to trading among middlemen and to markets dealing in producers' goods rather than in consumers' goods, except where grading is made compulsory by law.

The manufacturer, whether of automobiles, soap, or clothing, buys his steel, paints, chemicals, woolens, and other products on specification. He

could not produce on a large scale and at the same time guarantee the quality of his product unless he were certain of the quality of the raw materials that he uses.

Carpenters and mechanics buy tools, screws, wire, nails, lathes, etc., by number or technical terms, because the products that they use have been, to a great extent, made to standard specifications. Business stationery, typewriter keyboards and ribbons, threads, and numberless articles are standardized as to size, thickness, or fineness.

The benefits of standardization for marketing purposes are as important to the farm as to the factory. Mixed lots of farm products, when made up of a number of varieties, a number of grades, or both, are difficult to sell for the simple reason that any prospective customer is likely to object to one or more of the lots offered. Practical marketing demands reasonably large shipments of uniform grade and variety.

The Department of Agriculture and most of the large cooperatives have been instrumental in the grading of agricultural products. At present, such grades have been formulated for more than 60 farm products, varying from asparagus and potatoes to grapes and peanuts. Products like grain, cotton, rubber, cocoa, coffee, and sugar, since they are traded on organized exchanges, must of necessity be standardized. The manufacturer who buys cacao beans described as "Superior Red Summer Arriba" or "Ordinary Machala" knows exactly what he will get, without the need for samples, at the time that he places the order. He knows in each grade what to expect in aroma, butterfat content, slate content, size, and the maximum allowance for wormy or defective beans.

The U. S. Grain Standards Act, passed in 1916, set standards for corn and, in 1917, for spring and winter wheat. Official standards have subsequently been set for oats, rye, sorghum, and barley. In grain, the factors that determine quality are moisture content, weight per bushel, freedom from foreign material or damaged kernels, and general conditions which may be described as cool and sweet or musty, sour, and hot.

Cotton is divided into 13 official grades depending upon the length of the fiber, fineness of texture, tensile strength, color, shade, and other factors. Without such descriptions, spot lots could be sold only on submission of samples. An important part of cotton grading is the inspection service, provided by both federal and state governments and by the members of the important cotton exchanges situated in New Orleans, New York, and Liverpool.

Canned goods are standardized both as to the size of the can, *i.e.*, halves, No. 1, No. 2, and as to quality, "ordinary," "fancy," "extra fancy." Canned peas are graded as to size: "tiny," "very small," "small," "medium," "telephone," etc. The consumer, however, generally buys by trade name and is, for the most part, unfamiliar with standard terminology.

Results of Standardization. Standardization serves as a basis for future contracts, for sales quoted f.o.b. shipping point or in transit, and as a basis for adjustment of claims, intelligent comparison of market prices, and a reduction of marketing costs. In addition to these benefits which obtain by reason of a complete understanding between buyer and seller as to the precise character of the product, there are other advantages that result from the actual sorting of the product into classes which meet the particular requirements of the trade. A further result is the good-will that it creates. Confidence in a product makes financing easier, permits of trade-marking, increases the demand for the product, and reduces the number of claims and rejections.

Questions and Problems

1. Explain the fact that railroad tonnage of freight far exceeds all other types of transportation. What advantages do railroads offer over other means of shipment? What are the advantages and limitations of water shipments? Trucks? Air shipments?

2. Discuss the problems connected with shipping petroleum. What methods are in greatest use? Can these facilities be used for the shipment of gasoline and refinery products?

3. The traffic manager is an important official in many lines. What are his functions? What knowledge and experience are necessary for the position?

4. Discuss the relative advantages and disadvantages of the following: express *vs.* freight shipments; carloading companies *vs.* motor freight; parcel post *vs.* express.

5. Describe the terminal services offered by railroads in cities having water facilities. What are free lighterage zones? Demurrage?

6. Explain freight and express rates, using such terms as commodity classification, and classification areas. If you had to ship 500 bags of coffee from New York to Pittsburgh, how would the freight charges be determined?

7. Why would railroads be willing to haul sand for an average revenue per ton mile that is less than the total cost to the railroad of carrying an average ton of freight 1 mile? Briefly summarize the elements that are considered in drawing up freight rate schedules.

8. The warehouse is regarded as an important link in financing, processing, and physical distribution of goods from producer to consumer. How might a warehouse serve a manufacturer of wallpapers in these respects?

9. Explain the important differences between the order bill of lading and the straight bill. Outline the uses of each.

10. It would be difficult if not impossible to buy or to sell for future delivery without grades or standards. Explain. Give examples of grading and standardization. What advantages accrue from setting up recognized grades to the seller? The buyer? The manufacturer? The consumer?

Part VI

PRICING PROBLEMS

CHAPTER XX

COMMODITY EXCHANGES IN THE PRICE SYSTEM

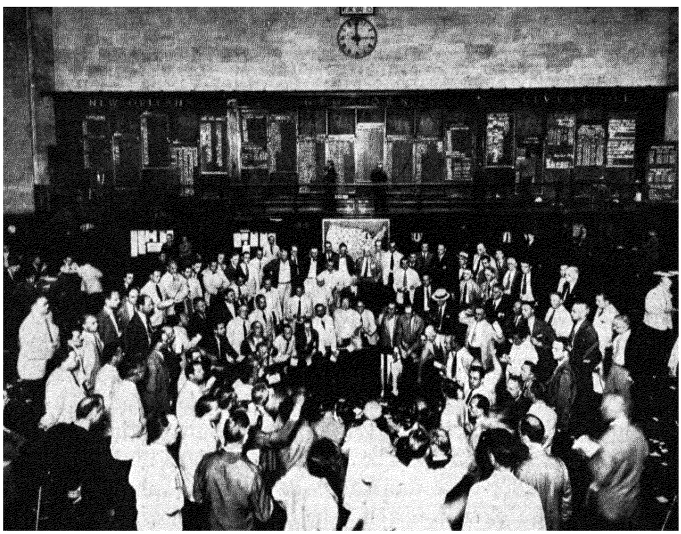
Complexity of Price Phenomena. Every profit-making enterprise must engage in some exchange transaction. In other words, there must be a sale, a "give-and-take" operation in which goods or services are transferred in return for other goods, services, or money. The difference between the total sum of all costs and the revenues received from sales constitutes the profit or loss.

It becomes apparent, therefore, that every business is confronted with a pricing problem. Either a physical product or a service must be sold, and it is to the interest of the producing organization to obtain as great a spread as possible between costs and selling prices—if not in individual transactions, at least in the aggregate of its business. Prices, then, occupy a position of first-rank importance and present some of the most baffling problems with which business leaders are forced to contend.

It has already been noted in the analysis of marketing that a great variety of trading situations is to be found in American business experience. There is small wonder over the complexity of price phenomena when it is realized that the close interrelationship of business, through trading operations, brings about a network of price adjustments which becomes highly sensitive to changes in any single part of the industrial mechanism.

Prices and Competition. The business executive is primarily interested in seeing the goods and services of his firm sold in sufficient volume and at profitable prices. Even though he might never have learned of the "law of supply and demand" as such, he realizes that surplus supplies tend to send market prices downward whereas the stimulation of new demands for a product may bring an upswing in its price. But this alone does not get him very far. It merely generalizes a series of long-run tendencies under assumed conditions of competition. For his purposes, it will be necessary to have more definite information concerning the probable price trends along which his raw materials may be expected to move in the near future, the prices on his products that the market may support, the quotations by competitors, the amount of business that they are getting, and the price cuts that will be necessary to move the merchandise of his company.

Characteristics of Commodity Exchanges. Perhaps the closest approximation to the attainment of perfect price competition in the commodity markets of the world is to be found in the purchase and sale of staple products. Day after day, in fact hour after hour, the prices of wheat or cotton closely reflect the impulses of buyers and sellers of these goods the world over. Instead of finding thousands of scattered transactions in these



Trading ring of the New York Cotton Exchange. Note the bulletin boards in the rear showing quotations of prices on the New Orleans, New York, and Liverpool exchanges. Just below, in the center, is a weather map.

products, consummated in isolated parts of the country and varying materially in price, it will be seen that central "exchange" mechanisms have been devised, whose functions make it possible for buying and selling orders to be brought together from near and far—resulting in the establishment of a single price which relates to all buyers and sellers at any given moment. In other words, all traders are placed upon an equal footing. The wishes of the buyers in the form of bid prices are matched against the offers of the sellers. The transactions are rigidly regulated to prevent fraud or deception. Buyers and sellers do not see each other but are represented by brokers, who act as their agents. Sales are strictly impersonal, and units of purchase are definitely standardized as to grade, quantity, or weight, so that no influences enter into the transaction except the consideration of price.

In order to understand the exact role played by these exchanges, it must be realized that transactions on them do not always involve the selling of actual goods. When goods that are on hand or on the way to the market are sold, the sale is made on a "spot" contract. This calls for an allotment of goods of a specific description, and the buyer expects actual delivery of the lot that he purchased. In the case of a number of staple commodities

An exciting moment on an exchange.

whose prices fluctuate with great frequency, however, organized trading in "futures" is very common.

The *futures market*, or *exchange*, is the place where contracts represent agreements to buy and sell definite quantities of goods for future delivery. Actual delivery need not be made. As a matter of fact, in most cases neither seller nor buyer expects delivery of the goods; the contract is generally completed by an offset agreement requiring only a settlement of price differences on the contracts between buyer or seller and the brokers.

In spot markets, anyone may sell to any buyer directly or through brokers. If buyer and seller know each other, no margins or guarantees will be exacted. Agreements are made concerning the time at which the shipment is to occur and the manner in which payment will be made. Orders may be for any quantity of goods.

TABLE 19.—COMMODITY FUTURES TRADING INFORMATION *

Commodity	Exchanges Trading hours—New York time Opening Daily close Sat. close	Contract or unit	Minimum fluctuations		Commission †	
			In price	Equals per contract	Price basis	Rate
Butter	Chicago Mercantile 10 30 A.M. 12:55 P.M. 11.55 A.M.	19,200 lb.	5/100¢ per lb.	$9.60	Any price	$50.00 ‡
	New York Mercantile 10:00 A.M. 1:30 P.M. 12:00 M	6,400 lb.		3.20	Under 65¢	15.00 §
					65¢ and higher	20.00 §
Cocoa	New York Cocoa 10:00 A.M. 3:00 P.M. 12:00 M.	30,000 lb.	1/100¢ per lb.	$3.00	Under 10¢	$25.00
					10¢ to 14.99¢	30.00
					15¢ and over	40.00
Coffee (D-Santos)	New York Coffee & Sugar 10:30 A.M. 2:50 P.M. 11:50 A.M.	250 bags 32,500 lb.		$3.25	Under 10¢	$25.00
					10¢ to 19.99¢	30.00
					20¢ and over	40.00
Cotton	New York Cotton 10:00 A.M. 3:00 P.M. 12:00 M.	100 bales 50,000 lb.	1/100¢ per pound	$5.00	Under 30.01¢	$35.00
					30.01¢ to 35¢	40.00
					35.01¢ to 40¢	45.00
					40.01¢ to 45¢	50.00
	New Orleans Cotton 10:00 A.M. 3.00 P.M. 12.00 M.	100 bales 50,000 lb.			Under 30.01¢	30.00
					30.01¢ to 35¢	35.00
					35.01¢ to 40¢	40.00
					40.01¢ to 45¢	45.00
		Job, 50 bales 25,000 lb.		2 50	Under 30.01¢	18.00
					30 01¢ to 35¢	21.00
					35.01¢ to 40¢	24.00
					40.01¢ to 45¢	27 00
	Chicago Board of Trade 10:00 A.M. 3·00 P.M. 12:00 M.	50 bales 25,000 lb.			Under 25.01¢	12 50
					25.01¢ to 30¢	15.00
					30.01¢ to 35¢	17.50
					35.01¢ to 40¢	20.00
					40.01¢ to 45¢	22.50
Cottonseed oil	New York Produce 10:15 A.M. 2:45 P.M. 11:45 A.M.	60,000 lb.	1/100¢ per lb.	$6 00	Under 15.01¢	$30 00
					15.01¢ to 20¢	33 00
					20.01¢ and over	36.00
	New Orleans Cotton 10·15 A.M. 2·45 P.M. 11:45 A M.	30,000 lb.		3.00	Any price	15.00
Cottonseed meal	Memphis Merchants 10.30 A.M. 2·00 P.M. 12.30 P.M.	100 tons	5¢ per ton	$5 00		$30.00
Eggs	Chicago Mercantile 10:20 A.M. 1:00 P.M. 12:00 M.	600 cases 18,000 dozen	5/100¢ per doz.	$9 00	Any price	$45.00 ‡
Eggs (processed)	New York Mercantile 10·00 A.M. 1·30 P.M. 12.00 M.	200 cases 6,000 dozen		$3.00		$16.00 §
Grains:						
Wheat, rye, corn, oats, barley, soybeans	Chicago Board of Trade 10:30 A.M. 2·15 P.M. 1.00 P.M.	5,000 bu. Job lot, oats and barley, 2,000 bu. Other grains, 1,000 bu.	⅛¢ per bu		Any price 5,000 bu. Job 1,000 bu.	$15.00 4.00
Wheat, rye	Duluth Board of Trade 10:30 A.M. 2:15 P.M. 1.00 P.M.			$6 25	Any price 5,000 bu.	12.50
Wheat, corn, oats	Kansas City Board of Trade 10:30 A.M. 2:15 P.M. 1.00 P.M.	5,000 bu.		1 25	Job, 1,000 bu.	4.00
Wheat, rye, corn, oats, barley	Minneapolis Grain 10:30 A.M. 2.15 P.M. 1:00 P.M.	Job lot, 1,000 bu.				
Wheat, rye, barley, oats	Winnipeg Grain 10.30 A.M. 2:15 P.M. 1:00 P.M.					
Hides	Commodity 10:10 A.M. 3:00 P.M. 12:00 M.	40,000 lb.	1/100¢ per lb.	$4.00	Under 10¢	$30.00
					10¢ and over	40.00
Lard	Chicago Board of Trade 10:30 A.M. 2:15 P.M. 1:00 P.M.	50,000 lb. 40,000 lb.‖	2½/100¢ per lb.	$12.50 10.00	Any price	$20.00
Metals Lead, zinc, tin (Straits),¶ copper	Commodity 10:20 A.M. 2:50 P.M. 11:50 A.M.	50,000 lb.	1/100¢ per lb.	$5.00	Any price	$50.00

TABLE 19.—COMMODITY FUTURES TRADING INFORMATION * (*Continued*)

Commodity	Exchanges Trading hours—New York time Opening Daily close Sat. close	Contract or unit	Minimum fluctuations		Commission †	
			In price	Equals per contract	Price basis	Rate
Onions	Chicago Mercantile 10.25 A.M. 12:55 P.M. 11.55 A.M. New York Mercantile 10·15 A.M. 1·15 P.M. 12:00 M.	800 bags 40,000 lb.	1¢ per bag	$8.00	Any price	$20.00 §
Pepper	New York Produce 10·45 A.M. 2:15 P.M. 11·55 A.M.	33,600 lb.	1/100¢ per lb.	$3.36	Under 10.00¢ 10¢ to 19.99¢ 20¢ and above	$25 00 30.00 37.50
Potatoes: Idaho Maine	Chicago Mercantile 10·25 A.M. 12:55 P.M. 11 55 A M New York Mercantile 10·00 A.M. 1 30 P.M. 12·00 M.	450 bags 45,000 lb. 500 bags 50,000 lb.	1¢ per bag	$4.50 5.00	Any price	$15 00 §
Rubber	Commodity 10 00 A.M. 2:55 P.M. 11 55 A M	10 tons 22,400 lb.	1/100¢ per lb.	$2.24	Any price	$40.00
Soybean oil	New York Produce 10.00 A.M. 2:30 P.M. 11.30 A M	60,000 lb.	1/100¢ per lb.	$6.00	Under 15.01¢ 15 01¢ to 20¢ 20.01¢ and over	$30 00 33 00 36 00
Soybean meal	Memphis Merchants 10 30 A.M. 2.00 P M. 12·30 P.M	100 tons	5¢ per ton	$5.00	Any price	$30 00
Sugar: Domestic No 5 World No. 4	New York Coffee & Sugar 10 00 A.M. 3.00 P.M. 12:00 M.	50 tons 112,000 lb.	1/100¢ per lb.	$11.20	Under 2.00¢ Each 2¢ advance additional Under 1.00¢ Each 2¢ advance additional	$20.00 5.00 20.00 5.00
Wool	Wool Associates of New York Cotton Exchange 10·10 A.M. 2:40 P M 11·40 A.M.	6,000 lb. (Clean content)	10/100¢ per lb.	$6.00	Any price	$30.00
Wool tops	10 20 A.M. 2 50 P M. 11 50 A M.	5,000 lb.		$5 00		

* Data provided through the courtesy of Thomson & McKinnon, Commodity Department.
† Domestic round turn nonmember commission rate.
‡ Additional $3.50 charged for clearance fee.
§ Additional $2 00 charged for clearance fee.
‖ December, 1947, and later deliveries.
¶ Trading suspended.

In futures markets, transactions can be made only through brokers who are members of the exchange. Buying and selling orders are in terms of the definitely prescribed quantity of sugar, cotton, or wheat used as the unit of trading. All transactions must be covered by margins specified by the rules of the exchange, which also fixes the brokers' commissions.

The wide variety of commodities traded on organized exchanges is shown in Table 19. The table also gives information regarding units of trading and commissions for each type of commodity. Margin requirements tend to vary considerably and hence have not been included in the table.

Not all commodities lend themselves to trading on exchanges. A product must be so standardized that the various units are conveniently inter-

changeable and that trading in it may be established in terms of widely accepted agreement as to quality or grade. It should have a minimum degree of perishability to permit of storage without deterioration. There must be an adequate supply of the actual commodity available from year to year so that there is a proper adjustment or relationship between the spot market and the futures market. In order to ensure continuous trading, a large demand resulting in a large volume of sales is highly desirable.

Buying and selling in an exchange generally take place within concentric circles or around a "ring," a circular railing about which the traders and brokers gather. Offers and acceptances are made by outcry in some exchanges, accompanied by recognized motions or gestures. To the layman, an exciting moment on an exchange may look like a gathering of madmen shouting and gesturing at each other. On the walls of these exchanges, there are usually charts and price boards, postings of foreign quotations, and weather maps. Tickers and telephone lines constantly bring in important news, which may affect the bids or offers of the traders. Sales are reported and quickly broadcast a few seconds after they have been consummated.

Speculative Trading. Speculation involves buying or selling in anticipation of future price changes. The speculator expects to profit by correctly analyzing the trend and acting at the present time in anticipation of the expected change. The trader who buys now because he expects prices to rise takes a "long" position. *Buying long*, therefore, refers to buying something at present prices in anticipation of a rising market. Those who buy long or who try to force prices up are referred to as "bulls." On the other hand, if a trader expects prices to fall, he sells at present prices and expects to buy in the future for less. *Selling short* means selling something before it is bought or selling something that a person does not as yet own. Short sellers, or those who anticipate lower prices, are sometimes known as "bears."

Traders attempt to evaluate the data concerning all market factors and to translate them into terms of price. Information indicating an increased demand or a diminished supply at a given price level tends to increase the price; conversely, information indicating decreased demand or increased supply tends to lower prices and to favor bear operations.

Supply Factors. *The Concept of Supply.* Technically, supply means the quantity of goods offered at certain prices at a given time and place. Many commodities, especially agricultural staples, move into the markets of the world without reservation prices; *i.e.*, they are offered at whatever price the market will bring. In the case of goods whose output is subject to a greater degree of control, it is virtually impossible to predict the amounts of goods that will be released at given price levels. Estimates of supply therefore tend to run in terms of physical volume available rather than as ratio expressions of volume to a series of prices. Traders assume

that the pressure to sell is governed by the size of the existing stock when compared with market needs. When potential supplies are considered, however, more attention is given to possible increases or decreases in output of goods in the light of prevailing prices.

Since contracts specify future delivery, the supply of the staple means to the traders, not only the actual quantity in existence at the time the contract is made, but also the quantity that can be made available in the future prior to the maturity of the contract. And since such products in any part of the country or even of the world can usually, though not always, be made available for delivery if needed, the effective supply is not limited to stocks in the immediate vicinity. Supply may be taken to embrace the country's, and for that matter the world's, stock existent at the time or to be available after the lapse of a certain period. The idea of supply at this juncture, therefore, assumes a dual aspect—actual and potential. The actual supply is defined as that available at the time; the potential as that which it is believed will be available in the future.

Statistical Data Relating to Supply. In estimating physical supplies of staple commodities, a number of guides are used, such as statistics of "carry-over," "mill takings," "exports," "imports," "ports stocks," "interior stocks," "visible supply," "invisible supply," "consumption," and myriads of other numerical summaries. From these figures must be secured a measure of the supply that will coincide with that net market conception of the supply which is effective in determining price.

These data may be classified as (1) those which represent additions to supply, (2) those which represent withdrawals from supply, and (3) those which profess to represent supply at any instant, such as the carry-over, or current inventories.

The carry-over figure at the beginning of the season in agricultural staples and at the beginning of any calendar year in mineral products may be taken as indicative of the supply in the United States at that time. The supply at any subsequent time in the year is then determined by adding imports and domestic production up to the specified date to the carry-over figure and subtracting therefrom domestic consumption plus exports. A further subtraction is needed to account for fire, spoilage, evaporation, shrinkage, and other losses. The actual domestic supply is, in short, the physical product in the country that is available for export or consumption on a given date. In certain commodities, such as cotton and copper, the domestic supply is the most important element in the consideration of supply factors. In products such as rubber and cacao, on the other hand, all the physical supply, except the domestic carry-over from the preceding year, is foreign. In either case, however, both foreign and domestic supplies must be given their proper weight in the price analysis, as the prices for these products are established in a world market. The measure-

ment of foreign supplies is conducted in the same manner as that of domestic supplies.

Potential Supply. Potential supply for any given date is taken as the current estimate of the size of the future output. In the case of agricultural products, this usually implies a crop estimate. Commercial agencies make and distribute estimates, as does the crop-reporting board of the U. S. Department of Agriculture. The crop estimates of the latter are generally accorded the greater confidence because of the impartiality with which they are prepared and the greater resources at the disposal of the government. They may be taken, therefore, as the best index of the size of the coming crops—hence of the potential supply.

But this provides for a measure of potential supply during the growing season only. Some measure of market anticipation of supply is needed to represent the influence of potential supply in other months during the year. This necessitates a consideration of the factors influencing the opinions of participants in the trade at such times. In the growing and harvest season, scant attention is paid to the prospects of the next year's crop, for the current crop is, at that time, of absorbing interest. But as January and the spring months come on, expressions of probable acreage begin to appear in market news. Winter weather conditions are noted in the case of certain crops such as winter wheat and cotton. Labor and financial conditions and fertilizer prices are also contributory to market opinion as to coming acreage, and not least in importance is the price of the one crop relative to the prices of other crops. It is logical to suppose that relatively high prices of any one agricultural product might induce acreage expansion whereas low prices would prompt the substitution of other crops for it.

The following newspaper report is indicative of the attention that is given by traders to weather conditions and crop reports:

> Rains were forecast for most of the Southwest wheat area, and there were showers at a number of points. The American Northwest and Western Canada had another wetting down, which assures ample moisture for some time to come for the spring-sown crops.
>
> Foreign news indicates some improvement in crop conditions, but the consensus is that in the United Kingdom and on the Continent 1947 crops will be much smaller than last year.
>
> The factors that lifted corn prices were the extremely tight cash market conditions and the forecast for pretty general rains over the belt tonight and tomorrow.

Demand Indexes. If the demand factors to be recognized and the question of their measurement are now considered, some way must be found of gauging consumption requirements. If it were known how much of a product is regularly purchased by consumers and how fast the consumers use up this supply, the differences between the rate of purchase and rate of consumption during any period would indicate the change in the quantity of goods in their possession during the period and hence act as an index of demand for like periods. However, it must be recognized that the "exchange" price relates to the sale of a commodity chiefly for further industrial use before it is ready for final consumption. Such figures as the supplies of goods in the hands of retailers, jobbers, and manufacturers must be considered as demand indexes rather than supply indexes if it is to be assumed that such inventories will be maintained at approximately the same levels throughout the year. Therefore, in any analysis of demand, all the supplies in possession of the intervening agencies should be measured rather than merely those in the hands of the consumers themselves. From the point of view of the ultimate consumer, these supplies are truly supply factors. From the point of view of the trader in the central market, these stocks are demand factors; *i.e.*, they indicate the amount of the product in the channels of consumption.

Such figures, therefore, as mill takings, spindles in operation, and cloth sales of mills, merchants, and retailers are taken in the cotton industry as good indexes of demand. In addition are such factors as consumer style changes, the newly developed uses for cotton, changes in the use of silk and rayon, and the spread between the prices of cotton yarn and cotton cloth.

In the rubber market, automobile production and registration are the most important demand indexes, inasmuch as tires and tubes represent the largest percentage of the rubber products. Gasoline consumption is another valuable guide, as it shows the extent to which automobiles are being run.

Inasmuch as sugar consumption remains relatively fixed in a country unless there are revolutionary changes in the dietary habits of the people, demand for this product can be estimated with a fair amount of precision. Within a given price range, such demand fluctuates little—the only noticeable decline being registered in the domestic sales of candy or similar confections.

In addition to all the specific matters relating to the demand for individual staples, it is also necessary to take note of general business conditions which might produce price fluctuations in all commodities. Among such factors are employment conditions, business optimism, and the prices of industrial stocks.

Hedging Operations. In some products, like flour and cotton goods, the current price of the raw material has a marked influence on the price

of the finished product. The price of flour from the mill tends to follow the price of wheat, and the price of cotton goods moves with the course of cotton. In such cases, manufacturing becomes very risky. During the lapse of time between the purchase of the raw material and the sale of the finished product, violent fluctuations in price may not only wipe out profits but cause considerable loss. When a quotation is made on a quantity of flour, the price is based, not on the cost of the wheat that went into the flour, but on the current price of wheat on the exchange. This makes the manufacturing of flour, cotton goods, or even chocolate a highly speculative business. The manufacturer knows that profits and the growth of his business require the elimination of risks as far as possible. One loss is likely to wipe out the profits of a long period.

How can a manufacturer avoid the risk due to fluctuations in the prices of raw materials? When the raw material is sold on an exchange, this is done by a hedging operation. When the manufacturer buys raw material in the spot market, he *simultaneously sells an equal quantity of raw material in the futures market.* In other words, the flour mill buys spot wheat and at the same time sells short an equal amount of wheat on the Produce Exchange or the Wheat Pit. This is done to protect the usual gross manufacturing profit. It is a means of covering or protecting the mill against losses arising out of adverse price fluctuations, but it involves the necessity of foregoing the opportunity of securing a speculative profit should the price changes prove favorable.

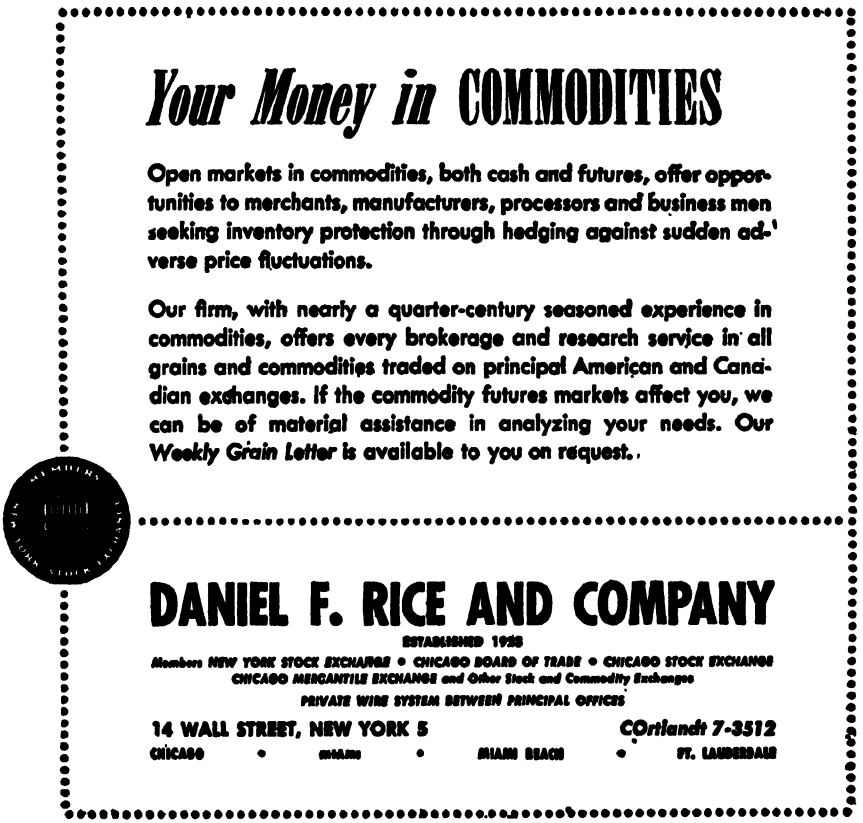
Suppose the Pillsbury Flour Mills, Inc., buys 50,000 bu. of wheat in September at $1.36.[1] This wheat will be made up into flour that cannot be sold before November. In November, the price of wheat may drop, causing a considerable loss in the sale of the flour. Therefore, on September 10, when the Pillsbury Company buys wheat to make into flour, it sells short a similar quantity of wheat by selling at $1.36 per bushel on the Chicago Board of Trade 10 units or 50,000 bu. of December futures in wheat.

If it is assumed that a gross margin of 5 cts. will adequately cover the cost of operation and overhead of the Pillsbury Company and leave a satisfactory net profit, the flour made out of wheat that has cost $1.36 a bushel in September should sell for $1.41. But suppose that the exchange price of wheat in November drops to $1.20 a bushel. The miller will then have difficulty in selling flour for much above $1.25, thus showing a loss of 11 cts. instead of a gross gain of 5 cts. But the Pillsbury Company had sold short 50,000 bu. of wheat at $1.36 on September 10. It now has to cover this short sale by buying December wheat at a price of $1.20 a bushel. This leaves a gross profit on the short sale of 16 cts. a bushel. If

[1] All prices used in these illustrations are hypothetical and have no relationship with actual current prices.

the loss of 11 cts. on the flour is deducted, a gross margin of 5 cts. remains. The hedging operations have therefore been instrumental in enabling the company to realize the usual manufacturing profit.

On the other hand, suppose that the price of wheat in November, instead of falling, rises from $1.36 a bushel to $1.45. The flour, being regularly



The above advertisement emphasizes the importance of hedging to merchants and producers who trade in staple commodities.

established at approximately 5 cts. over the price of wheat, will then sell for $1.50. This leaves a total return of 14 cts. But in this case as before, the short sale must be covered. In September, December wheat futures sold at $1.36 a bushel, and now this sale is covered by purchasing December futures at $1.45, showing a loss of 9 cts. on the short sale. Taking this loss from the above gain of 14 cts. the usual manufacturing profit remains.

The schedule shown on page 450 may help to present these transactions more clearly. Whether the price of wheat rises or falls, the results under a "perfect" hedge are exactly the same.

Case 1.

	Transactions in *actual* goods	Transactions in "future contracts" on the exchange
Sept. 10	Bought 50,000 bu. of wheat for $1.36 per bushel and had it shipped to the flour mill	Sold "futures" for 50,000 bu. of wheat, deliverable in December for $1.36 per bushel. (This is a "short" sale)
Nov. 15	Sold a shipment of flour which was made out of the 50,000 bu. of wheat at a price equivalent to $1.25 per bushel	Bought "futures" for 50,000 bu. of wheat deliverable in December for $1.20 per bushel. (This is intended to "cover" on the short sale still outstanding)

Loss on the flour—11 cts.
Gain on the "future" transaction—16 cts.
Gross gain on the whole transaction—5 cts.
Loss, if hedging operation had not been entered into—11 cts.

Case 2.

	Transactions in *actual* goods	Transactions in "future contracts" on the exchange
Sept. 10	Bought 50,000 bu. of wheat for $1.36 per bushel and had it shipped to the flour mill	Sold "futures" for 50,000 bu. of wheat, deliverable in December for $1.36 per bushel. (This is a "short" sale)
Nov. 10	Sold a shipment of flour which was made out of the 50,000 bu. of wheat at a price equivalent to $1.50 per bushel	Bought "futures" for 50,000 bu. of wheat deliverable in December for $1.45 per bushel. (This is intended to "cover" on the short sale still outstanding)

Gain on the flour—14 cts.
Loss on the "future" transaction—9 cts.
Gross gain on the whole transaction—5 cts.
Gain, if hedging operation had not been entered into—14 cts.

In a perfect hedge, the spot purchase and the short sale are usually made at the same time. The quantity of wheat bought must be the same as the amount sold short, and the price spread between spots and futures must be the same in both the buying and selling transactions. However, this situation seldom arises in actual business experience. The range

between spot and futures prices does not remain constant—the variation in the spread between them being sufficient to cause a discrepancy in the price hedge. This may result in a slight gain or loss arising from price fluctuations.

The hedge is based on the assumption that prices of raw materials and finished goods will rise or fall simultaneously. Should something occur to disturb this relationship, hedging will fail of its purpose as a protecting device. If the price of raw materials remains unchanged but the price of the finished goods rises or falls or vice versa, a loss or higher profits will replace the usual margin of profit.

Sometimes manufacturers hedge on long-time sales contracts in order to protect themselves against price rises. For example, a coffee company agrees to supply the U.S. Navy with coffee for a period of one year at a price based upon current market quotations. Although the price of coffee may be very low at the present time, there might be a rise in price of 100 per cent before the year is up. The company, therefore, hedges its contract by buying coffee futures at present prices. Should the price later rise, the company will have to pay more for its green coffee and may lose money on the government contract, but it will make up this loss by means of the hedging operations, for the futures that it purchased will also rise in price. Although the methods of hedging are quite different from insurance, the purpose is not dissimilar.

Price Movements. It is not so much its function as a form of insurance, however, as its influence upon market prices that makes the practice of hedging significant in the present discussion. Because of the nature of the hedging operation, the price of a commodity becomes a subject of great interest to large groups of businessmen—not only from the standpoint of current quotations but also with reference to anticipated prices within the coming year. The effect of selling or buying futures contracts simultaneously with the purchase or sale of actual goods is to cause future prices to be influenced by current developments. Similarly, future price trends will influence the prices of commodities in the spot markets. An easy transition in price movements from the present time to some future period is thus readily afforded.

Because all companies are not operating on exactly the same production schedules, the hedge sales of one company may be made on the futures market at the same time that another company desires to buy a future in order to cover a short sale made at a prior period. In such cases, hedge sales cancel out against purchases, and the accumulation of many of such transactions provides the necessary support for an ever-willing group of buyers and sellers on the exchange. However, if a fair number of producers should have production schedules sufficiently similar to cause them all to

want to sell futures for hedging purposes at about the same time, the market will become top-heavy. In other words, the activity would be greater on the selling side than on the buying side. If no support were to be found on the buying side, this desire to sell would so depress the price of futures as to make hedging impossible. This, in turn, would discourage spot sales, on the theory that the price might drop further, and as a result the general market price in that commodity would decline. Fortunately, speculative trading in commodity markets helps to prevent such extreme price swings from going too far. If the future price becomes depressed, speculators are attracted to buy futures in order to make a profit on an anticipated rise later on. This supports the existing price level. Conversely, if too many producers wish to cover on short sales made at some prior time, they will have the effect of bidding up the price unduly. Speculators then sell short on the theory that prices in the future will eventually fall. The absence of sufficient speculative support, when needed, may induce considerable price fluctuation. The following newspaper report illustrates the mechanics of such price movements:

HEDGE PRESSURE WEAKENS WHEAT

Other Grains Show Tendency to Rally, but Upturns Fail to Hold, Chicago Reports

Special to THE NEW YORK TIMES

CHICAGO, June 11—Hedge pressure and local selling on the bearish June crop estimate caused further weakness in wheat futures at all markets today. The market on the Board of Trade showed a rallying tendency at times on the strength in coarse grains, but the upturns failed to hold.

Corn was decidedly strong up to the last hour of trading, all deliveries except the May registering new highs on the crop, but there was a reaction from the top on profit-taking. Oats were strong for a time but closed weak, selling orders being numerous in the late trading. Final prices were $2\frac{1}{4}$ to $3\frac{1}{2}$ cents lower for wheat; unchanged to $1\frac{3}{4}$ cents up for corn, and $1\frac{5}{8}$ to $2\frac{1}{2}$ cents lower for oats.

Speculative trading often results in removing the peaks and filling up the troughs in price movements. This may not always be true, since many factors are current in a day's sales on an exchange. Generally, however,

if the price of a commodity falls to an unusually low level, bulls, by taking a long position, will strengthen the market, and cause prices to rise. When prices are unusually high, bears may foresee a drop and start a selling movement which will turn the price trend. If there were no trading in futures in agricultural staples, there would probably be a tendency for prices to drop very low immediately after harvest, when growers generally sell their crops.

World Price Movements. The speculators' influence is also to be recognized in "straddling" transactions. This term applies to the trading of those who desire to profit by price differences existing between speculative and spot markets. A similar type of transaction occurs when there is a difference in the prices quoted on two exchanges. For example, should there be a difference between prices on the New York Rubber Exchange and the London Exchange, traders will buy in one market and sell in the higher market. This type of transaction is known as *arbitrage* and results in an adjustment of all markets to approximately the same price level. The organized exchanges thus become centers for the posting of current prices which reflect both national and international trading sentiment.

Trading on a commodity exchange, then, may be conducted by several types of buyers and sellers: the speculator who sells short or buys long because he anticipates a drop or a rise in price, the merchant or manufacturer who hedges in order to protect orders or quantities of goods in warehouses, and finally arbitrage traders who take advantage of differences in price in different markets.

Speculative Evils. It should not be assumed from the foregoing that these exchanges always operate to perfection. Certain speculative practices to which they give rise often result not in price stabilization but in price manipulation. Bear movements sometimes cause ruin among thousands of farmers, and bull movements and corners will cause overproduction and inflation and at the same time may artificially raise the prices of necessities, thereby resulting in suffering and famine among the poor. Speculative transactions are too similar to gambling to be harmless. Millions are gained and lost, and those who speculate are often ruined by adverse market trends. The possibility of quick profits often attracts inexperienced and ignorant individuals. Transactions of this variety sometimes lead to harmful effects on prices.

Interplay of Price Factors. Without delving at length into the moral aspects of the matter, it is significant that the existence of organized exchanges makes possible a free interplay of supply and demand forces. Prices become closely adjusted to the collective needs of world buyers and to the accumulated supplies that are being offered for sale. Speculative activity introduces, in addition, the estimates of future market require-

ments and of anticipated stocks of goods. Unfortunately, from the standpoint of stability, ignorant amateur participation coupled with selfish manipulation in the form of bull and bear raids is also capable of producing pronounced effects upon price movements in this competitive market. Those business organizations whose success or failure depends upon the level of prices established in one or more of these commodity exchanges must naturally keep a close watch over major movements which are likely to be reflected in the exchange prices.

The futures market is essentially a price-making organization. The thing traded in is a contract for goods, not the goods themselves. Every factor that is calculated to affect the supply or demand for the product within the next 12 months may register its influence immediately on the price in the futures market. It may be weather conditions, disturbances abroad, England's or America's decision concerning monetary standards, or an important strike or other labor disturbance. The price at any time is a balance of the judgments of those buying and selling in the market. When it is realized that each trader has a different temperament, different contacts and sources of information, and different financial resources, it is no wonder that the price fluctuates continuously and sometimes erratically.

Summary of Price Factors. In a study of prices of staple commodities sold on organized exchanges, three major movements may be recognized: (1) the general trend of prices due to changes in the level of prices of all commodities, (2) the gradual change in the relation of the price of one staple to prices of other commodities, and (3) shorter fluctuations which may be attributed to three causes: (*a*) the annual movement caused by changes in supply, (*b*) the changes caused by alterations in business conditions and therefore in demand, and (*c*) the short-time movements caused by the technical position of the buyers and sellers in the market or by other factors.

The general level of prices changes from one period to another and explains a large part of the change in price of a commodity from one period to another. Price index numbers like those of the Bureau of Labor Statistics, the Federal Reserve Board, and Dun & Bradstreet, Inc., are the best indicators of changes in the general price level.

Changes in price relationships are due to changes on the demand side or the supply side or both. The great demand for leather during the First World War sent hides prices soaring out of all proportion to other prices, inasmuch as hides are essentially a by-product of the meat-packing business and are produced without regard to the demand for leather. Rubber prices soared in 1925 owing to artificial restriction of supply under the Stevenson plan.

The change in price due to changes in supply is essentially an annual movement, though it is not exclusively so. Supply in the sense used above is made up of three items: (1) carry-over, (2) production of the current year, and (3) prospective output of the coming year. Over a long period of time, availability and volume of substitutional material must be taken into account.

Changes in general business conditions, usually referred to as "business cycles," are accompanied by changes in the price of goods largely through the effects that are produced on the ability and disposition of people to buy. To measure the influence of cyclical movements on commodity prices, it is necessary to separate them from any short seasonal factors and from secular or long-time movements in the general price level.

Short-time fluctuations are more or less irregular. The period covered by one of these movements, as well as its intensity, varies from time to time. This type of movement originates in or turns upon a wide range of causes or groups of causes, which may relate either to demand or to supply. The character of any particular movement will be determined somewhat by the technical position of the traders in the market.

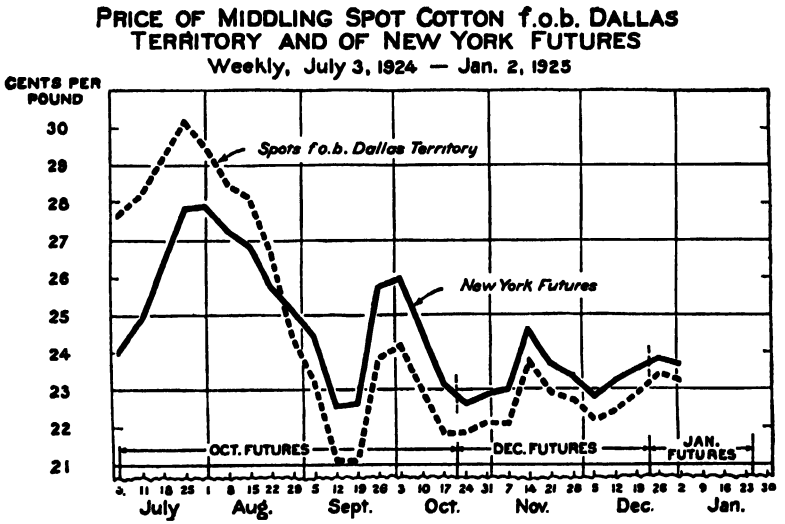
A decline may be the result of profit taking on the part of "long" speculators, selling by bear speculators, lack of interest on the part of mills and exporters, or the pressure of a flood of hedges. If the price rises, it may be due to a movement of the bears to cover previous sales, a speculative bull movement, increased activity on the part of mill buyers, or the lack of offering of spot hedges in the market.

The futures market thus becomes the pivotal center around which these groups of price movements oscillate. It is still necessary to consider, however, how such futures quotations are made to dominate price formation in the various spot markets. To attempt to make a thoroughgoing study of the trade practices in each commodity with reference to the establishment of the prices of such staples in the local markets would be far beyond the scope of this volume. However, by way of illustration, a brief summary will be made of the points of relationship existing in the spot and futures markets in the cotton industry.

Prices in Spot and Futures Markets. The methods of trading in cotton and of quoting prices in the primary markets have given the futures exchanges a very important position in the market structure as a whole. Prices in the futures market tend to respond most quickly to the changing opinions of traders as to world demand and supply conditions. As a result, these prices are accepted as the standard for trading purposes and buying and selling in the spot markets are conducted in terms of points or fractions of a cent "on" or "off" futures; *i.e.*, local spot-market prices are quoted as so many hundredths of a cent above (on) or below (off) the prevailing

futures price. The actual price in each transaction is the result of a bargain between seller and buyer in terms of the "points," or fractions of a cent (per pound), deviation from the basic exchange quotation.

For example, a cotton merchant may be interested in obtaining a spread of approximately 100 points (or 1 ct. per pound) between the buying price on the farm and the selling price of cotton landed at some North Carolina



During the last half of 1924 the basis at Dallas fluctuated from 365 points on New York to 190 points off. Merchants in the Southwest had sold more new crop cotton for July and August shipment than was readily available because of the lateness of the crop. Spot cotton sold at a considerable premium over futures until the insistent demand had been satisfied. Prices used in the preparation of this graph were official quotations of Friday of each week. New York futures are those for delivery in nearest active month on that exchange. (*From U. S. Department of Agriculture, Department Bull.* 1444, 1926.)

mill.[1] Since the daily prices of cotton quoted on the New York or the New Orleans exchanges are accepted as the standard of trading by both buyers and sellers, the important question involved in the process of bargaining in the markets is not the price but the number of points above or below this standard. If cotton is being sold currently at a basis of 70 points "on" New York October futures, delivered in North Carolina, it means that the mill will pay the middleman seven-tenths of 1 ct. per pound more than the exchange price of this future. The merchant must buy or have bought cotton from the farmer at a price equivalent to 30 points "off" the exchange price, *i.e.*, three-tenths of 1 ct. less than this future quotation, in order to have a spread of 1 ct., or 100 points, between buying and selling prices.

[1] See GARSIDE, A. H., "Specimens of Cotton Hedging," N. Y. Cotton Exchange, p. 4, 1934.

Trading among farmers, merchants, and mills is conducted in terms of bids or offers for cotton at varying points on or off the quoted exchange price.

Much of the business in the spot markets is done on "basis for forward delivery," the price to be an agreed-upon number of points above or below the price of contracts for future delivery in a designated month in a named market. A further element that brings about a close correlation between spot and futures prices is the provision for the liquidation of futures contracts by the delivery of spot cotton. This gives rise to straddle transactions if the spread in price is broad enough to offer profit opportunities.

Such price adjustment is typical in similar commodity markets. Hides are purchased from local meat packers by the tanneries in terms of the exchange price. Raw sugar is purchased from the plantation owners on the basis of the New York price. Similarly, cacao, rubber, tin, coffee, flax, and hemp are determined in price in the spot markets of the world, by allowing premiums and discounts on the quoted futures prices.

In many industries, the influence of the exchange prices is felt still further. Textiles and flour, for example, are regularly quoted in the wholesale markets in terms of the future quotations on wool, silk, and cotton and on wheat; refined sugar takes its price cue from raw-sugar quotations. In the markets for these products, however, conditions frequently arise that far outweigh the effects of the raw-material markets. In the finer textile fabrics, labor costs and style trends are more significant in the final price than are raw-material costs. Moreover, markets of the foregoing type are not characterized by formal organization or operated on a strict set of trading rules. They are subject to the haphazard movements of competitive and quasi-monopolistic enterprises in the struggle for new business. A series of price situations of a different character from those discussed in the present analysis are thus to be expected.

Questions and Problems

1. Agricultural prices tend to be more responsive to changes in demand than are industrial prices, in the aggregate. Why is this so? In which of the two fields are prices more competitive?

2. "The futures market is a far closer approximation to the economist's concept of a perfect market than are the spot markets for the same commodity." What is meant by a "perfect market"? Show how the characteristics of futures markets in staple commodities approximate the conditions set forth in your definition.

3. How are prices determined on a commodity exchange? Make a list of what you consider to be the most instrumental factors influencing bids and offers on raw-material futures.

4. "A purchase of futures on an organized commodity exchange may be offset by a sale of the same number of contracts for delivery in the same month. This obviates

the necessity for any receipts of actual merchandise." Explain, describing the mechanism that makes this statement true.

5. Illustrate clearly how a miller buying wheat for manufacture into flour can protect himself against possible loss resulting from a decline in the price of flour. The North Star Coffee Company accepts a contract to supply the U. S. Navy with 1,000 bags of coffee (100 tons) each month for one year, based on the current price of green coffee. What risks are taken by the North Star Company? What steps can be taken to offset possible losses? Describe in detail.

6. "Hedging does not eliminate all risks of price losses to the merchant." Why not? Explain why hedging is widely employed in the cotton textile industry and not in the automobile or the steel industries. What is the influence of hedging on market prices?

7. What is meant by the statement that the market is bullish or bearish? What indexes, relative to demand factors, may be used in studying price movements of a given commodity? Supply factors?

8. Present an illustration of a commodity that would be traded on both spot and futures markets, and show the relationships and the differences between the two markets.

9. Prices of corn on all exchanges tend to reach the same level as a result of arbitrage transactions. Explain.

10. The futures market becomes the pivotal center around which groups of price movements oscillate. Explain. What types of price movements? Why is the futures market the "center" or motivating force?

CHAPTER XXI

PRICE PRACTICES AND PRODUCTION COSTS

Production Costs vs. Market Prices. Cotton is plain cotton, and wheat is just wheat in the world markets. All producers grow substantially the same kinds of crops, and the price paid in the world markets becomes the same, for any particular grade, to all buyers and sellers. Competition in staples thus comes closer to perfect price competition than is the situation in other markets.

Although it is true that production costs influence the prices of these products, they do so only indirectly through their influence, in the long run, upon future supplies. Because of the competitive character of these markets, current prices are largely determined by the ratio of bids to offers on the part of buyers and sellers the world over. Bids are based upon the existing needs for the product and upon the speculative estimates of the pressure of such needs. Offers spring into existence partly through the desire to sell existing stocks of the staple but more frequently through the combined effect of speculative estimates of future supplies and of reciprocal offers for equivalent purchases that are being hedged.

The *individual* costs of production of a staple commodity have practically nothing to do with its selling price if it is assumed that the goods are sold immediately after they are prepared for the market. The *average* or representative costs of production of all producers of the same staple might have a tendency to influence the prices in the following year. In other words, if the selling price in a given year remains consistently below the costs of production of the bulk of the producers, it may have the effect of discouraging a certain amount of production the following year. Coalition on the part of producers throughout the world under a strictly controllable selling plan might send prices considerably above the cost of production. The extent to which production costs of a commodity influence prices depends upon the degree to which the producers themselves know what their exact costs are and to what extent the costs affect existing and potential supplies of such goods. Inasmuch as the costs of production vary, the effects also will be variable.

In industries of a less competitive character or in which output can be readily controlled, costs sometimes represent the starting point in the building up of a price policy. A company will strive to obtain, in all cases,

the largest possible aggregate revenue over total costs. In branded or trade-marked goods, for example, the producer is frequently able to control the supply of the product entering the market. Such producers are in a position to stipulate the prices of their goods and to refuse to sell them for less than this figure. Competition, though present, is mainly in the form of substitute or similar merchandise; consequently selling appeal is made in terms of quality or other nonpecuniary bases.

Likewise, products protected under patent rights enjoy a virtual monopoly, and with reference to the pricing situation, it is ordinarily found that quoted prices cover the costs of manufacturing. Failure to obtain a satisfactory price usually results in curtailment of production schedules. It is true that firms in this type of business are in a better position to control prices for their products than are producers of staples sold in world markets. Consequently they exert every effort to keep prices sufficiently far above the costs of production to yield a profit. The power to control prices, however, is limited, and this power must be bought at a price. Hence the cost of doing business is increased. Furthermore, production costs are in themselves extremely variable, so a price that at one time appears to cover costs may not continue to do so at another time.

Fixed vs. Variable Costs. For example, if it costs $20,000 to make 1,000 tweed coats, how much will 2,000 tweed coats cost? The answer of $40,000 would probably be wrong. The application of simple arithmetic to this problem results in an incorrect conclusion because it fails to take into account the important differences in industrial costs.

Business costs fall into two general classes: those which change more or less uniformly with fluctuations in output and those which remain relatively fixed in character, despite variations in the volume of production. The former are known as *operating costs;* the latter are usually referred to as *overhead costs.* The direct labor employed in the making of goods or in the supplying of services coupled with the materials and supplies that go into the finished product are the most important of the variable or operating costs. Overhead costs are also referred to as "indirect costs," while operating expenses are sometimes called "direct costs."

If in the figures given above the total cost of $20,000 is made up as follows: overhead $7,000, direct labor $5,000, and materials $8,000, it will be seen that the unit costs, *i.e.*, the costs per coat, are as follows:

Overhead cost per unit	$7	Variable cost per unit	$13

Suppose that with the same facilities 2,000 coats are produced. The total costs might then be overhead $7,000, labor $10,000, and materials $16,000. On a unit basis this would make

Overhead cost per unit	$3.50	Variable cost per unit	$13

If sales decreased so that only 500 coats were produced, total costs would be overhead $7,000 and variable $6,500. On a unit basis this would make

Overhead cost per unit . . . $14 Variable cost per unit..... .... $13

These three conditions may be summarized as follows:

Output, units	Total overhead	Total variable or operating costs	Overhead cost per unit	Variable cost per unit	Total unit cost
500	$7,000	$ 6,500	$14	$13	$27
1,000	7,000	13,000	7	13	20
2,000	7,000	26,000	3.50	13	16.50

From these figures, it is seen that the *overhead cost per unit* fluctuates with production (from $3.50 to $14 per coat) whereas the operating cost per unit tends to remain constant ($13 per coat). Overhead costs are fixed, therefore, only in the sense of the total amount, and likewise variable costs fluctuate as a whole but not on a per unit basis.

A radio company turning out more sets will need increased amounts of materials and more employees. These costs vary directly with increases and decreases in the production schedule. On the other hand, there is a tendency for the salaries and employment of executives to remain relatively stable whether the company is working part time or full time. Advertising appropriations, insurance costs, taxes, and electric light and telephone bills seem to fall into the same category. Although no cost may be declared as a rigid, unchanging element, certain costs are much less affected by fluctuations in production than are others. A recognition of the distinction between these two classes of cost is important when cost analyses are made.

What constitutes an overhead cost in a business may under different conditions be a variable cost, and vice versa. For example, if a factory produced its own electricity or power, this expense would be constant, regardless of changes in production, within the capacity of the plant. On the other hand, if a factory operated machines with individual motors, purchasing its power on a kilowatt basis, electricity would be a direct or variable expense. Certain shoe machinery and machines for making buttonholes on men's clothing are leased to the manufacturers on a royalty basis. Each machine is metered, and the lessee pays an amount that varies with the output. In such cases, the cost of running the machine is an

operating expense, whereas ordinarily the fixed charges on owned equipment would be regarded as overhead costs. In other words, costs sometimes differ in their classification solely because of the way in which conventionalized contracts are drawn with respect to them.

In general, the following classification of costs is recognized:

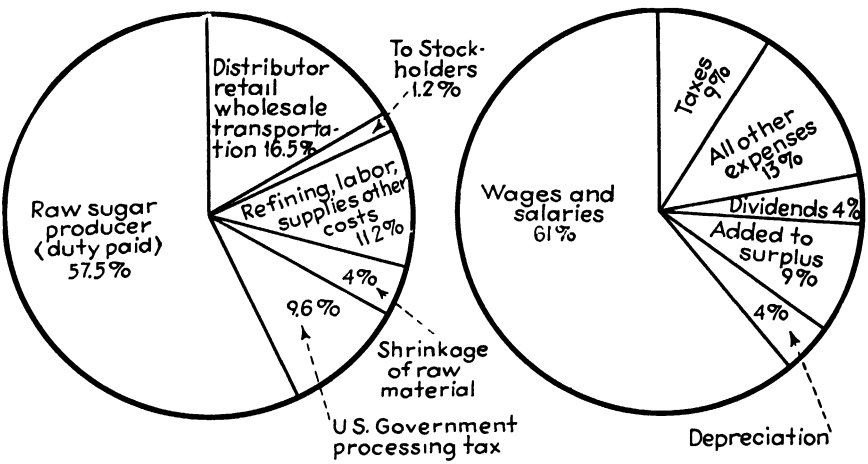
Operating or Variable Costs	Overhead or Fixed Costs
Raw materials and supplies used.	Rent of land, equipment, etc.
Direct labor.	Taxes on land, stock, and assets.
Power used for production.	Interest on indebtedness.
Current repair and replacement costs.	Salaries of executives and managers.
Salesmen's commissions.	Insurance on plant and equipment.
Transportation and shipping costs.	Advertising appropriations.
Depletion of resources.	Hospital, infirmary, lunchroom, and other general maintenance costs.
	Pension and benefit charges.
	Depreciation and obsolescence on buildings, equipment, and fixtures.

Depreciation and Depletion. Although all costs of production must be calculated in arriving at a determination of profits, not all cost items are expenses that must be paid in cash. Some costs consist merely of allowances that should be deducted from profits. The most common of such allowances is depreciation. *Depreciation* is a charge made against a business for a calculated decline in value of some of its assets. The factory deteriorates, or the machines wear out in time. In order to charge off these losses gradually so that the cost of a new machine does not have to be borne in any one year, an allowance is deducted from profits each year, which will gradually charge off the cost of the machine or the factory. Or some of the equipment may become outmoded or inadequate and is replaced by newer or larger machines. To provide for this eventuality, an *obsolescence charge* must be added to the costs. In extractive industries like mining and lumbering, the resource that is being worked will be slowly exhausted. In these cases, an allowance for *depletion* is made to protect the investor against a slowly diminishing value of a company's assets.

Inasmuch as obsolescence and depreciation continue, whether or not the industry is in operation, they are ordinarily considered overhead costs. Depletion, however, takes place faster when a mine is in operation than when it is idle, and this charge is therefore usually regarded as an operating cost.

Composition of Industrial Costs. Some very interesting and important differences are found in the composition of production costs. In the slaughtering and meat-packing industry, for example, operating costs exceed 90 per cent of total costs of production. A 10 per cent increase in

raw-material costs in this industry would have to be reflected quickly in the selling price of meats inasmuch as raw-material costs constitute about 85 per cent of the wholesale selling prices of the finished products. In the baking industry, on the other hand, the costs of flour, yeast, and lard form only slightly more than half of the total manufacturing costs. In the tobacco industry, overhead costs, primarily composed of taxes and advertising expenses, make up a large part of total production costs. Chemical manufacturers and producers of metal products and electrical



Costs in a sugar company and in a machinery company are compared above.

appliances and equipment also have comparatively high overhead costs. In the steel industry and in certain types of machine shops, labor costs exceed 40 per cent of the total costs. On the other hand, less than 10 per cent of the total cost of production in petroleum refining and meat-packing industries is for wages. These costs are subject to considerable fluctuation and are dependent upon many factors, such as general market conditions, price movements, and volume of production.

In the United States Steel Corporation, the annual charges for depreciation and obsolescence of its plants exceeded $50,000,000 when the company was operating at close to estimated plant capacity. This, however, formed but 5 per cent of total costs of production. In subsequent years, similar annual charges were approximately $40,000,000; but inasmuch as the plants were operating at about one-third of capacity, these costs were from 10 to 15 per cent of total production costs. Plant capacity has been used here in the economic sense and not in the engineering sense. The former refers to the point of maximum efficiency of all factors of production; the latter refers to the physical capacity of the plant and machinery. In the

economic sense, a plant may operate beyond capacity by increasing its supervisory force or its mechanical equipment or by making other changes that would tend to increase the total overhead costs. The engineer's concept of plant capacity is a theoretical point of maximum production seldom reached in practical plant operation.

Changing Cost Conditions. Cost variations are common in all industry. Companies having relatively high operating costs and low overhead charges have an almost constant cost of production for each unit of goods produced. This is because their costs vary in almost exact proportion to output. For example, a company supplying a variety of original wax models to a large bronze-casting firm has a minimum of overhead costs. Save for the salaries of the managers, the rent, and incidental expenses of maintaining the shop, all the rest of the production costs are operating expenses, and the largest item in this list is the wage bill. If twice the number of wax models should be ordered, no appreciable reduction in costs would follow. The staff of modelers and designers would have to be doubled; wax, frames, and other supplies would be ordered in greater quantity; and unit costs would be unchanged. As a matter of fact, a slight rental increase might be necessary if working quarters were not sufficiently large.

On the other hand, companies having high overhead costs experience decreasing costs per unit of production as they increase their output and increasing costs per unit as their output declines below capacity. This is explained by the fact that the overhead expenses remain the same and, when the output is increased, the amount of overhead cost spread over each unit of output decreases appreciably. The reverse is naturally true when the output drops.

A striking illustration of how these decreasing cost conditions in the printing business are reflected in selling prices is seen in the price schedule on quantity orders shown on page 465. On a unit basis, the cost of each sheet in the first lot of 5,000 is over four times as great as the cost per unit in the last lot of half a million.

Extractive industries, in general, usually show increasing costs of production if worked to capacity. This is not always true, but as a rule it follows because of the limitation of yield of the fruits of nature. Soil fertility, the width and depth of mineral seams, and the limited quantity of large standing timber per acre of woodland are the causes for a diminution of proportionate returns in these industries if pushed to capacity.

The development of a large market through a growth in demand will then have the effect in extractive industries of stimulating increased production at increased costs. In manufacturing pursuits, such increased production could take place at relatively lower costs per unit—unless the increased demand were accompanied by a rise in wages and raw-material costs that

PRINTING ON ONE SIDE ONLY ON 6 BY 10 IN. WHITE 16-LB. BOND
(Discount of 60 per cent applies to all scales)

In lots of	Price quotation *	Costs, in cents per unit
5,000	$ 24.25	0.485
10,000	32.80	0.328
20,000	50.07	0.250
25,000	58.75	0.235
50,000	90.69	0.181
75,000	122.18	0.163
100,000	153.35	0.153
200,000	267.28	0.134
300,000	381.04	0.127
400,000	488.46	0.122
500,000	597.19	0.119

* From a price list, published by the By-the-inch Printing Corp., New York.

might wipe out all such advantages. To the extent that these advantages are retained, the ability of the company to convert them into profits rather than to offer lower prices depends upon the competitive position that it occupies. If it is a relatively low-cost producer, the company will usually have little difficulty in obtaining these added profits; if it is a high-cost producer, it is in constant danger of having the lower cost producers cut prices in order to obtain a larger share of the market.

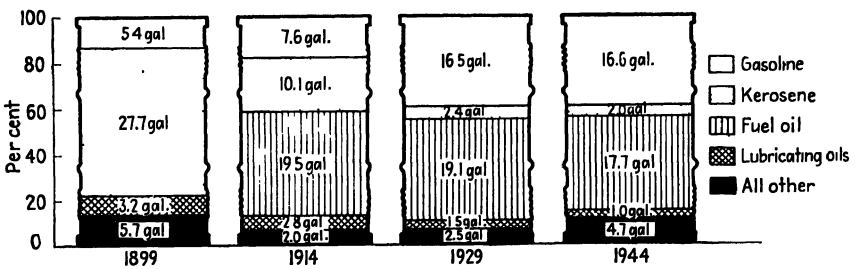
Unit production costs are thus seen to be relative, depending upon the volume of output or sale. Pricing policies are current; *i.e.*, unit selling prices must be stated at the time of sale. Annual production and sales volume are unknown quantities; and although statistical research is applied in estimating probable output, actual performance may depart sufficiently from the forecast figure to convert expected profits into losses.

In other words, unless there is a very fine adjustment of selling prices to current variations in cost conditions, it is quite possible for a company to quote prices below average costs for the year. As a matter of fact, during a general market decline accompanied by falling sales and consequently followed by restriction in output, most manufacturers experience rising costs per unit of output owing to the necessity of spreading overhead costs over the smaller number of units produced. Yet few producers would,

under the circumstances, attempt to raise prices to cover these increased costs. Such a policy, if it were tried, would undoubtedly bring an aggravation of the condition of falling sales with accompanying rises in unit costs on a still further diminished schedule of production. An able executive, under the circumstances, would probably not allocate overhead costs at all for purposes of fixing prices. Instead, he would look to the market for estimates of volume and seek to establish prices so that gross sales, less direct operating costs, provide the maximum balance.

Joint Costs. Another pricing situation is that relating to joint costs. Where several products are the result of a process in which costs are inseparably bound up with the whole operation, it is extremely difficult to tell whether a certain product in this group is being sold above or below its cost.

AVERAGE YIELD OF PRINCIPAL PETROLEUM PRODUCTS
(PER 42 GALLON BARREL)



Petroleum refining, meat packing, and the production of coal derivatives present interesting joint-cost problems. A policy of opportunism must be followed in such cases. Producers usually attempt to sell one or two leading products in the group at prices sufficiently high to cover all costs of production. The balance received from the sale of other products is then applied to profit returns on the entire operation. Such policies are by no means simple of accomplishment. At times, a producer will find that his leading product must be sold in a highly competitive market; occasionally the market for one product in a joint group is excessively large, and the balance of the products is sold with difficulty.

This is illustrated in the petroleum industry where kerosene was originally the refiner's most important commodity whereas gasoline was regarded as a worthless by-product. Subsequently, the demand for gasoline and fuel oil resulted in a sharp rise in the value of these products while kerosene oil prices declined. Refining techniques were therefore perfected so as to produce proportionately more gasoline and fuel oil and less kero-

sene from each barrel of crude. The chart opposite shows the shifts in output as processing methods kept pace with changes in demand.

A somewhat different cost situation arises in a business like that of the telephone, telegraph, or electric-power companies. In each case, these utilities must supply their services day and night; but although their capacity is such that they are able to supply the needs of the public at certain peak load periods of the day, the rest of the time, especially in the late night and early morning hours, there is little call for their service. Nevertheless, a certain minimum schedule of service must be maintained. As a result, the regular rates must bear a part of the cost of operation in the off periods, and the rates charged during these slack periods, though not completely covering costs, help to reduce the total overhead costs of operation.

Low-cost Production. The production costs of an enterprise determine its competitive position. Productive effort is directed toward the provision of goods or services to be sold. In the endeavor to sell, a persistent pressure is encountered on the part of the buying public for the lowest prices obtainable for products of like quality. This, of course, depends upon the ability of the buyers to distinguish quality and to obtain correct price data. Low-cost producers are consequently in the most strategic position to offer their wares to those who would buy. Kennecott Copper, National Biscuit, American Sugar Refining, Ford, American Radiator, Eastman Kodak, and American Tobacco are companies in this class of low-cost producers. Hundreds of other well-known firms might be added to this list. In most cases, they are the dominant producers—enjoying not only the lowest costs but also the largest volume of the business for any single enterprise in their respective fields.

Quantity Discounts. What advantages do these companies enjoy as a result of their large-scale operations? Why are they able to produce at costs lower than those of the majority of their smaller competitors?

In the buying of raw materials, supplies, or other merchandise, corporations with heavy demands are able to obtain quantity discounts on large orders. Fuel bought by the carload lot is cheaper than when ordered by the ton; a purchase of several thousand barrels of flour directly from the mills can be made at a substantial saving in price over that quoted on smaller commitments handled by the wholesale trade. Furthermore, firms operating on a large scale of production sometimes acquire or control their own sources of basic raw materials. Many steel companies operate coal mines; canning concerns own extensive farms and orchards; oil refiners control oil fields.

This strategic buying position is a distinct advantage to manufacturers and distributors—the bulk of whose costs of production consists of the prices paid for goods that they buy. The meat packers, for example, in

obtaining a 10 per cent discount on livestock purchases reduce their production costs almost 8 per cent. Department stores and chain stores receiving price concessions on large orders are able to undersell competitors primarily as a result of these savings.

Operating Economies. In many industries, the old-fashioned methods of production used by certain firms place them at a decided disadvantage with respect to competitors that have installed more efficient modern equipment. Yet the cost of machinery or apparatus frequently prevents an enterprise from acquiring it. Moreover, the productive capacity of such equipment is sometimes far in excess of the needs of the small venture. Modern high-speed wrapping machinery, for example, economizes in labor and in packaging material, but the use of this equipment presupposes an output that will continually feed the machine.

The production of goods in great quantity makes possible a more efficient division of labor. Each employee is assigned a specific function in a series of operations that must be performed. The constant repetition of identical tasks should make the employees extremely efficient and should result in a greater output per worker. Decreased unit costs are made possible because a maximum output is attained with a given staff of workmen whose activities have been timed and properly coordinated with mechanical laborsaving devices. Such methods of production are naturally limited to products that are standardized in character and enjoy a large market.

Certain companies produce at lower cost levels because of their ability to develop by-products. This joint-cost condition places the larger producer at a great advantage in quoting wholesale prices, inasmuch as the revenues derived from the sale of by-products help to cover part of the cost of production.

Besides economizing in the purchase of fuel, such as coal and oil, large producers have been able to reduce the costs of heat and power in their plants in other ways. The hot furnace gases drawn off in the production of steel are used in the larger plants for purposes of preheating other furnaces and for generating steam for power. Special power rates have been obtained from public utilities for heavy industrial use. In cases where local power rates are too high, many companies have installed their own power plants for the generation of electricity. The ability to do this has given the larger producers a further advantage in costs over their smaller competitors.

Finally, lower production costs may be accounted for in terms of superior management and expert control. In view of the greater output, the expenses of administration, even though fairly high, constitute a comparatively small fraction of unit costs of production. Consequently, the best

paid executives, plant managers, and production engineers can be employed by the company.

Overhead Burdens. The reasons for the low-cost position of large-scale producers have been stated in terms of lower unit charges resulting from economies of several types. The assumption has been made, however, that such producers are operating their plants somewhere near capacity.

An illustration of how large-scale capacity might be converted from a great advantage into a disadvantage in the event of declining business is provided in the experience of the Amoskeag Manufacturing Company some years ago. The largest cotton mill in the world at the time, this concern was faced with the possibility of economic disaster as a result of its large production capacity and the general decline in demand for its products. A comment on the position of the mill at the time stated:

> The very size of the company is one of the main elements in the problem which it has to solve. The plant is intended for a vast volume of production. Buying of cotton-mill products for a long time has not been on a quantity basis; buyers have taken small lots. This plant is too large to cater to that kind of business.

In other words, small-scale producers actually had a competitive advantage over this large mill, which in one year suffered a loss of over $3,500,000 although total sales amounted to $33,000,000. The properties were subsequently disposed of at a forced sale to be operated as smaller, separate units.

The programs of expansion and improvement of certain large-scale producers frequently seem to retard their earning capacity for a long time, in view of the fact that the full effects of proposed economies that should result are sometimes not realized until several years have elapsed. In the interim, the company may show a relatively poor income statement.

Price Policies. In spite of the danger of top-heavy organization, large-scale low-cost producers are in a strategic, *quasi-monopoly* position in the market. They could eventually drive out all competitors by continuing to quote the lowest possible prices. Such tactics would, however, result in a situation in which some of the worst features of cutthroat competition might arise. In preference to a struggle of this character, such producers usually quote prices sufficiently high to permit participation of competitors in the market but not high enough to lose too large a percentage of the gross business.

Wholesale Market Prices. In some of the wholesale markets, there are agents of manufacturers who quote daily prices on their goods. Buyers shop at the offices of these various agents and compare quotations. This causes daily fluctuations in the offers of these representatives. Prices are quoted for delivery in the market in which the agent sells. The averages

of such quotations are reported daily. Sometimes wholesale quotations are made with certain restrictive or limiting provisos. For example, a price may be stated as "firm," "for today until 12 noon only," "subject to cancellation," or "subject to prior sale." Such provisions are frequently made in order to take into account unforeseen changes that might occur in the primary markets or because of peculiarities in demand and supply factors in that particular variety of merchandise.

Another common form of quotation in the wholesale market is that which is based upon catalogue prices. The manufacturer or wholesaler issues printed price lists to the trade, and all transactions are based upon such prices. A fair amount of stability is thus secured. Price lists of this description are usually issued weekly, monthly, or annually, depending upon the line of products. The retailer either buys or refuses to buy. There is no haggling. The wholesaler stands firm on his quotations; if his trade appears to slip away, he may lower prices through the issue of a new list. Similar job-lot price lists are frequently issued by manufacturers to the wholesale trade. A variation of this practice is often found where the producers issue definite retail price lists and quote *trade discounts* in terms of percentages off the list price. For example, a drug company may quote the following prices:

Triple-strength mouthwash per bottle..... Retail price 25 cts.
Discount to the trade—33⅓ per cent
In job lots of 500 bottles—55 per cent

This means that retailers will pay 16.67 cts. per bottle and wholesalers or large retailers buying in quantity will pay only 11.25 cts. per bottle.

Prices and Transportation Charges. In the handling of certain goods, in both primary and secondary markets, the element of transportation and haulage costs is of considerable importance. Especially is this true in the case of the cheaper, bulky products. In dealing in commodities of this description, it is important to know whether or not quoted prices include shipping charges. In domestic trade, for example, prices are commonly quoted as f.o.b. factory or f.o.b. Chicago. This signifies "free on board" the freight train, either at the railway siding of a designated factory or at the freight terminal in a stated city. It means that the shipper pays all haulage and loading costs to the designated shipping point. The buyer must pay all freight charges and costs of unloading and haulage at the receiving end. When goods are quoted for New York delivery, the shipper bears the freight costs from his point of shipment to the New York destination. Sometimes producers quote delivery prices as "f.o.b. your factory," in which case all transportation expenses, except the cost of unloading, are paid up to the railroad siding or receiving depot of the buyer's plant.

When shipments by water are made, prices are often quoted "f.a.s." New Orleans. This signifies that the goods are brought "free alongside the steamer," and the purchaser is responsible for the costs of placing the cargo on the ship and for all shipping expense from that point to destination. In foreign trade shipments, invoices frequently read "c.i.f. Liverpool." In this case, the quoted price includes the cost of the merchandise, marine insurance, and all freight charges up to specified destination. To an English merchant buying American machinery, for example, there would be a very substantial difference in prices quoted "f.a.s. New York" and "c.i.f. Liverpool."

Retail Prices. Retail markets, although the most familiar to the average person, are perhaps the most varied of all with respect to methods of quoting prices. No attempt will be made here to present a detailed analysis of retail-market price quotations except to note the many forms of price quotations commonly found.

Some firms sell on a strictly quoted price basis without deviation. This price may be advertised or marked on the merchandise or else quoted orally by a sales person. Bargaining is not invited. The price stands, and the customer is free either to accept or reject the goods on these terms.

Certain retail channels, on the other hand, adopt the opposite practice of quoting prices high and allowing them to be brought to a lower level through the haggling activity on the part of the buyer. The price is established at different levels for different buyers, depending upon their bargaining proclivities. This method of price quotation resembles the system found in some of the primary markets, where the lowest price goes to the buyer who is the best bargainer.

Chain stores, department stores, and other classes of retail dealers that do not offer to make sales on a credit basis quote "cash-and-carry prices." The understanding is that the merchandise must be paid for before it leaves the store and that no delivery service will be afforded. Variations in these arrangements frequently occur—certain stores, for example, demanding cash payment but offering free delivery service.

Installment selling is quite common in such retail lines as furniture, jewelry, electrical appliances, automobiles, and clothing. According to this plan, prices are quoted as so many dollars "down," or cash payment, and the balance "in convenient payments" which are definitely agreed upon. A hidden charge or a specifically stated charge is usually added to a cash-basis price for this credit service. The customary arrangement is to require a "down payment" of from one-fifth to one-third of the purchase price, the balance to be paid within one year. Practice varies, however,

with the character of the merchandise, the dealer, the service rendered, and the type of trade.[1]

Certain retail prices, such as those for foodstuffs like meat, fruits, and fish, vary from day to day in view of the fluctuations in the primary markets for these products and are quoted by retailers on the basis of a margin that they commonly add to wholesale costs. Other prices, printed in catalogues issued by mail-order houses, remain substantially the same throughout a period of several months.

The methods of quoting prices reflect somewhat the degree of control enjoyed by the producer or distributor of the commodity in question. Day-to-day quotations in a market where haggling is the rule or in one in which the base price is determined in a futures market many miles away offer little evidence of control in the hands of the producers or sellers of the product. On the other hand, stipulated prices, issued on printed schedules and maintained with unbending determination, have some semblance of a more favorable position of control for the seller, from the standpoint of price. Competition in all its ruthless role of slashing prices to cost levels appears to be less potent as a force in the latter variety of market situation.

Resale Price Maintenance. *Collier's, Life, The Saturday Evening Post,* and other publications enjoying a large circulation carry each week the messages of some of the leading national advertisers in the country. A glance at a number of recent issues, selected at random, quickly reveals a series of standard price quotations. A washing machine is advertised at $249.50. A beverage is offered at 5 cts. per bottle. A corn cure is priced at 35 cts. a box; a motor oil at 35 cts. a quart; a clock at $9.95; and a radio at $19.95.

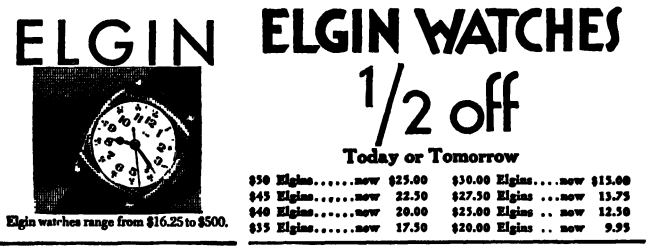
Who charges these prices? What do they signify? For how long will these quotations hold? The American people have come to learn that these prices represent a definite retail-price policy on the part of the producers according to which all consumers everywhere, until further notice, will pay the stated price—no more and no less. In other words, these prices are different from those quoted in the daily market reports. They do not change from day to day; in fact, some of them remain fixed over a period of years.

These fixed quotations do not, of course, imply that the costs of production of the products so priced remain unaltered. Raw materials rise and fall in price; wage levels shift; advertising and marketing expenses undergo revision; and tax burdens increase. Within limits, however, despite these fluctuations in cost, certain classes of producers desire to maintain a stated price on their product. These prices, as has been mentioned, are final

[1] See Chap. XXIV for discussion of installment credits.

retail prices. Between producer and retailer, there are frequently several middlemen. A price policy of this character then involves a satisfactory price adjustment between the producer and these middlemen. In many cases, there is little trouble in securing complete cooperation of these marketing agencies in the enforcement of such price policies. In some instances, however, the producers have found it almost impossible to prevent scattered price cutting below their advertised price schedules.

There are several reasons why certain producers (especially among manufacturers of final consumption goods) endeavor to maintain a stipulated price on their products. The leading argument is that such a policy offers the advantage of stability. The public becomes accustomed to paying a



given price; the middlemen are therefore guaranteed a steady margin of return from the handling of these goods, and the producer, in turn, has a fairly good estimate of the monetary revenues that his productive operations will yield. A price-cutting system tends to demoralize the market; it destroys profit margins for the middleman and leads to requests for lower wholesale prices; it makes dealers look for substitute products with the result that they cease to push the sale of cut-priced articles; it overextends buying at one time, which carries in its wake a period of dullness in the market; it undermines public confidence in the fairness of prevailing prices and invites hesitation on the part of buyers, in anticipation of further price cuts.

Although the position of a manufacturer in the attempt to standardize prices can be appreciated, it must also be recognized that the middlemen who are handling the sale of such products are concerned with the successful operation of their own business. As has already been noted, distributors, as well as producers, enjoy some advantages in maintaining a standard or fixed set of advertised prices. At times, however, it is of distinct advantage to certain classes of middlemen to offer price concessions in order to attract trade. In these cases, therefore, they deem it essential to be permitted to determine independently the prices that they quote to their customers. Where such price concessions involve the sale of standard-brand goods at cut prices, there is direct opposition to any price-maintenance policy on the part of the producer (see above illustration). There is,

however, no fixed division of opinion among either producers or middlemen concerning these practices. Some wholesalers and retailers will refuse to sell any but those products whose prices are maintained, and others protest against being bound by any agreement concerning price fixing. In similar fashion, manufacturers, seeking wide distribution and large outlets, do not discourage the practice of price cutting, whereas others refuse to sell to dealers who do not maintain the advertised price.

Price-maintenance Policies. Producers, opposed to the practice of price cutting or acting as a result of complaints from their distributors, have experimented at different times with a variety of plans. Some have sought to develop an agency method of sale and to draw up contracts with dealers that would clearly set forth the price to be charged. Others have sent investigators to check up on the prices charged by dealers and have refused to trade with those who would not maintain their prices. Still others have sent their goods on consignment and have dictated the prices to be charged for them. The last policy, used many years ago by General Electric, Pepsodent, and Squibb, involves the appointment of wholesalers as sales agents on a consignment basis. Agents under this *del credere* plan have the right to return unsold goods and are not billed until the merchandise is sold. They must, however, submit detailed accounts of sales to the principal.

Legalization of Price Maintenance. In order to legalize price-maintenance agreements entered into by producers and distributors, the state legislatures began to draft measures applying to price-fixing contracts in intrastate trade. These "fair-trade" laws, passed by most states, permitting manufacturers to fix retail sale prices on their goods were upheld in December, 1936, by the United States Supreme Court. In 1937, the federal government passed the Miller-Tydings National Fair Trade Enabling Act as an amendment to the antitrust laws. It sanctioned contracts that prescribed minimum resale prices for trade-marked or branded goods moving in interstate commerce. This legalized vertical price fixing, *i.e.*, price agreements between a manufacturer and his distributors. Horizontal price fixing, *i.e.*, among a group of manufacturers of the same product or among wholesalers in the same line of business, is, however, still unlawful.

As the price-law battles drew closer to complete victory for the sponsors of price fixing, some of the earlier enthusiasm among supporters of such measures began to diminish. Manufacturers discovered that organizations of retailers were virtually dictating to them what prices to maintain and what margins to specify. It soon became apparent that in some trades, the "fair-trade system" was not, in fact, voluntary but compulsory in the sense that manufacturers were being subjected to direct retail pressure. Moreover, it was realized that for certain commodities, a uniform price

throughout the country was manifestly unfair, owing to differences in shipping and handling costs, purchasing power, and conditions of competition. Volume outlets working on rapid turnover protested against high

margins, whereas small local dealers complained that the maintenance of narrow margins was no price protection at all.

The Federal Trade Commission issued a statement to the President prior to the passage of the federal act supporting the position that the potential damage to consumers through price fixing by unduly raising prices would be much greater than any existing damage to producers through price cutting. After the law went into effect, increases in the

prices of drugs, liquor, tobacco, books, and electrical appliances sold in low-price outlets were in many instances greater than what the retailers themselves considered adequate. This resulted in some degree of consumer resistance toward such products. In a few instances, retailers returned to manufacturers as unsalable, thousands of dollars' worth of price-fixed goods.

Capitalizing on this tendency, certain distributors, opposed to price fixing, launched vigorous advertising campaigns pointing out to consumers the significant price differentials existing between goods sold under price-maintained contracts and similar merchandise not so protected. R. H. Macy & Company, for example, came forward with a full line of private brand items and widely advertised their lower prices as compared with the similar branded products whose prices were controlled under the New York Feld-Crawford Law. Such policies are regarded by manufacturers as serious threats to their business, since the effect is to drive consumers to the purchase of private brands at lower prices in preference to those whose prices are standardized. The advertisement on page 475 is typical of the efforts that have been made to enlist the support of the consuming public against legalized price fixing.

Price Cutting. Thus far, the practice of price cutting has been referred to as the chief obstacle in the path of resale price-maintenance policies. As a vital factor in the formation of market prices, however, price cutting deserves further attention, quite apart from its role in connection with the underselling of nationally advertised goods.

Price cutting policies fall into a number of categories. (1) There is the practice of producers in slashing price quotations, sometimes below cost of production, in order to wrest trade from each other. The practice may be nation-wide or purely local in scope and seldom exists for any protracted period of time. (2) A regular annual policy of cutting prices of style or season goods is followed to make way for new stock. (3) There are the familiar series of sales, both voluntary and forced, and, finally, the existence of steady "cut-price" policies. This last situation, in turn, breaks up into cut prices based upon efficiency and cut prices arising out of ignorance of true costs.

Concerning the first of these price-cutting practices, there is considerable difference of opinion as to the prudence or the justification of such action. The whole matter divides itself into two parts, according to the head of a prominent concern which manufactures buttons. The first is the effect of cut prices on the industry as a whole, and the second is the effect on the individual concern. Commenting on these points, the executive in question wrote:

> I believe there can be no doubt of the bad economic effect on the industry. Not only do buyers become quickly accustomed to below-cost prices but, on account of

them, purchase more than their requirements. By such action, the whole industry is likely to be upset for a long period.

There is apt to be a great difference of opinion as to the effect on the individual concern, but often concerns which endeavor to live up to the best business principles for the sake of the industry suffer in the long run. Self-preservation is the greatest aim in life and in business, and it often pays for a concern to be selfish and look out for its own interests in place of the interests of the industry.

In dull periods, it is advantageous to sell below cost to keep an organization intact, to hold trade and to try and steal trade from competitive houses. This, admittedly, is not fair to the industry, but it is advantageous to the individual concern. Until such time as there may be better organization in industries or a higher ethical standard, there always will be some concerns trying to keep themselves going at the expense of their competitors. Those concerns which have higher ethical standards are compelled to follow suit. Otherwise they are likely to find themselves out of business.

Cyclical periods of depression, in particular, are characterized by widespread price cutting of this type. Some of these reductions are purely voluntary, in order to attract business; most of them are practically forced into existence through the competitive pressure that exerts itself at such times. Hides and shoes, cotton and textiles, wool and clothing, building supplies, automobiles, and restaurant meals, all pass through the same transition. Buying power is scarce, and those who have something to sell do their utmost to attract such purchasing power, regardless of costs. Overhead costs per unit are forgotten, and the only basic "costs" of significance that are watched are the "out-of-pocket" or direct operating costs. The effect of this is cumulative; one commodity-price cut lowers raw-material costs in other industries and induces further cuts there. This sharpens competitive forces and leads other companies to lower their prices. A drop in cotton-cloth prices induces sympathetic declines in the price of silks, woolens, and linens. Wage costs must also be adjusted downward, and this reduces buying power still more.

Local Price Cutting and Dumping. A variation of this general price-cutting policy is local price cutting. Instead of announcing general price reductions, some companies have seen the wisdom of retaining their selling prices at relatively high levels in the general markets and of reducing quoted prices, in a given locality, below the costs of production. The purpose of such action is usually to drive competitors out of these localities in order to establish monopoly control there. It is possible of accomplishment wherever such low prices would not operate so as to induce people to buy up large quantities of these goods and send them elsewhere to be sold at attractive profits. This favorite method of "killing off" small rivals was widely practiced by the tobacco and oil trusts in the nineteenth century. Today it is regarded as unfair price competition and is illegal

under the federal laws. Because of numerous ways of disguising such tactics, however, traces of operations of this character are still found in the present markets.

Another closely related form of local price cutting is that of "dumping." Occasionally a producer finds himself embarrassed by a top-heavy investment in production equipment, so that productive capacity far exceeds market demands at the existing price level. More goods might be sold at lower prices, but such price reduction would wipe out a large part of the profit margins. In order to meet the situation, a plan is sometimes adopted of producing in excess of market needs, selling the greatest possible volume at existing price levels, and disposing of the balance in some foreign country or in some isolated part of the domestic market at substantially lower prices. These prices are often below total costs, but seldom below operating costs. The theory behind a plan of this nature is that whatever margin is obtained over operating costs in the sale of such "dumped" goods will act as a reduction of general overhead cost and hence increase the profit margin on all sales.

Temporary Price Cuts. The second general class of price cutting is that which is employed in the movement of "stale" goods. In industries in which season or style plays a predominant part in sales volume, it is the height of folly to attempt to market commodities at prevailing prices after the style or season has changed. A choice must be made between retaining such goods for the next season or remodeling them if possible and cutting prices.

Most business houses prefer the latter move if losses are not too great. It releases capital that would otherwise be tied up for a year or more, and it permits a later acquisition of new stock. Fall sales of summer wearing apparel, spring sales of winter clothing, postholiday sales of Easter plants and of Christmas merchandise are illustrations of seasonal price cuts. Price reductions on radios, automobiles, and beaded lamps are examples of similar handling of style goods. Careful planning of production and purchase might help to eliminate the need for price reductions of this kind. The unpredictable changes in climatic conditions and in habits, tastes, and customs of the buyers account for most errors in this direction. Prices in season and during the peak of sales of favored styles are usually adjusted to levels sufficiently high to care for end-season losses. The universality of these problems among competing companies results in a more or less corresponding behavior on their part in the manner of making price offers. Hence, price offers are held at relatively high levels during the big selling season and are later cut by most producers and distributors.

Price cutting is also familiar where it is engaged in as a temporary device, through several varieties of sales, to attract new buyers. Although prac-

ticed in wholesale channels to some extent, it is most widely known in the retail outlets. "Dollar sales," "one-cent sales," "inventory sales," "profit-sharing sales," "overstocked sales," etc., are designed to draw additional customers by attracting attention to low prices.

Frequently, such sales involve the quotation of ridiculously low levels on products whose prices are well-known to buyers. Other merchandise is kept at prevailing prices. Quotations of this kind are known as "loss leaders" because it is intended that they should entice buyers into the store that features them in the hope that other merchandise will also be bought at the same time.

Disguised price cutting akin to this practice is sometimes engaged in by manufacturers. For example, a producer may offer to give a dealer a free display stand if he will buy $50 worth of merchandise in the course of one month. Candy companies supply electric signs for their dealers if they buy an allotted amount of their goods during the year. Free samples of a soap powder may be obtained if one full package is purchased. Premiums are given to the purchaser of a certain brand of cigars.

Forced sales, such as bankruptcy sales, obviously result in price cutting. They are not usually so harmful as are other forms of price cutting, however, inasmuch as the forced character of the selling suggests to the buying public that prices established at such sales are abnormally low.

Steady Cut-price Policies. This is not the case where steady "cut-price policies" exist. Such slogans as "world's greatest price wrecker," "always the same low prices," "our reputation is based upon fresh merchandise at deep cut prices," "we positively will not be undersold" suggest permanence. Hence buyers become accustomed to these low price quotations and compare them with prices quoted regularly elsewhere. The policies of such merchants are designed to produce this effect. They wish to establish the reputation of being price cutters.

Naturally, manufacturers and merchants who attempt to sell their goods at certain established prices resent such methods. This was noted in the discussion of resale-price maintenance. A continued policy of this character, however, does more than upset standard price quotations. It changes consumer buying habits. It makes them "price conscious" to a much greater degree than is characteristic of their normal buying attitudes. This draws a considerable amount of trade away from "standard-price" competitors. An outcry against "pernicious practices" of this sort is then bound to be heard sooner or later.

Geographical Price Discrimination. The quoting of a nationally advertised price for a product is, in a sense, a case of discrimination against purchasers who are located near the center of production. Although differences in costs of transportation and handling exist, a purchaser 1,000

miles away from the factory pays no more than a purchaser living 1 mile away from the factory. There are several instances of price quotations of a so-called "uniform" type, which appear discriminatory from this same point of view. Thus, in lumber and in steel, certain "basing points" have been selected by producers as a convenient means of stating prices. Prices are quoted as dollars per 1,000 board feet or dollars per ton at Cincinnati or Pittsburgh or Chicago plus freight charges from these centers to destination. In practice, shipments of these commodities are made from any geographical point of production, but prices are quoted in terms of location in one of the cities selected as a "price-basing point." Discrimination here again appears to be geographic—those consumers who are fortunate enough to be located near one of these arbitrarily selected basing points enjoying the lowest prices.

Price-basing Points. Steel prices at one time presented a remarkable illustration of the operation of this method of price quotation. Under the famous "Pittsburgh plus" plan of selling steel, all steel companies agreed to quote their prices in terms of "delivered price in Pittsburgh, plus freight rates from Pittsburgh." While Pittsburgh was the big steel center of the country, this practice seemed fair, for it represented a quotation similar to a bona fide f.o.b. factory price. However, inequalities soon arose when other big steel centers in the country sprang up. A plant in Gary, Ind., for example, quoted prices to a firm in Chicago on the basis of the established Pittsburgh price, plus all rail freight costs from Pittsburgh, although delivery was actually made from Gary. This, therefore, amounted to a fictitious charge for freight for several hundred miles in excess of that actually traveled by the steel. After a Supreme Court hearing on the matter, the steel companies were finally directed to change their methods of quoting prices. As a substitute, several of the most important steel centers were established as basing points, and freight charges were quoted from the steel center located nearest the purchaser.

Despite frequent conflicts with the Federal Trade Commission which has ruled against the Pittsburgh plus plan, the steel companies have continued to quote prices on the same basis but have increased the number of price-basing points. Table 20 illustrates some of these base points and price quotations.

Delivered Prices. Cement prices are commonly quoted on a "delivered basis," competition among producers taking place in each large city as a separate market area. Prices are established competitively in each of these cities and generally at different levels in each city on any given day. They must, however, be sufficiently close in range to prevent transshipments between markets. The price for cement in St. Louis may thus be lower at times than it is in New York, although the majority of the pro-

TABLE 20.—IRON AND STEEL PRICES *

Basing points	Pittsburgh	Chicago	Gary	Cleveland	Birmingham	Buffalo	Youngstown	Sparrows Point	Granite City	Middletown, Ohio	San Francisco, Los Angeles, Seattle	Delivered to Detroit	Delivered to New York	Delivered to Philadelphia
Ingots:														
Carbon, rerolling							($35.00 f.o.b. mill)							
Carbon, forging	$40.00	$40.00	$40.00	$40.00	$40.00	$40.00	$40.00							
Alloy	$52.00									(Canton = $52.00)				
Billets, blooms, slabs:								(Provo = $53.20)						
Carbon, rerolling	$42.00	$42.00	$42.00	$42.00	$42.00	$42.00	$42.00	$42.00				$45.00		
							(Provo = $61.20, Duluth = $52.00)							
Carbon, forging billets	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00					$53.00		
Alloy	$61.00	$61.00				$61.00		(Bethlehem, Massillon, Canton = $61.00)				$64.00		
Sheet bars							$53.00	Portsmouth, Ohio = $67.20						
Pipe skelp	2.35¢	2.35¢					2.35¢	2.35¢		(Coatesville = 2.35¢)				
Wire rods	2.55¢	2.55¢		2.55¢	2.55¢		(Worcester = 2.65¢)				3.27¢			
Sheets:														
Hot-rolled	2.50¢	2.50¢	2.50¢	2.50¢	2.50¢	2.50¢	2.50¢	2.50¢	2.875¢	2.50¢	3.24¢	2.65¢	2.79¢	2.70¢
Cold-rolled	3.20¢	3.20¢	3.20¢	3.20¢		3.20¢	3.20¢		3.30¢			3.35¢	3.61¢	3.58¢

* *The Iron Age*, July 10, 1947.

Steel prices shown here are f.o.b. basing points in cents per pound or dollars per gross ton. Extras apply. Delivered prices do not reflect 3 per cent tax on freight. Industry practice has discontinued arbitrary f.o.b. prices at Gulf and Pacific ports. Space limitations prevent quotation of delivered prices at major ports.

ducers of cement are located nearer New York than St. Louis. The effect of quoting prices in this way is that all producers, whether situated relatively close to the market or at a considerable distance from it, ask identical prices for their product. Any change in quotation by one seller will be met at once by all competitors remaining in the market. Those close to the market enjoy a quasi-monopolistic position in the sense that they are strategically located with reference to fixing or determining the market price. If they chose, they could lower prices in the market and still cover costs. The effect would be to cause distant competitors to abandon that market in favor of one in which they could make profits. Instead of doing this, however, local mills prefer to follow the policy of supplying only a portion of their nearest market, allowing prices to remain high enough to permit outside competitors to sell at a small profit and at the same time enjoying the resulting profit spread between their own costs and this higher market price. The balance of their output can then be sold in more distant markets where the spread of profit is probably not so great.

Other products that have been sold on a delivered-price basis include automobiles, rubber, chemicals, stone, clay, glass, and certain foodstuffs. In a very strict sense, all commodities that are sold at a uniform price quotation delivered "in all parts of the United States" or in the "Western Hemisphere" or "east of the Rocky Mountains" serve as examples of price discrimination. In some instances, the shipping costs are so petty that such discrimination is more theoretical than real. Where the product is bulky, however, and freight charges are high, the quoted prices undoubtedly include allowances for average shipping costs. Consequently purchasers located near the center of production are partly penalized, in the price that they pay, for the freight costs sustained in shipping the goods at the same standard selling price to more distant markets.

Price-control Practices. Certain price-control policies are based upon mutual understanding, price- and trade-information services, or mutual informal agreement relating to prices. This form of control is illustrated in a Federal Trade Commission report on the meat-packing industries:

> The five big packers make the market. All buying orders come from Chicago. . . . In brief, the prearranged division of live-stock purchases forms the essential basis of a system by which the big packers are relieved of all fear of one another's competition and, acting together, are able to determine broadly not only what the live-stock producers shall receive for their cattle and hogs, but what the consumer shall pay for his meat. . . . The "making" of the daily market as established by packer documents and statements of live-stock commission men and packer buyers may be summarized thus: (1) The independent packers, order buyers, and traders, no matter what time in the morning they begin buying, or what prices they offer, whether higher, lower, or steady, are not generally of sufficient influence

to establish the market for the day. The market is "made" at the principal buying centers only when the big packers begin to make their purchases. (2) That it is the rule of the big packers to have their buyers enter the market at the same time and to exhibit the same attitude to the market, thus "making" the market. Exceptions to this rule are rare.

In reply to this accusation an official of one of the big packing houses stated: [1]

A good many people think that the meat packers sell meat for the cost of the livestock, plus expense, plus a profit. But that is not how meat prices are made. We *must sell* our meat—because it is perishable. We hope, of course, to sell it at a price which gives us a profit. But profit or loss, we *must* sell it. . . . Sometimes this is a profitable price; sometimes there is a loss. The records show that, on the average, we make a modest profit year by year.

As for prices paid for livestock, they, too, are set by the forces of supply and demand. No meat packer could control them because there is so much competition both in buying and selling. There are over 4,000 meat packers and 20,000 commercial slaughterers competing daily for live animals.

There is neither frictionless price competition nor unbridled monopoly in the markets of the world. Competition in its simplest sense represents the striving for something that is sought by another at the same time. But such contention may range from friendly rivalry to fierce opposition. In its extreme form, competition becomes "cutthroat" in character, and the competing enterprises stop at practically nothing to achieve victory. During a battle of this kind, prices are invariably slashed below production costs in the mad struggle of one company to "outdo" the other. The cigarette manufacturers at one time faced a price-cutting struggle that threatened to result in tremendous losses. Less sensational examples of ruinous price-cutting practices are seen every day in certain local retail trades in which merchants engage in "a fight to the finish." Bids are sometimes made that do not cover costs—either through ignorance or in sheer desperation to get work and to cover part of the running expenses of a plant that would otherwise remain idle. The aftermath of such profitless operation is frequently characterized by a series of bankruptcies among weaker contestants and the establishment of combinations or agreements of "mutual understanding" among the survivors. Bankruptcy sales, fire sales, and other forced sales contribute further to the confusion by thrusting upon the market at sacrifice prices goods that other companies are trying to sell at a legitimate margin.

Administered Prices. In its milder form, competition approaches more nearly the spirit of friendly rivalry. Substantially the same variety of

[1] F. M. Simpson, Agricultural Research Department, Swift & Company.

trade may be served by several producers, but they are content to adopt a policy of "matching" prices rather than one of undercutting one another's prices. Under this arrangement, a "respectable" profit margin is maintained for the majority of the competitors, and the buying public is attracted by inducements other than price. Service, quality, advertising, and past reputation are used as the means of drawing trade toward a particular company. If the market is sufficiently broad, there will be room for a considerable number of competitors—each offering goods at substantially the same price and with little tendency to drive prices down to the cost of production.

Where a few large firms dominate a market, they can cooperate, directly or indirectly, for the purpose of fixing prices for the entire field. In such cases, prices are not arrived at independently by each producer but result from agreement among the leaders. There is therefore no variation in the price of competing brands of cigarettes, gasoline, or bread. Similarly, there is uniformity in the prices of steel and steel products and in copper and brass quotations, even though they are offered by competing firms.

Sensitive and Insensitive Prices. Under free competition, the producer adjusts his price continually until he has sold all that he has produced or can produce. Under monopolistic competition, there is a tendency for the producer to maintain his price level for long periods of time and to adjust production to whatever demand develops at that price. In other words, these firms, in contrast to those under free competition, would rather let production drop in order to maintain prices even through depression periods than lower their prices and sell more goods. Price sensitivity to demand and business conditions is associated with free competition, whereas price insensitivity is usually a result of administered or monopolistic control.

Although in a general way, all prices are subject to certain dynamic influences, each is affected somewhat differently from the others. Some are far more sensitive to factors of change. Some prices are free competitive prices; some viscous and slow to change; some semiviscous or "sticky"; some semifrozen; some absolutely frozen or rigid. The businessman is confronted, not by a uniform mass or structure of flexible prices, but by a heterogeneous collection, some elements of which are quicker to move than are others. The uneven movement of prices or costs of production is really more important to the businessman than is the course of the general level.

Open-price Associations. The influence of "open-price trade associations" from the standpoint of price control may be briefly cited. Open-price trade associations are simply organizations whose purpose is to distribute or exchange price information. Members of such associations

ties dealt in, and the association circulates such information for the use of other members. It is the use that can be made of such information which places it in the category of price-control tactics. Without making an elaborate analysis of the ways in which these price reports are used in enforcing price agreements, preventing price cutting, or standardizing prices among its members, the following quotation [1] will be of interest in revealing the cooperative spirit to which these associations lead:

Those of us who have been connected with the "Benders Board" Association since its formation have undoubtedly benefited by it greatly . . . by the very stable condition in which the market is and has been for some time back. . . . This is not due to any agreement as to what prices shall be named, but is the natural result from the continual association of men in the industry, discussing their common problems and realizing that after all is said and done, things are about the same with one mill as they are with another. There is only just about so much business to be had, and results are much better by cooperation than by the old-fashioned cut-throat competition where no one knew anyone else in the trade.

The prevalence of all these relationships among producers in the market materially diminishes the influences of competitive factors in the determination of prices. The following table of quotations by a number of steel producers for various types of steel is indicative of the degree of similarity in price offers that prevails among competing firms in this industry.

TABLE 21.—HIGH-STRENGTH, LOW-ALLOY STEELS *

(Base prices, cents per pound)

Steel	Aldecor	Corten	Double strength No. 1	Dynalloy	HI Steel	Mayari R	Otiscoloy	Yoloy	NAX high tensile
	Producer								
	Republic	Carnegie-Illinois, Republic	Republic	Alan Wood	Inland	Bethlehem	Jones & Laughlin	Youngstown Sheet & Tube	Great Lakes Steel
Plates	4.10	4.10	4.10	4.10	4.10	4.10	4.10	4.10	4.10
Sheets:									
Hot-rolled	3.85	3.85	3.85	3.85	3 85	3 85	3.85	3.85	3.85
Cold-rolled	4.75	4 75	4.75		4.75	4.75	4 75	4.75	4.75
Galvanized		5.40				5 40			
Strip:									
Hot-rolled	3.85	3 85	3 85		3 85	3.85	3.85	3.85	3.85
Cold-rolled			4.75			4.75	4.75	4.75	4.75

* *The Iron Age*, July 10, 1947.

[1] Open Price Trade Associations, *Senate Document* 226, p. 260.

In industries like steel, copper, and electrical equipment, where a few low-cost producers enjoy quasi-monopoly positions, such open-price agreements have been criticized as being tantamount to outright price fixing. Buyers have argued that these price policies lead to monopolies and unduly high price levels.[1]

> With producers knowing what their competitors are charging for a given commodity . . . one producer may post a higher than warranted price, and others may follow suit, knowing that the buyer must buy at that price and preferring to take chances on getting a certain amount of business at a profitable level rather than to precipitate a price-cutting fight by posting a lower price. . . . Thus, buyers see open-price agreements as a hindrance to the free play of competition, a device by which artificial prices may be set and exacted.

In reply, the electrical manufacturers contended that over a period of 14 months, in which 14,500 prices were filed by producer members of their association, only 22 cases involved increases of list prices. Moreover, operation of the open-price plan helped the electrical industry to uncover vicious pricing practices made possible only by the payment of low wages. It also prevented large producers from taking orders at special price concessions to the disadvantage of smaller operators, since all competitors knew at all times the prices quoted by others.

Commenting upon the effect of this policy, Dr. Paul H. Nystrom said:[2] "Superficially, the open-price principle seems innocent enough but its purposes are definitely price fixing, market control and monopoly. The adoption of this principle means the end of free competition, and the beginning of rule by industrial monopoly."

Monopoly Controls. Price control becomes most pronounced in those industries in which patent rights have placed monopolistic control over markets in the hands of a few producers. Thus, until the Fleming detector tube patent expired, the Radio Corporation of America controlled the manufacture, sale, and use of all forms of vacuum tubes. This control placed it in the position where it virtually dominated the market. After its patent on tubes expired, the Radio Corporation of America began to include, in its license agreements with manufacturers of radio sets, a clause that required the licensees to purchase from it all tubes used as initial equipment in sets. Independent manufacturers of radio tubes brought suit against the company, under the Clayton Act, alleging that this clause in the licensing contract restricted competition in the tube business and tended to create a monopoly. During the litigation, the independent manufacturers were granted a temporary injunction, and the Radio Cor-

[1] The Open Price Problem, *Nation's Business*, pp. 70–72, March, 1934.

[2] *The New York Times*, Apr. 1, 1934.

poration of America agreed to suspend the enforcement of the objectionable clause.

A final form of price control is that which arises out of the formation of legalized selling pools. In domestic trade, the price of citrus fruits is largely influenced by the shipping policy of the California Fruit Growers' Exchange. In foreign trade, Copper Exporters, Inc., at one time virtually dictated world copper prices. In Europe, the various cartels or selling syndicates have at times been eminently successful in controlling prices of coal, steel, and chemicals. The difficulty with such control usually lies in the fact that unless it arises from a rigidly united group of producers, it rests on a shaky foundation. Loosely associated groups of sellers are often temporarily successful in pooling their interests, but individual selfish desires lead to secret independent sales and result in the disintegration of the structure of the association.

A serious question that has been introduced into the already complex price structure is that of governmental price control. Is it possible for any semblance of free competitive pricing to remain in a regime in which such important elements as wages, hours, and the prices of certain staples are rigidly controlled? Moreover, is it desirable, in terms of the philosophy that governs these new systems of control in which the government is an interested party, that competitive bidding for commodities, relatively limited in supply, should determine the ratio of exchange? The role of the government as a price regulator is one that in recent years has become of sufficient importance to warrant separate consideration. The following chapter deals with this subject.

Questions and Problems

1. Assuming that you were the publisher of magazines, show how you might pass through successive stages of increasing, constant, and decreasing costs in the printing of a periodical. Explain why production costs per unit of output tend to vary as volume of output changes.

2. Considering production costs, how do you account for the fact that a manufacturer of a "luxury" good raised the price of his product in the face of a steady decline in sales volume?

3. If there is a large increase in demand for one commodity produced under conditions of joint cost, what pricing problems arise with respect to the other allied products?

4. "Dumping" is not so likely to occur in an industry with a low percentage of overhead costs and an operating ratio close to capacity. Why not?

5. What do businessmen and economists mean by the term "cutthroat competition"? How have companies sought to eliminate or to minimize the possibility of such competition's developing? What defense may reasonably be offered in justification of certain price-cutting policies?

6. In many industries very large-scale enterprises have also become the lowest cost producers. This puts them in a quasi-monopolistic position. Discuss the relation of

plant capacity to their costs and hence to the prices that they are likely to quote. What industries typify this condition?

7. State why many producers are increasingly striving to stabilize their prices today. Explain the various forms of nonprice competition that have appeared as a result of these policies.

8. Present the arguments for and against the legalization of price-maintenance agreements made by producers and distributors, showing advantages and disadvantages from all sides concerned.

9. How might price discrimination arise in connection with the quotation of uniform delivered prices? Explain, using some product for illustration.

10. A publication of the American Iron and Steel Institute declares that "any action seeking to disturb the practice of quoting prices for steel products according to the long-established basing point method" would result in a decrease in production in certain large centers and an increase in production at plants favorably located near large areas of steel consumption. What is meant by the basing point method? What is the alternative? Discuss the validity of the foregoing conclusion.

CHAPTER XXII

GOVERNMENTAL CONTROL OF PRICES AND RATES

The Passing of Laissez Faire. In the strictest sense, there never has been in this country a complete absence of governmental control. Although it was theoretically the basic philosophy underlying state and federal constitutions at the inception of the nation, the principle of laissez faire of the so-called "liberals" did not call for the establishment of weak governmental units completely stripped of power. On the contrary, from the outset, national and state laws were so framed as to restrain the exercise of individual freedom in the interests of the social group.

What today is regarded as the "passing of laissez faire" is a further extension of governmental control in certain directions, previously considered as fields for the conduct of unrestricted private activity. Many of these new advances in governmental authority have been defended on the ground that group action must be sought in cases where "the rugged individualism of private businessmen" is detrimental to the interests of society.

The present chapter is devoted to a study of the role that government has come to assume in the determination of prices. Federal, state, and local governments have participated to an increasing extent in price regulation and price control. Regulation of rates, particularly among the public utilities, through rate-making boards and public-service commissions, began in the nineteenth century. The more ambitious program of the federal government to extend price control into other fields of business and industry was begun in the twentieth century.

Scope of Federal Price Control. A general statement of federal policy with reference to price control was made by President Roosevelt as follows:[1]

> The definite policy of the government has been to restore commodity price levels. The object has been the attainment of such a level as will enable agriculture and industry once more to give work to the unemployed. It has been to make possible the payment of public and private debts more nearly at the price level at which they were incurred. It has been gradually to restore a balance in the price structure so that farmers may exchange their products for the products of industry on a fairer exchange basis. It has been and is also the purpose to prevent prices

[1] Radio address (Oct. 22, 1933), reprinted in *The New York Times*.

from rising beyond the point necessary to attain these ends. The permanent welfare and security of every class of our people ultimately depends on our attainment of these purposes.

The government sought to attain these ends (1) through the control of prices of individual commodities or services and the relations of groups of prices and (2) through its influence on the general price level.

Agricultural-commodity Prices. In the first category should be placed the attempt of the government to raise prices of specific agricultural commodities that, for several years, were selling below their average costs of production. Under the authority given by Congress in 1931, a $500,000,000 revolving fund was set up for purposes of extending credit and for buying, if necessary, surplus quantities of staple crops in the United States in order to prevent prices from dropping excessively below cost levels. An agricultural price-stabilization board was established to administer the fund. Soon after the board was created, agricultural prices dropped to new low levels. The early career of this body was a trying one. Hundreds of millions of dollars' worth of wheat and cotton were purchased but with little success in the direction of price elevation. The government became embarrassed with large holdings of wheat and cotton and showed tremendous paper losses.

A new agricultural policy was formulated under the Roosevelt administration in 1933 for the reduction of various crops, to facilitate a rise in prices of farm commodities. According to this plan, so-called "processing taxes" were levied upon millers, textile producers, and processors of foodstuffs made of agricultural staples. The money so collected was used to pay farmers for their cooperation with the government in reducing planted acreage or in plowing under a percentage of their crops. The Agricultural Adjustment Administration was established to supervise this curtailment of production of selected farm commodities. By the spring of 1934, more than 300 million dollars had been paid to farmers of cotton, wheat, and hogs, in particular, in an effort to curtail output and to stabilize market prices. A similar program for the limitation of agricultural production and to peg farm prices at higher levels was projected in 1934 and 1935 among cotton and wheat farmers, hog breeders, corn growers, tobacco planters, and growers of certain fruits and vegetables. In 1935, the Commodity Credit Corporation held over six million bales of cotton under its 12- and 10-ct. loans to farmers and in the producers' pool. In addition, legislation was enacted calling for more rigid control of production and for compulsory marketing quotas of specified crops. The Loan Subsidy Act sought to peg prices and at the same time raise the farmers' income. Under the Soil Conservation Act, the retirement from cultivation of millions of acres of poor-grade farm lands was arranged to help reduce surplus crops

and, at the same time, to lower average growing costs because of the concentration of the farmers on the better grade lands.

Industrial Commodity Prices. In general, the attempt of the government to control the prices of commodities produced by American industries was expressed in the National Industrial Recovery Act. The codes of fair competition provided for under this act called for the elimination of unfair competitive practices. Basic prices as established through the agency of the trade associations in many industries were intended to take into consideration the elimination of unfair trade practices, abolition of child labor, a reduction in working hours, a rise in wages, and, in some industries, a conservation of resources. Naturally these prices were higher in most instances than those prevailing in the precode days. However, if no monopolistic practices resulted and there was no unfair rise in prices out of all proportion to these additional cost elements, the resulting price was regarded as an equitable one. In most of the codes that were approved, provision was made to the effect that goods were not to be sold below cost of production or reasonable cost. By a system of licenses and of federal fines imposed for code violations, these price levels established by the industries themselves received a legal sanction.

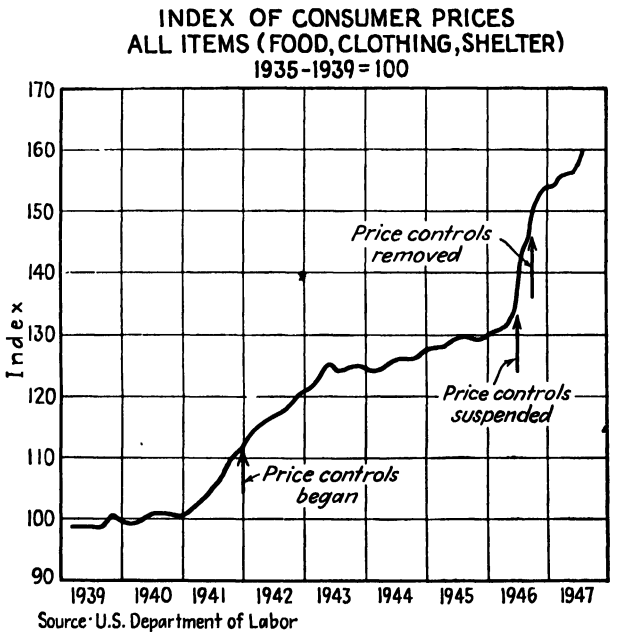
During this same period, a governmental agency, known as the Petroleum Industry Administration with the Secretary of Interior as "oil code administrator," was formed to administer the oil code and to "set price limits." Another board—the Petroleum Administration Board—was set up to supervise production of crude and refined oil. Members of this industry themselves realized that in the several years preceding the formation of the code in their industry, the chief evils and economic difficulties with which they had to contend arose primarily from the overproduction of crude oil. Various state laws and cooperative agreements among leading producers had failed to remedy the situation. Any more drastic plans for control generally resulted in violation of laws against the restraint of trade. Federal price fixing and restriction of output by means of setting production quotas for the oil fields were therefore accepted by the oil industry as a solution to its pricing problems.

Bituminous coal operators similarly sought federal aid in stabilizing prices in their industry. The Guffey Coal Act of 1937, in seeking to attain this end, set up a National Bituminous Coal Commission. This body, with the aid of district boards, was authorized to prescribe minimum and maximum prices of coal.

Another governmental agency designed to exercise supervision over prices of industrial products was the Consumers' Advisory Board. This board was created for the purpose of observing and reporting effects upon the consuming public of prices quoted on the basis of the provisions in the

various codes. It was given no real authority to control prices, except through its ability to reveal to the general public the facts of any cases where profiteering or "runaway" prices were brought to light.

Wartime Controls. In order to avoid some of the mistakes of the First World War, Congress, at the outbreak of the Second World War, set up strict controls over raw materials, consumer goods, and the prices of essential commodities and services. Priorities were required for strategic



materials, both raw and finished. Scarce items ranging from meats and canned goods to shoes and gasoline were rationed, and all price-controlled items had to be plainly and conspicuously marked. Violators were subject to fine and imprisonment; and in many states, local enforcement bodies supplemented the federal courts and agencies in apprehending violators.

The Office of Price Administration was set up to regulate the rationing of goods and to determine prices for basic commodities. Despite the fact that rationing and price controls were new experiences for the American public, the law was successful in holding prices down. The weakness of the law was evident in those cases where scarce materials were unobtainable at the artificially low price set by the OPA. This led to black-market operations, especially where those whose earnings and profits were unusually high were willing to spend more than the official rates to get more than their allotted supplies of scarce items.

At the conclusion of the war, there was considerable agitation for the removal of all government price regulations that had been introduced as war emergency measures. It was argued that "nothing is more inflationary than a system of artificial regulations which inhibits free movement of goods from producer to consumer." Spokesmen for "decontrol" contended that with the lifting of the government control barriers, the shipments of commodities would quickly reach floodtide proportions and that prices would react from the high levels to which they had gradually climbed, even while under state-operated controls. The OPA was discontinued in 1946, and the few remaining restrictions on commodities were removed the following year. The immediate effect of the removal of controls was a rapid upturn in prices as shown by the graph on page 492.

Government Enterprise. Another way in which the government sought to exercise price control was through its entry into industry. The most striking example of this was in the creation of the Tennessee Valley Authority, which was described as an organization whose project at Muscle Shoals might serve as a measure of the operation of public or private hydroelectric-power plants. Other government projects in the Columbia River district and at Hoover Dam were similarly regarded as models set by the government for the measurement of electric-power costs. "The very fact that a community by vote of the electorate may create a yard-

TVA PLANTS TO MAKE ITS OWN DAM CEMENT

Prepares to Act After Receipt of Similar Bids

WASHINGTON, March 28.—The Tennessee Valley Authority is considering a plan to manufacture its own cement for constructing the Norris and other dams in the Tennessee River, it became known today when Dr. Arthur Morgan, TVA chairman, said that bids already received from cement companies were almost identical, from $2.00 to $2.10 a barrel. TVA expects to use around 7,000,000 barrels in the next five years, and on this basis the cost would be around $14,000,000.

Dr. Morgan pointed out that a recent report of the Federal Trade Commission said the cement industry is using a price system similar in some respects to the Pittsburgh-plus system of the steel industry He believes that with the expenditure of about $250,000 TVA could manufacture cement below quoted prices.

stick of its own, will in most cases guarantee good service and low rates." [1] Whether or not the "yardsticks" here referred to are sufficiently accurate or standardized to serve as equitable measuring rods is a matter that has naturally been the subject of heated discussion and debate between private interests and governmental authorities seeking to reduce existing rate structures. Another interesting illustration of how the government might extend the use of such "measuring devices" to other fields is illustrated in the news item on page 493.[2] The authority vested in the government to engage in business was so broadened through the formation of various federal corporations that the government could enter almost any branch of industry. The potentialities of inviting government competition in a field ordinarily conducted entirely by private enterprise is considered in government circles as an important check upon unwarranted price pegging or price rises by monopolistic groups.

Government Monetary Policy. The policy of the government with respect to money has much to do with the general price level. Prices are merely value expressions of commodities in terms of the monetary base. Money, in other words, is regarded by buyers as a convenient device for the expression of exchange relationships and for use in actual exchange transactions. "Its value lies in its purchasing power—its command over all individual goods taken collectively. . . . The general level of prices is the reciprocal of the value of money and in it the latter manifests itself." [3] Consequently, if the government should do anything that would influence the purchasing power—and therefore the value of its money—the effect would be seen in the average prices of commodities. A reduction in purchasing power of money results from a general rise in commodity prices; conversely, the value of money rises when commodity prices in general decline.

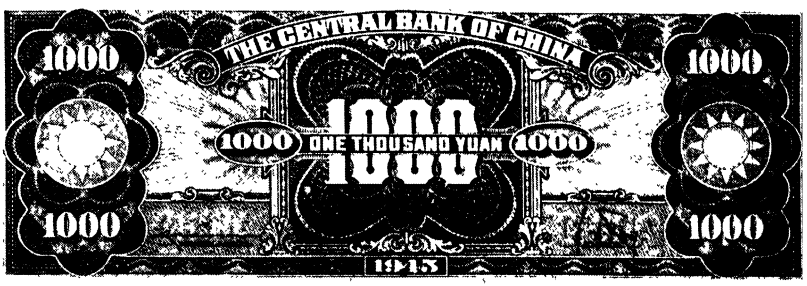
A large issue of paper money, without any valuable reserve or security to support it, may lead to a pronounced decline in the purchasing power of the money of a nation. This occurs particularly when a government decides to raise ready money by turning on the printing presses. The effect of this policy, historically, has been to put into circulation so much paper money that it is overabundant relative to the amounts of merchandise offered for sale. Prices rise, and the monetary unit depreciates in value. As the money declines in purchasing power, merchants tend to discount this depreciation process and raise prices still further. This movement gains momentum as more currency is issued. A graphic illustration of what happens once this price-inflation activity gets started is seen in the

[1] ROOSEVELT, F. D., "Looking Forward," pp. 152–153.
[2] *New York World-Telegram*, Mar. 28, 1934.
[3] STEINER, W. H., "Money and Banking," p. 772, Holt, 1933.

table on page 496 showing the rapid decline of the German mark relative to the American dollar in less than one year, when the German government increased its issue of paper marks.[1]

At the end of 1923, prices in Germany had skyrocketed to fabulously high levels in terms of German paper money. This was a situation in which commodity prices rose largely as a result of government action. The price level ran completely out of bounds, however, and the case illustrates lack of control rather than governmental control of prices.

The Chinese national government went through a similar experience in the period following the Second World War, when limits were removed on



Depreciated Chinese currency (1947).

the issue of paper money by the Central Bank of China. Originally its notes were quoted at 29.5 cts. in American money. During the war, they dropped to a value of 6 cts. Overissue caused inflation which finally rendered them practically worthless.

In the aftermath of these experiences with depreciated currencies, several countries attempted to control the general price level artificially and to "stabilize" prices through the regulation of currency and credit. In the United States, the falling prices during the depression of 1929–1933 turned the attention of the federal government to this problem. An attempt to prevent a further collapse in prices resulted in a series of monetary policies which were introduced in rapid succession. First, an embargo was placed on gold exports, and the gold standard was suspended. Then a policy on the part of federal government of purchasing gold was announced. Accompanying this was a rise in value of the metal. The standard gold dollar was next devalued; *i.e.*, the gold content was reduced. The United States government then announced the establishment of a modified gold

[1] From a letter published by the National City Bank of New York and reprinted in *Nation's Business*, p. 27, February, 1934.

standard for international-trade purposes and set up a $2,000,000,000 equalization fund to be used to buy and sell gold and foreign exchange in order to prevent any further rapid changes in value of the dollar. The bullion content of the dollar may, under the Gold Reserve Act of 1934, be

TABLE 22.—DECLINE IN THE VALUE OF THE GERMAN MARK, 1923

1923	Marks, note circulation	Number of marks equaling one U. S. dollar
Jan. 6	1,336,500,000,000	8,695
Feb. 7	2,253,963,000,000	36,363
Mar. 7	3,871,256,000,000	20,619
Apr. 7	5,624,110,000,000	21,052
May 7	6,723,070,000,000	36,764
June 7	9,309,532,000,000	76,923
July 7	20,241,750,000,000	222,222
Aug. 7	62,326,659,000,000	3,125,000
Aug. 15	116,402,515,000,000	2,777,778
Aug. 23	273,906,373,000,000	4,347,826
Aug. 31	663,200,000,000,000	9,523,809
Sept. 7	1,182,039,000,000,000	33,333,333
Sept. 15	3,183,681,000,000,000	105,263,157
Sept. 22	8,627,730,000,000,000	172,413,793
Sept. 29	28,228,815,000,000,000	204,081,630
Oct. 6	46,933,600,000,000,000	909,090,909
Oct. 15	123,349,786,603,000,000	4,000,000,000
Oct. 22	524,330,557,246,000,000	44,444,444,444
Oct. 31	2,496,822,908,936,000,000	166,666,666,667
Nov. 7	19,153,087,468,804,000,000	2,500,000,000,000
Nov. 15	92,844,720,742,927,000,000	4,000,000,000,000
Nov. 23	223,927,315,083,796,000,000	5,000,000,000,000
Nov. 30	400,267,640,291,750,000,000	6,666,666,666,667

altered if it appears necessary to do so in order to maintain a more stable price level. In explaining the reasons for the devaluation of the dollar, the administration indicated that this move was deemed essential to increase commodity prices and to promote industrial activity. The ultimate purpose of the government, as declared in 1934, was to maintain prices at a constant level.

A sharp distinction should be drawn between the general price level and individual commodity prices. The monetary policies referred to above all

aimed to elevate the general price level.[1] Peculiar circumstances influencing demand or supply of a given commodity may cause its price to rise far above the general level of prices or, on the contrary, to fall sharply. The price level is an average concept and is best expressed in terms of the average purchasing power of money. Individual commodities may exhibit price characteristics at variance with this general level.

Governmental Expenditure. Another important respect in which the government exerts an influence upon commodity prices is in its role as a large-scale buyer. Abnormal conditions, such as war, emphasize the importance of government spending as an influence upon commodity prices. The heavy war needs of the American government during the two world wars, accompanied by outlays of billions of dollars for supplies for allied nations, caused a tremendous increase in prices for these commodities and a considerable sympathetic rise in price of commodities in general.

Acting on the theory that through vast expenditures the government might succeed in "priming the pump" sufficiently to bring about a revival in general industrial operations, the American government embarked on a vast program of expenditures in 1933. In addition to routine costs, the federal government made large extraordinary or emergency outlays, amounting to billions of dollars. Some of this money was for public-works construction, for civil works of various kinds, for conservation projects, for direct relief to the needy, and for credit extension to qualified borrowers. The idea behind this plan was to pay so much money for labor and materials that a great flood of purchasing power would be released and industry would be stimulated. A natural outcome of such increased buying capacity was higher prices. If successful in restoring more prosperous business conditions, such policies may well justify the cost. The dangers lie in the direction of future ability to curtail such vast programs of expenditure, once the goal that is sought has been reached, and in controlling the upper limits of price movements, once the upward swing has begun.

State and Local Government Price Control. Attention has been directed chiefly to federal price-control policies. State and local governments have also actively participated in programs of similar description. Individual commodity prices, particularly petroleum and milk, have been singled out for local regulation and control with reference to price. In Pennsylvania, a law was passed setting up a commission empowered to establish maximum prices for used cars. Fines of from $50 to $200 were

[1] The present volume does not attempt to include an analysis of the theories underlying these policies or a discussion of the pros and cons regarding the effectiveness of such control. The reader who is interested in these aspects of the subject is referred to the bibliography in the appendix.

provided for violations. Several states have sought from time to time to limit agricultural production and to sanction associations seeking to establish such limitations. Constitutional restrictions usually stood in the way of these programs.

State and local governments have also played important roles in expending large sums of money for public-works construction and for relief, in the attempt to restore purchasing power. In this, they supplemented the federal program.

State and municipal markets, warehouses, gas and electric projects, railroads, waterworks, and other commercial and industrial ventures are illustrative of the same "yardstick" concept of price control that the federal government has sought to employ. In some of these cases, however, actual replacement of private by public enterprise was sought rather than models to act as devices for controlling prices in private industries.

The most prominent role played by state and local governments from the standpoint of price control has been in connection with their regulatory policies with reference to rates and prices quoted by public utilities. In this, they have followed more or less the same general technique accepted by the various federal regulatory commissions.

Public-utility Rate Regulation. Neither competitive factors nor monopolistic control is regularly permitted to play the dominant role in the establishment of prices for services rendered by public utilities in this country. Although it is true that certain railroads, gas companies, water-supply and electric-power companies enjoy an almost absolute price monopoly in a few sections, the common practice that has developed has been to subject such companies to the control of regulatory boards of the government. In exchange for franchise rights, granting exclusive privileges for the conduct of business within a given area, these companies have been required to sacrifice a fair amount of the dictatorship over prices that their strategic position would otherwise enable them to wield.

Regulatory Commissions. Direct price controls have been vested in a number of rate-making agencies or commissions of the government. The oldest of these is the Interstate Commerce Commission which has extensive powers to regulate rates of common carriers in interstate trade. The Federal Trade Commission has authority to bring proceedings against those guilty of unfair price practices and business conduct that is in restraint of interstate trade. The Federal Reserve Board may materially influence credit through its control over the rediscount rates and supervision of bank transactions and open-market operations. The Federal Power Commission has authority to control electric-power sites on public lands and to regulate public-utility rates, and the Federal Communications Commission examines the rates of private telephone and telegraph companies for

purposes of bringing about the establishment of equitable charges for service. The Civil Aeronautics Board regulates rates and traffic of commercial air lines.

Local railways, waterworks, gas and power companies, and telephone lines have been subjected to the rate-making powers of various state and municipal public-service commissions. The determination of rates in all cases is therefore primarily prompted by social motives. Hence, a legal concept of what is to be considered a "fair" or "reasonable" rate is necessary. This must be established in such a way that the minimum price to the consumer is obtained without interfering with the flow of revenues essential for operation and maintenance and for an equitable return to the investors in the utility.

But how, in practice, shall this theoretical fair rate be arrived at? Many questions immediately arise:

1. What items of expense are included in operating costs?
2. To what levels shall the wages of workers in the industry be permitted to rise?
3. Are allowances for maintenance and repair excessive? Insufficient?
4. What economies might be made in order to reduce current expenses?
5. What is to be regarded as a fair percentage rate of return upon capital invested?
6. What value is to be placed upon this "invested capital"?
7. What allowances are to be made for increases or decreases in the value of this investment?
8. Are annual returns assumed to remain the same, or will rates be adjusted for cyclical changes in business?
9. Are rates to be established on a flat basis, or will there be a differentiation according to users of the utility?
10. Will the determination of rates be arbitrary, or will the utility be given the opportunity to have a voice in making them?

Many of these questions are extremely difficult to handle satisfactorily. Answering the last question first, it may be said that almost never is the attempt made to establish such public-utility rates in an arbitrary manner. Hearings are usually held at which the utilities are given ample opportunity to present data to the regulatory board in defense of a rate schedule that is in force or for any proposed changes. Private conferences are also called, at which the nature of the business of the utility is discussed in minute detail, and the effect of any proposed rate change is analyzed by both the utility representatives and the board members. Finally, after the rates have been publicly announced, the utility has the right to appeal the justice of such rates in the courts.

In passing upon the various regulatory acts, the courts have held that although the public is to be protected against unfair charges, rates must be fair and not confiscatory. This necessitates prompt adjustments in rates when such items as wages, fuel, and equipment costs rise beyond the

ability of a public-service corporation to control them. However, rate-making bodies tend to move slowly—particularly when upward revisions in rates are being considered. As a result, during periods of rapidly mounting prices, the railroads and public-utility enterprises have frequently been forced to operate at a loss. In some instances, the reverse has sometimes occurred; *i.e.*, the utilities have been allowed to continue charging higher rates long after the general level of prices has declined.

By far the most important questions in rate making are the determination of the valuation to be placed upon the capital investment and the decision concerning the rate of return to be allowed on this investment. In the United States, rates ranging from 4 to 10 per cent have been accepted by various commissions as "adequate" or "fair" returns upon invested capital. The rate of 6 per cent is probably most prevalent. The Transportation Act of 1920, relating to the rate of return that the Interstate Commerce Commission should use as a guide in the fixing of interstate railroad rates, set the rate of 5½ per cent with an additional one-half of 1 per cent allowance. At best, no matter what rate is finally selected, it remains an arbitrary figure that is regarded, in the judgment of a group of men, as fair.

The determination of the valuation of the investment in a utility, however, is less simple. Years of dispute sometimes intervene before a rate board and a utility company can come to an agreement on this subject and then it is usually settled by compromise. The cause of this difficulty rests in the fact that there are several ways in which such investments might be evaluated. One method is to add up the market values of its outstanding securities. This is obviously erroneous for rate-determination purposes, however, inasmuch as the market value is largely influenced by a capitalization of present income. Any change in the rate structure will naturally affect this income. Hence the latter cannot be used as a basis for the determination of a future rate structure. Evaluation of physical properties is then the only other alternative. But there are several ways of making such evaluations. The original cost of acquisition and construction of the utility properties might be used, or the present cost of reproduction of similar properties could be determined, or either base might be used, and proper allowances made for depreciation, obsolescence, deterioration, or value increases. It is seldom that price levels are such that these various methods of evaluations yield substantially the same results. They usually differ by millions of dollars. Naturally, the utility clings with tenacity to the higher valuation, and the state stands firm in its demand that the lower valuation be used as a base.

But even after the valuation has finally been agreed upon and a fair percentage return has been declared, the problem of setting up the actual rate structure is fraught with difficulty.

Suppose that a power company with properties evaluated at $85,500,000 and with annual operating expenses of $660,000 were permitted to receive 6.9 per cent on its investment. Total annual charges and operating expenses that would have to be earned would then be approximately $6,560,000. The maximum output is estimated at 5,000,000,000 kilowatt-hours per year. If it is assumed that the company could operate at capacity, it would be able to sell power at as low as 1.3 mills per kilowatt-hour.

However, it must be recognized that the company will seldom be called upon to render capacity service. There are peak loads when full-power requirements will be called for and off periods when little power will be needed. Moreover there are three general classes of consumers: (1) domestic consumers, (2) commercial consumers, (3) industrial power consumers. In some respects, rural consumers may be grouped in a fourth class and municipalities as a fifth. The cost of transmission varies directly with the distance from the generating plants. A zoning system of differential rates might have to be built up. The final rate structure, therefore, takes into consideration

1. Classes of consumers.
2. Geographical location of consumers.
3. Time interval during which large demands for power are greatest.
4. Minimum charges for a minimum amount of current.
5. Low "promotional rates" for increased use.

That part of the rate structure applying to urban domestic use in a specified borough or county might then appear as follows:

MONTHLY RATE SCHEDULE
SERVICE CLASSIFICATION 1

(Residential only)

Minimum charge—$1.00 per meter per month.

Energy charge:
First 10 kw.-hours (or less) per month—$1.00 per meter per month.
Next 5 kw.-hours per meter per month—6 cts. per kilowatt-hour.
All over 15 kw.-hours per meter per month—5 cts. per kilowatt-hour.

Addition or deduction according to changes in cost of coal as prescribed by the Public Service Commission.

Railroad rates and telephone rates present the same complications in their determination in view of differences with respect to distance, time, irregularity of use of service, and variations in classes of customers.

The Emergency Railroad Transportation Act of 1933 abandoned all efforts to fix rates on the basis of "original cost" or "reproduction cost" or a combination of both. The law established a flexible and somewhat in-

definite basis for the determination of rates. In fixing "just and reasonable" rates, the Interstate Commerce Commission was instructed to consider such factors as the needs of the public for adequate service, the effect of rates on the volume of traffic, and the needs of the railroads for sufficient revenue to operate without loss. During the depression years and in the war period, a number of emergency rate adjustments were ordered, but no over-all rate revisions were made for more than a decade. In 1947, the Interstate Commerce Commission, recognizing the need for additional revenue to meet higher costs, permitted increases in both freight and passenger rates in interstate commerce. State commissions followed this by increasing rates for intrastate traffic.

Price Stabilization. With the movement toward an increase in size of the business unit, coupled with a noticeable social tendency in the direction of economic regimentation, there appear to be grounds for assuming that governmental regulation and control of prices will in the future advance rather than decline, despite the many difficulties or problems that such policies involve. Competition is more and more being hemmed about by private and social restrictive measures. The various demands for "planning," "orderly marketing," and "stabilization" carry with them a tacit acceptance of regulation, restriction, and control. The desirability of perfect coordination and stabilization of economic processes is unquestioned. The methods to be pursued in achieving this end, the effectiveness of such policies, and the abilities and sound judgment of the coordinators or planners are the subjects that are open to criticism. The extreme complexity of the price phenomenon—involving as it does continual adjustments to changes in climatic conditions, technological methods, styles, consumer needs, political policies, and hundreds of other factors—defies all attempts to set up a "stable equilibrium."

Questions and Problems

1. "There never has been in this country a complete absence of government control." Is this statement correct? How do you reconcile it with such basic philosophies as *laissez faire* or "rugged individualism"? Show that every attempt at regulation was resisted, sometimes as unconstitutional and at others as un-American; how was this reflected in the attitude of the courts?

2. What federal regulatory commissions exercise control, directly or indirectly over prices? What state and local commissions play a similar role?

3. In what ways do government enterprises exert a regulatory effect upon prices and rates in private industry?

4. What various methods for arriving at a fair value of the properties of railroads and public utilities are in use? What problems of valuation are involved?

5. After a valuation has finally been agreed upon, what other difficulties may arise? What elements enter into the determination of rate structures?

6. Is there any noticeable fluctuation from day to day in electric power rates? Are they the same for all purchasers? How are electric power rates established? Explain why such rates generally are not uniform for all purchasers, and give the basis for this discrimination.

7. Under the Gold Reserve Act of 1934 the bullion content of the dollar may be altered. What influence would a further devaluation of the dollar be expected to exert upon the general price levels in the United States? Why?

8. Government spending can have an important influence upon commodity prices. Illustrate with examples from war periods, other emergencies, "normal" times.

9. Compare currency inflation following the two world wars. What were the effects upon domestic prices? Prices of imported goods? Prices of exported goods?

10. Government regulation of prices was discontinued shortly after the Second World War to permit "the law of supply and demand" to function as a means of increasing production. Explain the sharp rise in price that followed upon the end of government wartime controls. What might have been the result if OPA had been continued? What steps were taken by the government, by industry, by consumers, by labor organizations to fight the inflationary spiral after the war?

Part VII

FINANCING METHODS

CHAPTER XXIII

LONG-TERM FINANCING

Long-term Requirements. After a concern has come into existence, many circumstances arise that necessitate additional capital of a permanent character. A program calls for the extension, addition, and improvement to existing plants; the purchase of land; the construction of buildings; or the installation of new apparatus. Growing sales require additional capital to take care of larger inventory and credit needs. An ambitious consolidation plan may necessitate a capital fund of sufficient size to obtain control of a subsidiary business. In these instances, unless the original capital is large enough to make the transactions possible, new financing is required. Obviously, money so invested is not quickly convertible into cash.

Long-term funds are often needed for purposes other than the acquisition of tangible properties used in production. A research program, requiring several years of study and scientific investigation of industrial processes, involves expenditures that must be financed on a long-term basis. For example, the General Electric Company has spent millions of dollars in developing research activities related to atomic power in fields of nuclear physics. Intensive studies are also conducted by this company in the field of electronics, including such developments as radar, new methods of communication, television, and broadcasting. The perfection of industrial processes and the ultimate introduction of new products justify such basic research but do not usually result in an immediate return upon the capital investments involved.

Similarly, an extensive advertising campaign may be of such proportions that current revenues are insufficient to cover the costs—thus necessitating relatively long-term credit accommodations. A good illustration of this latter situation was seen in the case of P. Lorillard Company when it introduced its famous "Old Gold" cigarettes and pushed them by one of the most ambitious advertising campaigns ever seen up to that time. In order to finance the campaign, its was necessary to suspend dividend payments and to borrow 15 million dollars. The rapid rise in popularity of this brand eventually brought in revenues more than sufficient to retire the loan.

The prime characteristic of long-term financing operations is that the money raised is utilized to provide additional resources of comparatively slow liquidity. There is a tendency to maintain these funds as permanent investments in a business or to arrange for their retirement at some distant future date—depending upon calculated revenue-yielding qualities. At any rate, they are advanced for fairly long periods of time and can be liquidated only out of earnings accumulated over a number of years.

Long-term funds are ordinarily provided either through an increase in "owned" capital or by means of "borrowed" capital. The former is obtained in the case of individual establishments or partnerships by additional investments on the part of the owners themselves or through the admission of new partners who have capital to invest. The following newspaper advertisements illustrate how such capital is frequently solicited:

CAPITAL WANTED

WORKING PARTNER, $5,000–$10,000, in old established electrical business, capital needed for expansion; executive and selling ability essential, wonderful opportunity; references exchanged. Z 2249 Times Annex.

SMALL capital establishes cash business. No canvassing, no selling. B 137 Times.

CAPITAL TO INVEST

CAPITAL for development worthy enterprises; prompt consideration; confidential. D 365 Herald Tribune. Downtown.

NEED MONEY? Have clients, who will grant loans; stocks, bonds, 6%. Equity Exchange, 345 Madison av. VAnderbilt-3-8548.

WILL endeavor placing proposition of merit on underwriting basis. X 84 Herald Tribune.

INDUSTRIALIZED AGRICULTURE PAYS

A large wheat grower, who has successfully developed and applied industrial mass production methods to this staple, desires to take advantage of unprecedented conditions now to increase efficiencies and extend these practices to a wider range of diversified agricultural products.

His experience in low cost production—one-fourth that of the country's average—demonstrates unlimited opportunities for industrialized agriculture.

He invites several individuals to become financially interested with him in this enterprise. He welcomes investigation and will gladly present references. B 98 Times.

In a corporation new invested capital is obtained by means of the sale of an issue of additional shares of capital stock. The varieties of such securities and their basic characteristics were discussed in an earlier chapter.

Borrowed capital for long-term purposes is usually obtained from private individuals who have surplus funds to invest and from institutional lenders that specialize in extending long-term loans to reliable borrowers. The loan is evidenced by a *bond*—an instrument that represents the borrower's obligation to pay a definite principal sum and that calls for periodic payments of interest at a specified rate. Rights and powers of the lender in

the event of default of interest or principal payments are clearly set forth.

The decision to borrow long-term funds rather than rely upon an expansion of invested capital is based upon a variety of factors. The proprietor or stockholders may not be able to increase their own investments and probably do not care to share the management or voting privileges with new owners. Or perhaps the market for risk or venture capital is narrow at the time, whereas loan funds are more readily available. Another important consideration is the fact that it is often cheaper to borrow. Money obtained at 3 per cent and invested so as to yield 7 per cent offers the owners of the business a 4 per cent advantage in the employment of these funds. The use of borrowed money bearing a fixed rate of interest in such manner as to increase the return upon the investments of the residual owners is known in finance as "trading on the equity." This policy is not without risk. It renders the borrowing firm excessively sensitive to the shocks of adversity by subjecting it to legal claims for interest and principal sums which take priority over the rights of all owners. Errors in judgment or unpredictable cyclical dips are likely to cause sudden losses that eventuate in "banker control" or perhaps complete sacrifice of the business to its creditors. It is noteworthy that many corporations which survived the depression of the 1930's later took steps to reduce or entirely eliminate their funded debt.

Classes of Bonds. There are two general types of bonds: those secured by assets pledged for the protection of the lender and those which have no specific tangible backing. In each class there are several different varieties.

Real Estate Mortgages. The oldest and perhaps best known of these securities is the real estate "bond and mortgage." This is an instrument which evidences a loan protected by a *mortgage* or lien on a specific piece of real estate. In the event of failure on the part of the borrower to pay interest obligations on the loan or to redeem the principal sum at maturity, the lender or mortgagee has the right to foreclose the mortgage. This involves the sale of the property at public auction and the distribution of the proceeds, after all expenses of court action and sale, to satisfy the claims of the mortgagee.

Millions of small property holdings are financed in this way. Residences, farms, and small mercantile and manufacturing establishments are mortgaged, *i.e.*, hypothecated by the owners for the protection of the lenders. The mortgage serves as backing or security for the loan. The bond expresses the promise to pay and represents the direct obligation of the borrower.

Private individuals, many of them prosperous farmers, as well as urban investors, buy mortgages directly from the mortgagor or through mortgage

companies. Landowners who sell their properties sometimes acquire mortgage interests by taking back a mortgage from the buyer as part of the purchase price. Important sources of this credit are the insurance companies, particularly the large life insurance companies which have invested a considerable part of their funds in mortgages. Savings banks, building and loan associations, land banks, mortgage companies, and commercial banks also invest heavily in mortgage paper.

Ordinarily, conservative lenders limit their loans of this description to little more than half the estimated value of the mortgaged property. This is known as a "first mortgage" and has first, or prior, claim against the real estate for the satisfaction of the debt.[1]

Often, however, a firm, after having mortgaged its real estate for 50 per cent of its value and still having a large equity in the property, requires additional capital. It obtains a further loan on its remaining equity by giving a second mortgage or perhaps even a third mortgage. Such mortgages are subject to the prior claims of the first mortgage and are therefore known as *junior liens*.

Mortgage loans vary from periods of 1 to 40 years or more. Loans that run beyond 5 years usually require *amortization* to allow for depreciation and other reductions in value. This means that in addition to interest payments, the mortgagor must reduce the loan by making periodic payments of the principal. Such payments are so arranged that a substantial part of the principal has been retired by the time the maturity date arrives.

Real Estate Mortgage Bonds. The financing of large properties by the foregoing method is dependent upon the willingness of a single investor to lend substantial sums of money to one interest. Within recent years, a few wealthy individuals and several life insurance companies have arranged loans of this type. The Empire State Building and Radio City in New York and the Field Office Building in Chicago are notable instances in which it was possible to negotiate individual loans running into millions.

However, in order to facilitate the financing of costly real estate properties, it has been found expedient to separate the bond from the mortgage. The mortgage is deposited with a trust company which is appointed to hold it for the protection and benefit of the lenders. Bonds are then issued in relatively small denominations of $1,000 or even $500 and $100. Occasionally bonds of higher denomination—$10,000 and $100,000—are issued.

Real estate mortgage bonds, like the old-line bond and mortgage, are secured by specific real property and depend largely for the value of their

[1] However, under the Federal Housing Authority the federal government insured private, amortized first-mortgage loans ranging up to 70 and 90 per cent of the appraised value of newly constructed properties.

collateral security upon the maintenance of the earning power of this property. In the event of default in payment of principal or interest, the trustee holding the mortgage takes the necessary steps in foreclosing or reorganizing the property on behalf of the bondholders.

Like most corporate bonds, these securities are issued under a deed of trust or an "indenture" between the issuing company and a trustee, whose important function it is to protect the interests of the bondholders. This indenture is a formal agreement, specifying the amount and conditions of the bond issue, the security that is pledged, the duties of the trustee, and the rights and privileges of the bondholders. The bonds are then issued as a series of obligations, each falling under and subject to the terms of the deed of trust.

General Mortgage Bonds. Many so-called "mortgage bonds" or "first mortgage bonds" differ from the real estate mortgage bond with reference to underlying security. Instead of acting as direct first liens upon specific properties, they may be "divisional" or "general-lien" bonds, secured either by certain divisions or parts of corporate properties or by the general properties of a company after all senior liens have been satisfied. "General" and "consolidated mortgage bonds" are usually secured by blanket mortgages which rank after all other prior liens.

Open- and Closed-mortgage Bonds. Inasmuch as the mortgage that serves as security for a corporate bond issue is held in trust and separated from the individual bonds, there is a possibility that more bonds may be issued than the value of the property would justify. This is particularly true in the case of so-called "open mortgages," which permit a further issue of bonds on the basis of the same security already pledged for the protection of outstanding issues. Purchasers of these subsequent issues are on the same footing as those who acquired an earlier issue. For the protection of the bondholders, specific upper limits to the total amount of issue are stated.

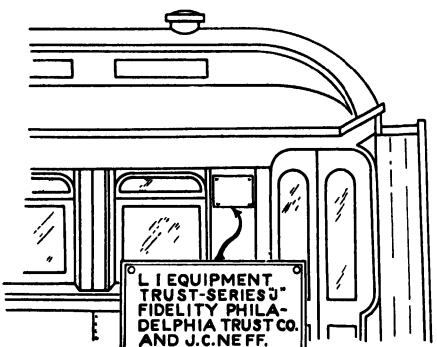
A closed mortgage is one in which all the bonds that are to be sold have been issued and are outstanding. No further liens of the same rank may be placed upon the pledged property. Any subsequent issues must therefore occupy a subordinate position.

Open bond issues have always been popular among the railroads and public utilities—the majority of the industrial bonds being of the closed type. In more recent years, however, there was a decided swing in the direction of open bond issues among corporations in all classes of business.

Certain mortgage-bond issues contain what is known as the "after acquired property clause." This clause has the effect of pledging as collateral security for the benefit of the bondholders, not only certain existing properties, but also any or all property subsequently acquired by the

issuing corporation. The obvious result of this arrangement is that the company is restricted in its borrowing operations, particularly if the bonds containing this clause are issued under a closed-mortgage agreement. For this reason, and because of the many legal subterfuges that have been devised to circumvent the effect of this clause, it has generally been omitted in bond issues.

Collateral Trust Bonds. A firm owning a considerable number of stocks and bonds that it intends to hold permanently may deposit these securities under an indenture and issue bonds against this collateral. These are known as *collateral trust bonds.* For example, a parent company owns shares in various subsidiaries and desires to maintain continued ownership in order to retain control. Yet large sums of invested capital are tied up in these assets In order to raise additional funds therefore, without disposing of these securities, bonds are floated, with these investments used as collateral. In event of default, the stocks serving as collateral are then sold for the benefit of the bondholders.



This steel plaque shows the pledge of car of the Long Island Railroad Co. under an equipment trust bond.

Collateral trust bonds are also issued when the mortgage bonds or other loans floated by subsidiary concerns do not enjoy a ready market. In such cases, the parent company purchases these securities and offers its own obligations (with these investments as collateral) to the public. Sometimes collateral trust bonds are floated for purposes of indirectly financing subsidiaries that, on account of restrictive clauses in their outstanding mortgage bonds or because of local or state laws, are unable properly to finance themselves.

Equipment Bonds. Equipment trust bonds are used mainly in railroad finance, although more recently the issue of securities analogous to "car trust certificates" or other railway equipment bonds has been extended to other corporate enterprises having a large amount of capital tied up in salable machinery and equipment. These bonds are secured by tangible property such as specific rolling stock or machinery. Title to this movable property is deeded in trust, and bonds are usually issued under an arrangement whereby they mature rapidly, are paid off serially, or are protected by a sinking fund which is built up so as to allow for the diminishing or depreciating value of the collateral. The advantage of such bonds to the

issuing company is that the funds necessary to purchase the equipment are made available and payment by the company is arranged periodically in the form of a relatively long-term installment plan.

ADVERTISEMENT OF AN EQUIPMENT TRUST BOND ISSUE WITH BONDS TO BE PAID OFF SERIALLY FROM 1948 THROUGH 1962

NEW ISSUE

$11,025,000

(Part of proposed issue of $32,910,000)

PENNSYLVANIA RAILROAD
EQUIPMENT TRUST SERIES S

2⅛% Equipment Trust Certificates

To be dated July 1, 1947 and to mature $735,000 each July 1 from 1948 to 1962

Issued under the Philadelphia Plan

Maturities and Yields

July 1, 1948	1.20%	July 1, 1953	1.85%	July 1, 1958	2.25%
July 1, 1949	1.35	July 1, 1954	1.95	July 1, 1959	2.30
July 1, 1950	1.50	July 1, 1955	2.05	July 1, 1960	2.35
July 1, 1951	1.65	July 1, 1956	2.15	July 1, 1961	2.40
July 1, 1952	1.75	July 1, 1957	2.20	July 1, 1962	2.45

The unsold portion of these certificates are offered subject to prior sale, when, as and if issued and received by us, subject to approval of the Interstate Commerce Commission.

SALOMON BROS. & HUTZLER

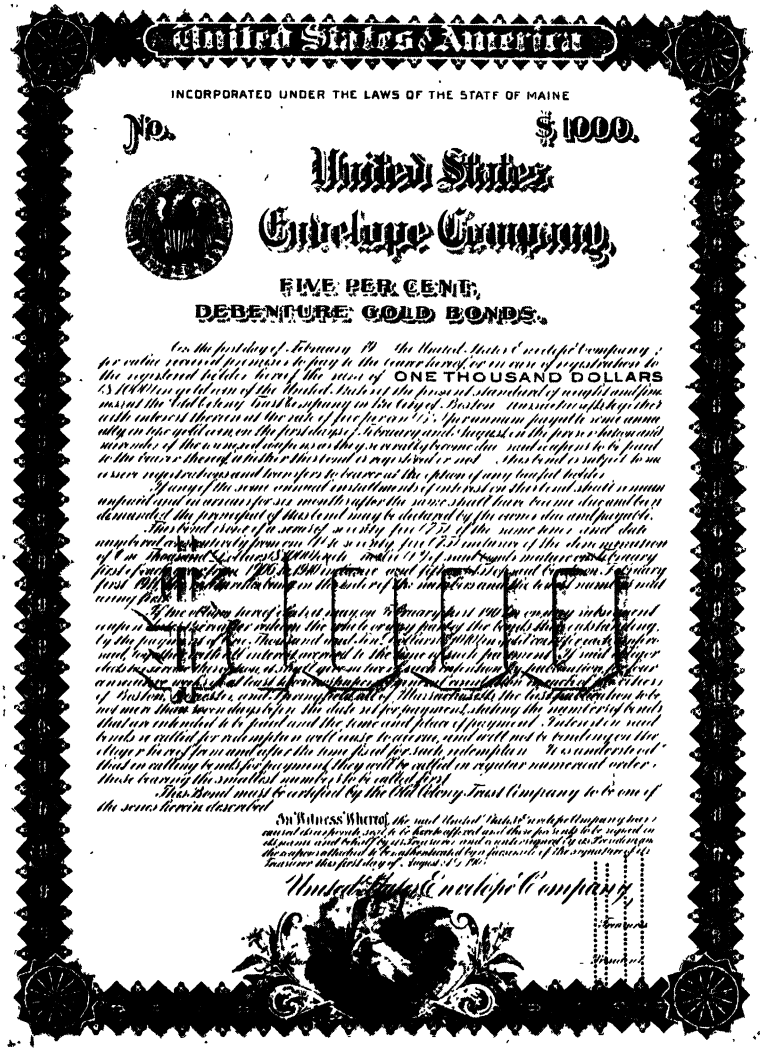
DREXEL & CO. **HARRIS, HALL & COMPANY (Incorporated)** **UNION SECURITIES CORPORATION**

WHITE, WELD & CO. **STROUD & COMPANY Incorporated**

Debenture Bonds. Sometimes a corporation borrows without pledging any tangible security. In other words, its obligations are secured by its general credit. Bonds issued under such conditions—backed by nothing more than the credit and financial standing of the company—are called debenture bonds. They ordinarily hold priority over all stock issues of the concern. All interest obligations must be paid before any dividends can be declared. In the event of default, such bonds constitute claims upon the general assets of the corporation after all specific prior liens have been satisfied. The instrument pictured on page 514 is an obligation of this type.

Income Bonds. Another variety of corporate bond is the income bond. This is usually issued during reorganizations to holders of more specific or secured liens. Income bonds involve no definite contract between the holders and issuers or the trustee to ensure the payment of the interest, although arrangements are usually made to pay the principal at a definite future time.

The interest is distributed only when earned, and failure to pay interest does not constitute default unless the bondholders can prove that the earn-


United States of America

INCORPORATED UNDER THE LAWS OF THE STATE OF MAINE

No. $1000.

United States Envelope Company,

FIVE PER CENT. DEBENTURE GOLD BONDS.

ONE THOUSAND DOLLARS

Debenture bond.

ings were sufficient to meet interest requirements. Obviously, this type of bond, when issued, is not very attractive to the average investor.

Serial Bonds and Sinking-fund Issues. When bonds of a single issue but made up of several groups with varying dates of maturity are offered, they are known as serial bonds. In such cases, the entire issue is divided

into a number of groups, each class maturing at a different period. The periods between maturities vary from a few months to several years. The purpose of issuing serial bonds is to provide for the gradual retirement of the debt. Usually the entire issue bears the same rate of interest, but prices vary with the date of maturity. Provision is made for retirement in definite amounts, by stating the date of maturity of each group in advance. These are to be distinguished from *callable bonds*. The latter contain provisions permitting the issuer to retire them before maturity. When the entire issue is not redeemed, the bonds that are called are selected by lot if sufficient numbers of bonds are not tendered by holders to the corporation or the bonds are not otherwise acquired.

At times, corporations, when issuing bonds, agree to set aside annually a definite sum which will provide a fund for the payment of the bonds at maturity. These bonds are known as *sinking-fund* bonds. The bondholders are given assurance, in such cases, of a systematic provision for repayment of the loan at its maturity. The sinking-fund payments are obligatory, and failure to lay aside the stipulated amounts is equivalent to a default in interest payments. Funds so accumulated are usually invested in the bonds either by purchasing them in the open market or by calling in part of the issue.

Convertible Bonds. In order to add to the attractiveness of a bond issue, investors are sometimes offered the option for a stated period, to exchange their bonds at a stipulated rate for some other class of security—usually common stock. The privilege of conversion becomes valuable to the bondholder if the market price of the stock should later rise. Thus, if the company prospers, the bondholder is given an opportunity to share in its growth.

Financial Plan. Each class of stocks and bonds has been developed to suit particular requirements; and for any given company, existing circumstances will force a narrowing down of the choice of securities to be issued. Obviously, a new concern or one that, because of elements of risk and fluctuating income, has encountered financial reverses in the past would have difficulty in floating an issue of debenture bonds. An agricultural corporation, whose fixed assets consist largely of land and farm equipment, would find more use for real estate mortgage bonds than for a collateral trust issue. A holding company whose only assets consist of the securities of its subsidiaries would, on the contrary, require the latter rather than the former type of credit instrument.

Occasionally, well-established corporations, with fairly steady earnings and a variety of tangible and intangible assets, are in a position to issue almost any class of security. This necessitates a careful analysis of the investment market and of the possible effect of the new financing upon

the equities in the business. It is well, in such cases, to develop a logical plan of financial expansion at the outset and to base later programs of financing upon this plan.

The essentials to be kept in mind have been summarized as follows:

The successful financial plan is not usually one that is highly involved and full of unusual and supposedly ingenious little expedients. It is more likely to be simple and to look beyond the needs of the moment. The chief financial virtue is foresight. Hit-or-miss financing is almost certain to involve either waste or danger.

One of the noteworthy advantages of most reorganizations is the greater simplicity which is secured through refunding small and isolated issues into a few large issues with well-defined claims.

It is usually best, also, to work along conventional lines. Originality is only too apt to arouse distrust. There is almost an established routine in organizing public-utility corporations, which is about as follows: First mortgage 5 per cent bonds are issued up to 75 to 80 per cent of the cost of construction or, if the company is a consolidation, of the value of the combined fixed assets. These bonds are sold to bankers at prices from 95 to 100. Preferred shares are then issued for the balance of the tangible assets plus a reasonable amount of good-will. It is expected that the preferred shares will be able to keep up their dividends. They are usually taken by bankers at about 95. Common stock is then issued to such an amount that the remaining earnings, after the period of development is over, will be sufficient to pay at least 4 or 5 per cent. This would be considered a conservative method of capitalization.

Without delving too deeply into the intricacies of the problems of corporation finance, attention should be called to the fact that the proper selection of securities depends upon a series of important conditions, which include the following:

1. Composition of corporate assets, *i.e.*, whether tangible or intangible, and the proportion of fixed to current.
2. Average "assured" income and estimated additional or anticipated earnings.
3. Existing fixed charges against income and calculated fixed charges caused by contemplated issues.
4. Majority *vs.* minority interests with respect to voting control and the influence of a new security issue upon voting rights.
5. Conditions in the financial markets and changing attitudes of investors toward certain classes of securities.

The management of a business enterprise should fashion its financing program with due recognition of the limits imposed by the above-mentioned factors. Failure to do so has often resulted in unsound financial arrangements, with subsequent difficulties and ultimate ruin.

Procedure in the Marketing of Securities. In disposing of new security issues, a corporation might arrange to offer them to existing shareholders or to its employees or to sell them to the outside public. In the former case, distribution is usually direct; *i.e.*, the corporation sells the shares

directly by subscription. In the latter situation, the company may decide either to market its own securities by means of advertising, circularizing, and personal solicitation or to sell them indirectly through the agency of banking or brokerage houses.

Direct Sales. In some states, the privilege of buying new issues of stocks bearing voting rights must first be offered to the existing stockholders. When the stock has a par value, the price to the stockholders usually must be not less than the par value. Often the par value is far below the current market price; and if it is offered at par, the privilege of buying the stock is a valuable one. Such privileges are known as "rights" and are traded on the security exchanges. The entire issue of new stock or bonds is sometimes allocated to existing stockholders in proportion to their holdings or is offered at attractive discounts to employees of the firm.

For example, in 1946, the American Telephone and Telegraph Company announced an issue of 15-year 2¾ per cent convertible debentures. These securities were offered pro rata by the company to the holders of its capital stock for subscription in the ratio of $100 principal amount of debentures for each six shares held. When issued, the market price of the bonds was $112, making the stockholders' privilege of buying one bond worth approximately $12 (*i.e.*, the value of six rights). Simultaneously, the company announced its plans to offer employees the right to purchase not more than 50 shares each of the common stock at a price of $150 per share or 20 points below the average market price, whichever was lower.

When market conditions are so favorable that a concern is able to issue securities at par or above and still offer valuable "rights" to its stockholders or employees, subscription lists are quickly obtained. Selling is thus made comparatively easy and inexpensive.

When a broader market is sought and stocks or bonds must be sold to the general investing public, the problem becomes more difficult. A well-established firm may, with a large measure of success, advertise and sell its stocks and bonds to certain classes of investors. Newspaper and magazine advertising is launched; a prospectus is prepared and forwarded to names on selected mailing lists; and salesmen are sent to all possible "leads." It frequently happens, however, that good businessmen are poor stock salesmen. In that event, it is advisable to hire professional stock salesmen, men with experience, who know how to obtain and follow up leads. Extreme care must be taken to select men who will properly represent the firm and who will not impair its standing or reputation.

Security Dealers. This is but a step away from the procedure of marketing the securities through bankers, brokers, and security houses who specialize in this work. When the issue is of sufficient size, *i.e.*, a quarter of a million dollars or more, the greater ease and simplicity of disposing of

it through these financial houses cause the majority of concerns to adopt this method. If, however, the issue is a small one, the difficulty of getting a reputable house to handle it often makes a more direct selling arrangement necessary.

Investment bankers act as middlemen between corporations desiring to raise funds and the investors who purchase the securities. They are commonly divided into three classes, *viz.*, wholesale houses such as Kuhn, Loeb & Company, with enormous financial resources, which undertake the preparation and issue of large blocks of securities and distribute them to a network of "retail houses" with which they have contacts; large retailers, like Halsey, Stuart & Company, who both originate issues and distribute securities to investors and smaller banking and brokerage houses; and retail specialists or dealers who originate small issues but whose business is primarily to sell securities obtained from the larger houses.

Like the promoter, the investment banker performs a threefold function, *viz.*, investigation, underwriting, and selling. Investigation involves a careful study of the security issue and of the issuer. A thorough credit investigation of the company is conducted. This is sometimes supplemented by an engineering survey of physical properties and of construction plans of projected improvements, a complete audit of the company's books, and consultation with attorneys with respect to the validity or other legal phases of the proposed issue.

The function of underwriting is of the nature of a guarantee or insurance of the sale of an issue. Because of the risk and responsibility and (in the case of a large issue) the resources and distributive facilities necessary to handle the sale of a block of securities satisfactorily, selling or "underwriting" syndicates are usually formed. Banking and security houses are members of these syndicates, which are temporary joint ventures formed to underwrite or guarantee the sale of a given issue of stocks or bonds. The offering of Northern States Power Company first-mortgage bonds, illustrated on page 519, was underwritten by a syndicate of 12 firms, each of which agreed to purchase principal amounts ranging from $400,000 to as much as $2,275,000 of the total issue. Usually only large issues of stocks or bonds are underwritten, as these syndicates do not care to bother with making an investigation of the corporation's standing and business unless the issue is at least $250,000.

The final step of the investment banker is the sale or distribution of the securities. As described above, this function may be tied in closely with that of underwriting—although not necessarily so.[1] For large issues,

[1] That is, arrangements may be made to distribute an issue without any underwriting agreements or commitments to sell specified allotments. Especially is this true in the handling of promotional issues.

$19,000,000

NORTHERN STATES POWER COMPANY
(a Wisconsin corporation)

2⅝% First Mortgage Bonds, Series due April 1, 1977

Dated April 1, 1947 Due April 1, 1977

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION.

Northern States Power Company has registered the securities by filing certain information with the Commission. The Commission has not passed on the merits of any securities registered with it.

IT IS A CRIMINAL OFFENSE TO REPRESENT THAT THE COMMISSION HAS APPROVED THESE SECURITIES OR HAS MADE ANY FINDINGS THAT THE STATEMENTS IN THIS PROSPECTUS OR IN THE REGISTRATION STATEMENT ARE CORRECT.

	Price to Public *	Underwriting Discounts or Commissions †	Proceeds to Company *‡
Total	$19,237,500	$108,091	$19,129,409
Per Unit	101.25%	0.5689%	100.6811%

* Plus interest accrued from April 1, 1947 to date of delivery and payment.
† Reference is made to the caption "Underwriting" subcaption "Purchase Contract" herein for a statement regarding the existence of indemnity agreements between the Company and the Underwriters.
‡ Without allowance for expenses payable by the Company estimated at $135,000.

The names of the several Underwriters are:

KIDDER, PEABODY & CO. **WHITE, WELD & CO.**

EQUITABLE SECURITIES CORPORATION **SALOMON BROS. & HUTZLER**

CENTRAL REPUBLIC COMPANY (Incorporated) **DREXEL & CO.** **SHIELDS & COMPANY**

PAINE, WEBBER, JACKSON & CURTIS **A. C. ALLYN & COMPANY Incorporated**

LAURENCE M. MARKS & CO. **STROUD & COMPANY INCORPORATED**

FOLGER, NOLAN INCORPORATED

TO FACILITATE THE OFFERING, IT IS INTENDED TO STABILIZE THE PRICE OF THE SECURITIES TO WHICH THIS PROSPECTUS RELATES. THIS STATEMENT IS NOT AN ASSURANCE THAT THE PRICE OF THE ABOVE SECURITIES WILL BE STABILIZED OR THAT THE STABILIZING, IF COMMENCED, MAY NOT BE DISCONTINUED AT ANY TIME. IN THIS CONNECTION SEE CAPTION "UNDERWRITING" SUBCAPTION "TERMS OF OFFERING."

The date of issue of this Prospectus is April 23, 1947.

special selling groups are organized, but the distribution of smaller blocks of securities is usually effected through the agency of retail dealers and bond houses. These in turn send out large numbers of salesmen to interest clients in the securities put up for sale.

Under the Securities Act of 1933 (as amended), investment bankers must give more attention to the work of investigating and analyzing the issues that they handle. Furthermore, in connection with their advertising and circularizing, they must conform to the legal requirements relating to the preparation of a prospectus.[1] The effect of the law has been to increase the civil liability and personal responsibility of directors, bankers, brokers, accountants, engineers, appraisers, underwriters, and salesmen who have a hand in the issuance and sale of new securities.[2]

Term Loans. A recent trend in corporate financing is seen in the expanding use of *term loans*. Companies in need of relatively long-term credit, yet undesirous of adding to their permanent funded debt, have succeeded in negotiating capital loans running usually from one to five years and, in some instances, for considerably longer periods. This is a type of *intermediate credit*, a characteristic feature of which is that provision is made for the systematic amortization of the principal throughout the life of the loan. The term loan is generally used for plant improvement or for the purchase of machinery and equipment. Such loans are also frequently employed to finance the carrying of inventories or otherwise to supplement working capital over an extended time period.

Term loans are a well-established and accepted type of credit for small as well as large business houses. However, the requirements of collateral security, interest charges, provisions for amortization, and the length of time that credit is extended depend upon the size and type of business conducted by the applicant. The smaller loans (for amounts less than $25,000) are typically secured by real estate mortgages or by liens and chattel mortgages against appliances and equipment. Most of the larger loans are unsecured, the lender relying mainly upon the reputation, financial position, and earnings capacity of the borrower. For this reason, the latter loans have been confined to established concerns with high credit ratings, engaged in stable and diversified lines of business. A term loan agreement sets forth in detail the arrangements between borrower and lender, including, usually, special requirements for the maintenance of minimum cash balances, restrictions against incurring additional indebtedness, and other limiting provisions.

[1] See Chap. III, pp. 55*ff*.

[2] Under the Banking Act of 1933, member banks of deposit were prohibited from underwriting securities and from becoming affiliated with any organization engaged primarily in security distribution.

The majority of term loans are of the small variety and are handled by local banks for 5-year terms or less. The larger loans are made by leading commercial banks or by groups of participating banks, while insurance companies are inclined to take up longer maturities of from 10 to 20 years.

An example of this latter type of borrowing is found in the 2¾ per cent promissory note issue for $5,000,000 arranged by Paramount Pictures, Inc. in 1945 and held by a group of New York banks. According to the loan agreement, $1,000,000 of the principal sum was due serially each July 1, from 1946 to 1951 inclusive. It was provided that net current assets must never be allowed to fall below $15,000,000 during the life of the loan. Restrictions pertaining to dividend payments were also imposed. Another illustration is found in the $200,000,000 loan arrangement completed by the General Electric Company in 1947. Of this sum, $150,000,000 were borrowed on 20-year promissory notes from 14 investors consisting of 11 insurance companies and three trustees. The balance was borrowed from banks on a straight 5-year loan agreement. Provisions were made for regular amortization of these loans and for prepayment of the principal at the option of the borrowing firm. The money was raised by the General Electric Company for use in plant expansion, reconversion, and modernization of factories and machinery.

A further refinement in this type of loan is the so-called "revolving credit plan." The borrower negotiates for a specified maximum amount of credit during a given period but need not draw on the full limit unless he requires it. Interest is charged for the loan fund actually employed, and a nominal commitment fee is imposed for any unused portion. As notes mature, they can be replaced by new notes falling within the agreed-upon life of the loan. The Dixie Cup Company loan, arranged in 1947, illustrates this latter type. A bank credit of $5,500,000 was obtained through the Bankers Trust Company of New York and the First National Bank of Chicago. The Dixie Cup Company was given until December 31, 1949, to draw on this credit as needed and six years thereafter in which to amortize the amount borrowed. Interest on the funds withdrawn was set at 2¼ per cent, with a ¼ per cent applying on unused funds during the stand-by period. The use of this money was broadly described as intended for a postwar expansion program.

A slightly different arrangement was obtained by Continental Air Lines, Inc., at about the same time. This corporation signed an agreement with a group of banks headed by the Chase National Bank for a credit of $1,700,000. Funds withdrawn under this credit during 1947 were declared convertible, beginning April 30, 1948, into a three-year term loan at an interest rate of 2½ per cent should the company find it necessary to extend

the period of credit. The funds were used to finance the purchase of five new Consolidated Vultee twin-engined aircraft.

Term loans have become an important source of credit, particularly among producers of metal products and manufacturers of petroleum, chemical, and rubber products and among public-utilities and transportation companies. Running into billions of dollars per annum, they represent a significant proportion of the total dollar amount of bank loans outstanding to business concerns.

Agricultural Credits. Like other businesses, farming requires the use of credit facilities. Yet the risks are so great and, in general, the resources of the agriculturists so inadequate, relative to credit needs, that many special problems arise which are not ordinarily encountered in financing other classes of industrialists. Moreover, the type of collateral that the farmer can offer is somewhat different in character from that commonly supplied by other producers. In view of these special features, a separate treatment of certain aspects of agricultural finance appears to be warranted.

The typical farm is a small unincorporated producing unit operated by an individual with the help of his family and a number of hired hands, many of whom live with the family during the growing season. As a result, personal and family expenses are usually intimately associated with the business aspects of the farm. Agricultural finance thus represents, in the main, a combination of business and personal credit.

Local farm-loan brokers and representatives or agents of large mortgage companies and insurance houses receive applications for loans in selected agricultural counties. These are investigated; and if they are approved, the farmer generally prepares a bond and pledges a mortgage on his property as security. The amount of the loan seldom exceeds 75 per cent of the property value, and conservative loans are restricted to 50 per cent of the land value and 20 per cent of the value of permanent improvements. They usually run for from five to ten years and may or may not have provisions for amortization of the principal. For shorter maturities, chattel mortgages on farm equipment or pledges of successive insured crop liens are employed.

In the cattle-raising industry, special livestock- or cattle-loan companies were formed to deal with the problem of affording suitable intermediate credit facilities. Loans are made on the basis of chattel mortgages as security. They are made either for financing the carrying of larger herds of livestock for fattening prior to shipment to the market or for breeding purposes. The former class of loans usually runs for six months with the privilege of renewal. The latter may extend for two years or longer. The loan company is in turn financed by endorsing the paper and discounting it at the banks or by pledging it as security against its own short-term

obligations. The financial strength of these companies has at times enabled them to carry farmers through extremely trying periods of adjustment.

In general, methods of financing vary to a large extent with the nature of the crop, the size of the farm, and the financial position of the grower. Owners of large farms, whose credit standing is high, are able to establish credit lines with factors, banks, and wholesale merchants in the larger cities. Small producers and tenant farmers with limited resources are forced to apply to local supply stores and to landowners for their credit needs. Direct bank borrowing, even from purely local institutions, is limited among the borrowers in this latter class.

Cooperatives and mutual credit associations of varying descriptions have also developed to meet special credit requirements of certain groups of farmers. In many instances, they have been eminently successful. However, the lack of diversification in their loans has been their chief weakness during times of stress.

Government Credit Aids. *Agricultural.* Because of the inadequacies of private credit facilities in meeting the special loan demands of farmers, the United States government enacted legislation designed to establish agricultural credit aids. The first step in this program came in 1916 with the passage of the Federal Farm Loan Act. This act created two types of institutions designed to supply the necessary credit at equitable rates. Twelve federal land banks were organized for the purpose of lending to cooperative farm-loan associations whose members would indirectly receive the proceeds of the loans. In addition, provision was made for the establishment of privately owned joint-stock land banks which would supply mortgage credit to individual borrowers. A Federal Farm Loan Board was given jurisdiction over these banking facilities. Various acts were subsequently passed amending and reorganizing this credit structure.

Loans made to national farm-loan associations by each of the 12 federal land banks are based upon applications of farmers who belong to these associations. An association consists of 10 or more borrowing farmers who incorporate under federal charter. Each farmer buys stock in the association to an amount equal to 5 per cent of his loans. When a farmer wishes to borrow, he files an application with his association, which appraises his property and certifies to the desirability of the loan. The association then applies to the federal land bank of its district for a loan. If the loan is approved by the bank's appraiser, the credit is advanced through the association to its member. The association is collectively responsible to the land bank for all loans granted. Individual loans may range in size from $100 to $50,000, and maturities extend from 5 to 40 years. Reasonable rates of interest are assured, and provision is made for the gradual retirement of the principal. The federal land banks raise their capital

through the sale of tax-exempt bonds in the investment markets—such bonds being backed by the farm mortgages as collateral.

In order to afford additional intermediate credit accommodations for the benefit of American farmers, the federal government created the Federal Intermediate Credit System in 1923. Twelve banks, the stock of which is wholly owned by the United States government, were established under the act. These banks were permitted to issue tax-exempt collateral-trust bonds or certificates to the investing public—the security consisting of chattel mortgages against livestock and other forms of agricultural paper. The obligations of these banks have maturities of from six months to five years.

Dealings of these banks are not directly with borrowing farmers but with cooperative marketing associations and other financial agencies which supply agricultural credit. In other words, the intermediate credit system affords a rediscounting accommodation to those groups which are carrying a large volume of agricultural loans. By discounting some of this paper at an intermediate credit bank, the liquidity of the lender is restored. To be eligible for rediscount, the maturity of the paper must not exceed three years. Local commercial banks, credit associations, and cattle-loan companies are thus given a freer hand in advancing loans to farmers, inasmuch as the intermediate credit banks act like reservoirs in supplying additional cash resources.

Cooperative associations may borrow from the intermediate credit banks on the basis of warehouse receipts, bills of lading, chattel mortgages, and other forms of collateral offered by their members. This facilitates both the production and the marketing process.

In 1933, under the Agricultural Credit Act, a new Farm Credit Administration was created, and all agricultural credit agencies directed or controlled by the federal government were brought under its jurisdiction. This included the land banks, intermediate credit banks, the cooperative bank division, and the production credit division. Credit accommodations are all handled through district units established in 12 farm credit districts.

In addition to these financial aids to the farmer, the federal government has established other agencies that, directly or indirectly, provide farm credit facilities. These include the Commodity Credit Corporation, the Rural Electrification Administration, and the Farmers' Home Corporation.

Various states have passed legislation affording aids to farmers on bases similar to those provided by the national government. In most cases, farm mortgages are accepted by the state government as security, and state bonds are issued against this collateral—the farmer receiving the funds so collected at comparatively low interest rates. Another form of state credit aid is illustrated by the laws passed by many states in the depression of

the 1930's and extended during the Second World War emergency, declaring moratoria on outstanding mortgages and extending existing loans indefinitely without threat of foreclosure as long as interest and tax payments were kept up to date.

Industrial and Commercial. Government credit aids have also been extended from time to time to other branches of American industry. Under Sec. 13*b* of the Federal Reserve Act, for example, the federal reserve banks have had authority to make direct loans to industrial and commercial enterprises. The extension of this credit is limited to the provision of working capital for periods of five years or less, and only to established businesses.

Another important government credit aid is the Export-Import Bank. The bank has two leading functions: (1) to provide loans to exporters and importers in the United States who cannot obtain suitable financing from private sources, (2) to make loans to foreign governments in order to enable them to develop resources or to stabilize their economy. The purpose of the latter function is to provide an indirect stimulus to American exports.

The principal lending agency of the federal government is the Reconstruction Finance Corporation. Originally set up in 1932 to assist private enterprises having financial troubles that arose out of the depression (including banks, insurance companies, railroads, and industrial and commercial ventures), it was later used to finance war industries and the construction of war plants. It also provided funds to other federal agencies, among which was the Export-Import Bank. In connection with the war effort, it sponsored several large-scale business ventures through corporations like the Defense Plant Corporation, the Rubber and Metals Reserve Corporations, and the War Damage Corporation. With loan agencies located in over 30 principal cities of the United States, the RFC became the largest financial institution in the Western World, with loans and investments up to the beginning of 1945 aggregating 45 billion dollars.[1] In its postwar role, it helped to finance reconversion. Many industries primarily engaged in production of munitions and war equipment were given generous credits in order to hasten the change-over to peacetime operations and to maintain full employment. For example, in June, 1947, the Glenn L. Martin Company received approval of an RFC loan for $16,600,000 to be used primarily as working capital in the production of Martin 2-0-2 commercial transport planes.

The demands on the part of private banking groups that the federal government should withdraw from all credit operations entering in direct competition with their business will probably result in a sizable reduction

[1] FERGUSON, J. W., and D. E. MCHENRY, "The American Federal Government," p. 594, McGraw-Hill, 1947.

in the scope of RFC activities that grew up during the Second World War. However, the latter organization will no doubt continue to provide important long-term and intermediate credits to certain types of business and, in its role as collection agency for some of its longer term maturities, will continue to function for many years to come.

Questions and Problems

1. Your concern is considering additional long-term financing. As a stockholder what considerations might cause you to favor obtaining the additional funds by means of a new stock issue? A bond issue?

2. Assume that you are an investment banker who has been approached by an established aircraft manufacturing corporation to aid in securing additional fixed capital. What factors would determine your selection of securities to be offered?

3. For what purposes and under what circumstances would a company issue the following classes of securities: collateral trust bonds, debenture bonds, income bonds?

4. Cite two examples of the use of long-term funds for purposes other than the acquisition of tangible properties. Why would it be advisable for the lenders to require provisions for amortization of such loans?

5. Explain why a financial plan of a company prepared during a speculative boom period might differ from one formulated during depression years.

6. Indicate the circumstances under which a company would be able to issue "rights" in connection with the marketing of its securities, and explain what purpose such procedure would be expected to serve.

7. How do promoters usually arrange to raise the necessary capital for their ventures? Who specializes in the sale of these securities? What is meant by underwiting an issue? Briefly outline the method of distribution of a new security issue.

8. Describe the nature and purpose of "term loans." Why have corporations preferred to raise additional capital in this way rather than to float a new bond issue? What are the leading sources of this type of credit?

9. What intermediate credit needs have arisen among agricultural groups? What special measures were taken by the federal government to provide these accommodations? Explain how agricultural cooperatives help farmers to obtain needed funds.

10. The following statements are captions taken from the business and financial pages of newspapers. Briefly but clearly explain their meaning: New Issues Are Filed with SEC; Syndicate Offers Atlanta Gas 4½% Convertibles; Redeems First Mortgage Sinking Fund Issue.

CHAPTER XXIV

SHORT-TERM CREDIT

Characteristics of Short-term Borrowing. In an advertisement issued by a New York bank, the following statements appeared: [1]

> The well-informed business man is familiar with the specifications of a good commercial loan. It is of temporary nature, to be liquidated in the normal expectancy of business, and profitable to the borrower.
>
> It is usually made to a responsible business house on the basis of full information concerning the purpose of the loan and the borrower's ability to repay. Each case must be considered in the light of all its circumstances, including the general business trends of the time.

This summarizes rather succinctly the general characteristics of a short-term loan. It is grounded on confidence on the part of the lender in the borrower's willingness and capacity to repay the debt. Its temporary nature refers to a period of time equivalent to the length of the production process or marketing period of the borrowing concern. This is usually 30 to 90 days and seldom for longer than one year. It is intimately related to the current operations of business and is intended to finance profitable transactions of a self-liquidating character.

For example, goods are bought for cash by a merchant who will require several weeks in which to sell them to his customers. Moreover, the buyers may require an extension of time before paying their bills. During all this time, a considerable amount of the merchant's current assets is tied up in merchandise or receivables. If, however, a short loan were obtained for, say, 60 to 90 days to finance this sale, the merchant would be free to use his funds in other profitable channels. If a manufacturer had to wait for payment for the finished goods that he has sold, his capital would quickly be exhausted, and he might even have to suspend production operations temporarily. In order to maintain constant production, therefore, financial help is needed to bridge this gap between the time that a firm pays for the materials and labor that are used and the time that its customers pay their bills.

There are usually certain seasons of the year when more money is required by a given line of business than at other times. If a sufficient

[1] Irving Trust Co., New York.

amount of working capital were provided so that it would be unnecessary to borrow money, there might be periods when idle money would accumulate. In such cases, it is usually desirable to adjust invested capital to normal or average needs and then to borrow money during the seasons when larger funds are required.

A farmer, for example, may have to purchase seed and fertilizer and to hire help in the spring of the year. During the summer, he continues to use labor; and at this time, he will also require insecticides and poisons to prevent destruction of his crop by plant pests. During the harvest period, he has another big outlay for labor and packing supplies. Ordinarily, he gets no return until the end of the growing season. From the late fall until the spring of the following year, his activities are greatly reduced. Therefore he requires financing during the periods when there are continual outlays and practically no income.

The clothing manufacturer is in a similar position. The cloth for winter clothing is purchased many months before the clothing is offered for sale. In addition to paying for cloth, the producer has heavy labor bills and overhead costs. The finished product is then sold to the wholesaler and finally reaches the retail public six or seven months after production began. In order to facilitate continuous advance production in this business, without making it necessary for the manufacturers to invest large sums of money for working-capital requirements, short-term credit accommodations are provided.

Another advantage afforded by borrowing is that it serves to multiply profits on invested capital. Thus, if average net profits per dollar sales are, say, 8 per cent and invested capital is $1,000,000, then, if sales amounted to $500,000, the net profit of $40,000 is equivalent to 4 per cent on invested capital. If, however, a series of loans is arranged that makes possible a doubling of sales volume at approximately the same profit margin per unit and at an interest cost of $25,000, net profits are roughly $55,000, or 5½ per cent on invested capital.

Short-term credit may be granted for specific and for general purposes. In the former case, the money is lent so as to finance individually identifiable transactions; in the latter instance, a loan is negotiated with the idea of supplementing the operating funds, without specific reference to their separable uses. A general extension of credit of the latter variety must usually be arranged with commercial banks or through note brokers. In specific transactions, these sources of credit are supplemented by advances made by trade creditors and special financial agencies.

Innumerable instances might be cited from American commercial and industrial experience to illustrate the advantages of the temporary use of short-term funds in buying, producing, shipping, warehousing, and selling

of goods. The essence of short-term or commercial credit is that it enables businessmen to obtain the use of purchasing power for a limited time period in which it happens to be of maximum advantage to have possession of funds to supplement the regular working capital. Whatever is acquired with this money is ordinarily used or disposed of in current operations and in such a manner that the transaction will yield proceeds sufficiently large to make possible the full return of the loan within a stated time.

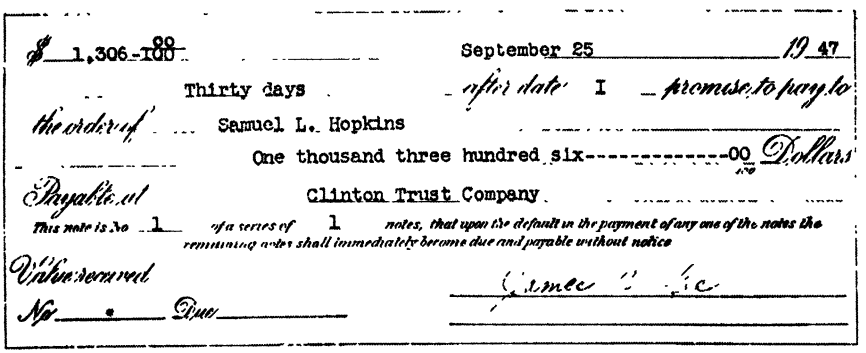
Short-term Credit Instruments. *Open-book Account.* Short-term loans can be recorded simply by an entry on the books of account of the lender under the heading Accounts Receivable, the corresponding entry on the books of the borrower being Accounts Payable. In the United States, this is the usual method of recording the extension of *trade credits* in the purchase and sale of merchandise. Merchants and producers sell "on account"; *i.e.*, they allow their customers credit for a period of time after date of purchase. The length of time varies with the trade but usually runs from about 30 to 90 days. The balance of a customer's account shows the amount that he still owes the firm which has sold him the merchandise. When he makes payment in full or in part, he is credited on the books of the lender for the remittance. This informal method of recording debits and credits is the only evidence of the indebtedness; yet millions of dollars of business is daily handled in this way.

No direct interest charge is ordinarily made for trade credit of this kind. However, the quoted price of the goods is made sufficiently high to allow for a liberal charge for credit. Moreover, a discount of 2 per cent or more of the invoice price is frequently offered for cash payment. If the buyer does not accept this offer, he is paying dearly for the credit accommodation that he receives.

Other short-term credit is evidenced in the form of various securities such as promissory notes, drafts, and trade acceptances. These are known as *commercial paper* and serve as negotiable instruments of credit. They provide a more effective means of enforcing prompt settlement of a debt than does the open-book account, inasmuch as they are recognized at law as prima facie evidence of the existence of the debt. Some instruments bear a definite maturity date; others are payable on demand, at sight (on presentation) or at a given number of days after sight. Certain forms bear interest at a designated percentage; others bear no interest; and some include the allowance for interest charges in the sum stated on the face of the instrument. Some commercial paper is secured by various forms of collateral; other notes are unsecured and depend merely upon the validity of the promise of the borrower to pay the debt at maturity.

Promissory Note. The promissory note is an instrument bearing an unconditional promise by the maker of the note to pay to the order of his

creditor or to bearer a specific amount of money at a definite time. In spite of its obvious advantages, such as ready negotiability and the elimination of misunderstanding with reference to the amount and time of payment, the promissory note is not so widely used in commercial transactions as is the open account. This is to be explained largely in terms of habit and custom in the business community. In some trades, only inferior credit risks and concerns that have overrun the normal time period allowed for payment are expected to give their notes instead of enjoying the privileges of an open account. Consequently, in these lines of business, the



$ 1,306.88/100 September 25 19 47

Thirty days after date I promise to pay to

the order of Samuel L. Hopkins

One thousand three hundred six 00/100 Dollars

Payable at Clinton Trust Company

This note is No 1 of a series of 1 notes, that upon the default in the payment of any one of the notes the remaining notes shall immediately become due and payable without notice

Value received

No. Due

James [illegible]

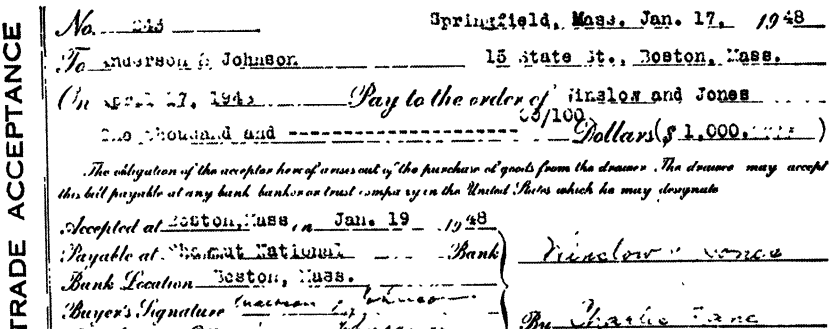
request on the part of a seller that his customers give him their notes in payment for purchases would be regarded as an affront or a reflection on their credit standing. The use of promissory notes in the financing of ordinary transactions in these industries has made slow progress. Only in those trades in which credit terms are relatively long and in which the practice of making payments in notes is well established are promissory notes regularly used rather than open-book accounts. This is illustrated in the jewelry and in the lumber business. In lines in which installment sales are popular, the employment of notes has also become fairly widespread.

The use of the promissory note is, however, mainly found in borrowing operations not arising in connection with specific business transactions. Most commercial bank loans are evidenced by a note made by the borrower, and large firms borrowing directly in the open market give their notes as evidence of their obligation. The bank loans may or may not require collateral security or endorsements. Open-market borrowing is usually conducted on the basis of "straight" or single-name paper.

Draft. In contrast to the note, a draft is prepared by the creditor and constitutes a written order addressed to the debtor requiring him to pay

a specific amount of money to order or to bearer, on demand, or at a stated time. If the draft is payable on presentation, it is called a *sight draft*, the words "at sight" meaning on presentation. On the other hand, the draft may be a *time draft* payable at a stipulated time interval after presentation or after the date on the instrument.

Some drafts read "Pay to the order of ourselves," in which case the drawer of the draft and the payee are identical. It is possible, however, for the drawer to make the draft payable to a third party. This has the effect of transferring the indebtedness to a new creditor. *Trade bills* or


TRADE ACCEPTANCE

No. 345 Springfield, Mass. Jan. 17, 1948

To Anderson & Johnson 15 State St., Boston, Mass.

On April 17, 1948 Pay to the order of Winslow and Jones

One thousand and 00/100 Dollars ($1,000.00)

The obligation of the acceptor hereof arises out of the purchase of goods from the drawer. The drawer may accept this bill payable at any bank, banker or trust company in the United States which he may designate

Accepted at Boston, Mass., Jan. 19, 1948

Payable at Chemical National Bank Winslow & Jones

Bank Location Boston, Mass.

Buyer's Signature Chairman of Finance

By Agent or Officer Treas. By Charles Jones Treasurer.

drafts are drawn by one business firm upon another. When drafts are drawn by banks upon one another, they are known as *bankers' bills*. Drafts arising out of foreign-trade transactions are ordinarily referred to as *bills of exchange*.

Shipments of cotton, grain, and other agricultural staples from primary markets to ultimate concentration markets and mill towns are commonly financed by means of the sight draft. This results in the requirement of payment for the goods on arrival. Frequently, however, merchants and buyers need an extension of time before paying for goods that are shipped to them. For this purpose, the time draft is more suitable.

Trade Acceptance. However, from the standpoint of the shipper, the time draft has its disadvantages. Inasmuch as the instrument is an order to pay at some subsequent date, it carries little guarantee that the buyer will pay at maturity. Consequently the marketability of the instrument is adversely affected. In order to overcome this difficulty, an arrangement is made to present the draft to the debtor who honors it by writing on its face the word "accepted," together with the date of acceptance, the place where payable, and his signature. This converts the draft into a *trade acceptance*, which now embodies a promise to pay rather than an order.

There are many obvious advantages in the use of trade acceptances. The merchant or manufacturer who sells on open account has to wait 30 or 60 days and sometimes longer before he receives the proceeds of the sale. Tying up his funds in this manner impairs his working capital and prevents him from doing as much business as he might otherwise obtain. However, if he receives tangible evidence of the amounts due him in the form of negotiable trade acceptances, he may take these to the bank and discount them or obtain a loan, thus receiving funds immediately instead of waiting until the end of the period. On the other hand, the buyer is not required to make immediate payment but receives the benefit of an extension of credit equivalent to the length of time stipulated on the instrument.

When an acceptance is signed, there is a definite promise between the borrower and the lender, both as to the amount due and as to the time of settlement. Thus it helps to provide a check on reckless buying because it compels keeping better track of outstanding obligations. It forces prompt payment and does not permit undesirable extensions or delays. By permitting the seller of goods to keep his funds liquid, it enables capital to turn over more frequently and lessens the accumulation of overdue accounts.

However, the trade acceptance runs into the same difficulties in domestic trade as were noted in the case of the promissory note. Businessmen accustomed to the use of the open account resent the action of shippers in drawing against them time drafts which they are called upon to accept. Although spirited educational campaigns have been launched among businessmen to show them the advantages of this form of financing, comparatively slow progress has been made in the extension and development of its use. Shipments of automobiles, automobile tires, raw tobacco, lumber, furniture, silk, and jewelry have frequently been financed in this way. Other industries make use of the trade acceptance to a limited extent.

Types of Collateral. The aforementioned varieties of commercial paper represent written promises or evidences of indebtedness. In themselves, they are only as good as the word of the debtor; in no way (unless they bear additional guarantees or endorsements) are they protected by pledges of collateral or security. When the borrower's credit standing is limited, lending agencies generally require some form of collateral as a safeguard against the possible default by the borrower. In the event that the credit position of the borrower is so sound that there is little doubt that the loan will be paid at maturity, the credit is extended in the form of a straight or unsecured loan.

The favorite forms of collateral for loans arising out of commercial transactions are the documents of title which control the merchandise

handled. In commodity shipments, these include the bill of lading, the warehouse receipt, and the trust receipt.

Order Bill of Lading. When the shipper places his goods on the freight car of a railroad, he receives either a "straight" bill of lading (nonnegotiable) or an "order" bill of lading, which is negotiable, as was described in Chap. XIX. Since the order bill of lading conveys title to the goods and must be surrendered at the point of destination before the railroad will release the shipment, it is regarded as good collateral for a loan. This assumes, of course, that the merchandise to which the document conveys title is relatively durable in character and stable in value.

Negotiable Warehouse Receipt. In similar fashion, negotiable warehouse receipts (illustrated on page 433) are used as valuable collateral security for loans against merchandise kept in storage. The receipt, if properly endorsed, entitles the holder to goods of a quality and condition specified on the certificate; and in the event of default on the loan, the products can be seized and sold at auction for the benefit of the lender. Loans are usually made against such collateral for considerably less than the estimated value of the goods in order to allow for possible losses arising from spoilage or shrinkage in value.

Trust Receipt. Banks are sometimes willing to permit borrowers who have given warehouse receipts or bills of lading as security for a loan to gain temporary access to such documents for purposes of moving the goods. For example, a merchant holding storage-battery plates in a warehouse in Rochester may desire to place them on a train for shipment to Cleveland without repaying a loan secured by the warehouse receipts. Under a trust-receipt agreement with his bank, an arrangement is made whereby he is given the warehouse receipt in order to take the goods from the warehouse and move them to the railroad. The bill of lading obtained from the railroad is then substituted as security with the bank. According to the terms of the trust receipt, the borrower is theoretically acting as an agent or trustee for the bank—the legal title to the merchandise that he is handling never really passing to him. In the interim, the trust receipt serves as collateral security.

Chattel Mortgages. Another way in which merchandise is pledged as security for a loan is through the use of the chattel mortgage. In effect, this is a document conveying to the lender legal title to some specific personal property as security for the debt. Possession is usually retained by the borrower, but the mortgagee is permitted to seize the goods and sell them if the debt is unpaid. Agricultural equipment, machinery, and appliances sometimes serve as security for short-term loans. Installment selling contracts covering credit extensions of from six months to a year are secured by chattel mortgages or by means of a *conditional bill of sale,*

under which title is not vested in the buyer until he has made all installment payments to cover the purchase price.

Other Types of Collateral. In addition to the types of collateral already mentioned, a businessman is able to pledge his inventories of raw materials and finished products; his accounts receivable; his bonds, stocks, and other marketable securities; and even the insurance policies on his own life. As further protection to a lender, he may offer endorsements or guarantees by outside parties, who assume secondary liability in the event that he defaults.

Banking Functions. Commercial banks, directly or indirectly, supply the bulk of short-term credit requirements of business. Although a considerable number of small borrowers receive advances from trade creditors, cooperative associations, and special lending agencies, these lenders are, in turn, financed to a large extent by bank credit.

Loan and Discount Functions. Banks supply credit facilities through their loan and discount functions. The loan function involves the advancement of funds for a period of time, coupled with the return of principal and interest by the borrower, at maturity. Discount operations represent the purchase of commercial paper for an amount somewhat less than the future value. The difference between the present and future value is the amount of the discount charge. The majority of commercial bank transactions are of the discount variety.

In advancing funds to borrowers, the bank must study the credit standing of each applicant. It determines, on the basis of the would-be borrower's property and business ability as well as upon his record for honesty and business integrity, whether or not he is entitled to credit. Although, in the case of the corporation, such an analysis involves fewer personal attributes, some attention is nevertheless paid to these qualities with reference to those men responsible for its management. In other words, credit is not, strictly speaking, "manufactured" or created by the bank. What really happens is that the bank accepts or rejects the credit offered by the would-be debtor. It *recognizes the right to credit, i.e.*, the right to command the goods and services of other members of the community. The bank merely appraises the credit tendered to it, employing the unusual facilities it has developed for such appraisal.

It is the general practice among American banks to establish a *line of credit* for each of their customers. This represents the upper limit of borrowing that the bank sets for individual firms. It is based upon the ratio of unencumbered current assets to current liabilities on the financial statement and upon other tests applied by the bank in determining the credit standing of the borrower. Under this policy, the bank will undertake, to the extent that it is possible, to supply credit from time to time up to the levels set in each case.

Such credit accommodations represent, in effect, an underwriting of the borrower's own credit by the more widely established credit of the bank. The bank guarantees the values of claims held against it by others and agrees to make good any losses arising from the borrower's possible default.

Deposit, Clearance, and Collection. The commercial bank also serves as a reservoir for the funds of businessmen. It stands ready to pay out such deposits on demand. Business transactions are facilitated through the use of checks and other instruments of credit. A useful service rendered to business by commercial banks is the collection of these items directly or through the Federal Reserve System and correspondent banks. This function is especially valuable in doing business with firms located in distant sections, since checks, notes, and acceptances are handled through the banking system with a minimum of delay and expense.

Directive Banking Functions. Because of their control over the flow of available capital, banks are in a position that frequently gives them a marked degree of influence over certain enterprises. This is especially true in cases where borrowers are unable to repay their obligations and banks, seeking to recoup their losses, occupy a prominent role in directing the affairs of the business. Occasionally this has caused a situation to arise where firms became virtual subsidiaries of the more powerful banking interests. Even in less extreme instances, the banks, through their power to withhold credit, can become important restraining factors in the business community.

In a limited sense, such control is desirable. Bankers are trained to judge, in a more detached way, the relative soundness of projects that enthusiastic businessmen are attempting to sponsor. The decision on the part of a banker to reject proposals requiring financing sometimes helps to prevent the inception of ill-considered speculative experiments. When a loan officer grants credit too abundantly and fails to use reasonable caution in analyzing the needs and abilities of his customers, the safety of the bank may be open to question. A careful banker, even though he appears to be unnecessarily strict, is likely to be a better guiding counsel for the financing of a business than is the case with a less cautious lender. On the other hand, the bank that rigidly adheres to a fixed line of credit and arbitrarily cuts off further extensions regardless of circumstances is too extreme on the conservative side and is often the direct cause of forced liquidation and failure of a business that needs its help. A firm requires the services of a bank that will develop sufficient familiarity with its business problems, one that will be able to deal understandingly with various situations as they arise, to offer sound advice, and to extend all reasonable accommodations if it is in a position to do so.

Analysis of Financial Statements. In determining the line of credit of a borrower or in deciding upon the desirability of a specific loan, banks and other lending agencies usually require the borrower to furnish financial statements relating to his business—both for the current period and for previous years in the history of the concern.

The scope of the present work precludes any detailed discussion of the technique employed by lenders in analyzing the borrower's credit from these statements. Some of the most frequently employed methods of analysis will, however, be cited.

One of the ratios most frequently applied is that of current assets divided by current liabilities. This gives an indication of the relative ability of a concern to liquidate its outstanding short-term indebtedness. Ordinarily, lenders consider it essential that current assets should be at least double the amount of current liabilities. The accompanying table prepared from data supplied by the Securities and Exchange Commission shows that at the close of the year 1946 the average American corporation engaged in nonfinancial business had a current ratio slightly greater than 2 to 1.

TABLE 23.—CURRENT ASSETS AND LIABILITIES OF UNITED STATES CORPORATIONS AS OF DECEMBER 31, 1946 *

(In billions of dollars)

Current assets:	
Cash on hand and in banks	$ 21.8
U. S. government securities	15.0
Receivables from U. S. government	0.7
Other notes and accounts receivable	29.9
Inventories	35.3
Other current assets	1.7
Total current assets	$104.4
Current liabilities:	
U. S. government prepayments	$ 0.1
Other notes and accounts payable	30.8
Federal income tax liabilities	8.5
Other current liabilities	7.9
	$ 47.3
Ratio: Current assets to current liabilities	2.21

* Excluding banks and insurance companies.

Another test is the comparison of cash with current liabilities. On the average, at least 10 to 15 per cent of the short-term obligations of a firm should be covered by cash assets.

Often the value of the merchandise inventories is compared with total current assets to show the percentage of working assets tied up in inventories. A bank or lending agency might hesitate to grant a loan for the purpose of making additional purchases if more than half of the current assets consist of unsold merchandise. Bank policy in this matter will, of course, depend upon other factors including a consideration of seasonal requirements.

The capital or net worth accounts are sometimes related to such items as the fixed assets, in order to show the percentage of investment in plant and equipment, or to outstanding indebtedness, so as to reveal the debt position or solvency of the firm.

Several interesting ratios are based upon net sales. For example, sales compared with receivables indicates the relative speed of collections; sales *vs.* merchandise inventory reveals the momentum of inventory turnover;[1] sales *vs.* net worth shows the vitality, or utilization, of invested capital; sales *vs.* fixed assets may indicate if sales volume is keeping pace with plant improvements. This last ratio is of particular interest when a comparison is made of the financial statements covering several years, during which changes in plant investment have occurred. In fact, many of these ratios are compared for a number of years, where possible, to see whether the current figures show an improvement or represent less favorable conditions relative to the past.

It is also customary to study income data to ascertain earning capacity and to determine the value of the business as a going concern. Interest on the funded debt when contrasted with average net income indicates the ratio of fixed charges to earning capacity.

These computations are used as *guides* in arriving at the credit standing of a borrower. They are not mechanical indexes which can be applied arbitrarily to all financial statements. A number of rules of a similar character cited by a prominent authority[2] can be summarized as follows:

Accounts receivable should always represent merchandise transactions and . . . notes receivable (excluding trade acceptances) should be small in proportion to the accounts receivable, particularly in a business where there is a rapid turnover of merchandise;

Notes payable should never exceed the Net Worth, except in the case of dealers in commodities such as wheat, cotton, wool, etc.

Notes payable for merchandise (other than trade acceptances) should be small as otherwise it indicates failure to take advantage of discounts.

[1] This is approximate. To be accurate, the ratio would have to be *cost of sales vs.* merchandise inventory.

[2] PATTERSON, STUART H., vice-president and comptroller, Guaranty Trust Company of New York, "A Bank's Relations with Its Customers," pp. 55–57, Guaranty Trust Company.

Unsecured notes payable to banks or sold through brokers should not exceed one-third of the Net Worth. . . .

Annual sales should equal and in general be greater than the amount of capital;

Net income before interest should be double the interest on funded debt. . . .

While a bank may have definite standards for the purpose of disclosing weak spots in a business, that does not necessarily mean that it will not make a loan under less satisfactory conditions, if there is confidence in the men running the business, or if other conditions indicate that the business is improving its financial position.

There are many lines of business in which the ratios stated . . . are not applicable, as that of the farmer, the broker, certain classes of export business, cattle loan companies, etc. When engaged in other than a purely commercial or manufacturing business, a business man should consult his bank to ascertain what it considers conservative ratios for his particular line of business, and should then govern himself accordingly.

McCarthy & Cox.....Bar & Grill H 4
McCarthy E. W., Inc.....Trucking 3
McCarthy Elizabeth (Mrs. James) Cig & Staty L 4
McCarthy J. F., Inc....Whol Paper
McCarthy J. P. Co. Nj...Job & Mfg Multigraphing F 3
McCarthy James A....Luncheonette J 4
McCarthy John . Cig & Staty L
McCarthy John A. & Co. Inc (479 Walton Ave.)...W & R Bldg Matl 1
McCarthy John J.....Bar & Rest
McCarthy Ray Advertising Service, Inc Genl Advg Agency
McCarthy & Simon, Inc..... Mfg & Rental School & Camp Wear C 1½
McCarthy William J .Job Bldg Matl
McCarthy William J . . . Gar K 3½
McCarthy's Restaurant, Bar & Grill Inc. H 4
McCartin M. A. Advertising.....
McCaul J Co. Inc. ....Mfrs Icing & Syrups H 4
McCauley Mrs. Freda..Luncheonette Concession M 4
McCauley G. H. Finishing Co. Inc. Label & Paper Cutting
McCaul Inc.....Imps Woolens K 4

Section of a page from a Dun & Bradstreet rating book. Code symbols indicate the size and financial position of each firm.

Credit Information. The financial position and business history of a firm are important bases used both by financial institutions and by merchants in determining if a concern is entitled to credit. The borrower's own financial statements, coupled with information directly supplied on forms provided by the lender, are basic data employed in credit analysis.

Supplementing this information are the reports of mercantile agencies that specialize in investigating the financial standing and reputation of business enterprises. The largest of these is Dun & Bradstreet, Inc. This firm supplies its subscribers with "rating books" in which are listed and classified most of the business establishments in the United States. With each name appears a symbol showing the approximate capital of the firm and the degree of its financial responsibility. The credit rating varies from "high" to "poor," classified according to financial strength; *i.e.*, these estimates of credit risk apply to the million-dollar firm as well as to the merchant whose capital amounts to only a few thousand dollars.

The subscriber to this service is entitled to a number of special reports each year. The report relating to the applicant for credit or the prospective customer shows the latest financial statement and, if unincorporated, the

names of the members of the firm and the extent of their personal liability. In addition to a short business history of the firm, there are also given the opinions of bankers and creditors concerning promptness of the firm in meeting payments, policies with reference to taking cash discounts, etc. The report also shows whether the firm or members of the firm were ever bankrupt and if there are any judgments filed or suits pending. In short, data are presented serving to indicate the degree of risk that an extension of credit will involve.

In some lines of business, credit information is of such importance that merchants form cooperative associations for the purpose of keeping themselves informed of the credit standing of their customers. By specializing in one particular field and interchanging information based on actual experience relating to collections and bad debts, valuable assistance is rendered by these organizations to manufacturers, middlemen, and financial institutions. Examples of such specialized credit bureaus are the Electrical Credit Association, the Fur Merchants' Association, and the Jewelers' Board of Trade. The National Association of Credit Men, through local bureaus scattered throughout the United States, is able to obtain millions of reports annually relating to the credit standing of firms in various lines of business by means of the confidential interchange of information on the part of users of this service.[1]

Commercial banks are also valuable sources of credit information. Although bankers may be reluctant to supply any data of a confidential nature, they usually find it possible to give to their depositors or to other financial organizations sufficient advice to guide them in deciding how much credit can safely be extended to a given concern.

Types of Bank Loans. *Unsecured Straight Notes.* Commercial banks render a variety of discount services. The single-name unsecured loan is the most common form in which commercial banks currently extend credit. Borrowers prepare their own promissory notes drawn in favor of the bank. These are discounted by the bank, and the proceeds are credited to the borrowers' accounts. For example, a hat manufacturer, wishing to pay cash for a shipment of fur in order to take advantage of the cash discount, prepares a 60-day note for $5,000 payable to the order of his bank. If the bank is willing to make the loan, it discounts the note at the rate of, say, 6 per cent per annum and credits the account of the manufacturer with $4,950. The company can then draw checks against this deposit. As evidence of the obligation, all that the bank retains is the unsecured single-name promissory note of the hat manufacturer.

[1] For a more complete discussion of this subject see W. H. Steiner, "Mercantile Credit," Chap. IV, Longmans, 1936.

Double-name Paper. As was previously noted, it is customary in some trades for customers to give their promissory notes in payment for their purchases or for sellers to draw time drafts against buyers. When these instruments are properly endorsed by their holders, they are known as double-name paper, since two or more parties are responsible for meeting the obligation at its maturity. The person or concern whose endorsement appears on the instrument is contingently liable in the event of default on the part of the debtor. This paper can be discounted at the bank, thus providing a company with immediate credit instead of necessitating the holding of such receivables until maturity.

Commodity Loans. A considerable part of the paper discounted by commercial banks is protected by collateral security. The following example illustrates the use of commodity collateral in financing the movement and storage of goods:

J. M. White and Company of Nashville, Tenn., sells a shipment of goods to the firm of Goodman Brothers in New York, the terms of payment being sight draft against shipping documents. White delivers his goods to the railroad, receiving an order bill of lading. He takes his draft drawn on Goodman Brothers together with a bill of lading to his bank, the Tennessee National Bank. The Tennessee National Bank will discount the draft for him and send both draft and bill of lading to the Federal Reserve Bank of its district or to its own correspondent, the Chase National Bank in New York. When the instruments arrive in New York, the bank receiving payment for the draft will give Goodman Brothers the bill of lading. The latter firm then claims the shipment.

Goodman Brothers, however, not requiring these goods immediately, puts them in a warehouse and obtains a negotiable warehouse receipt. The concern now borrows from the Bank of the Manhattan Company, where it has established a line of credit. The loan is arranged by giving the bank a promissory note, in the name of the firm, together with the warehouse receipt as collateral. Thus the merchandise is financed both in transit and while being stored and serves as security for the credit that is issued.

Other methods are in use, depending upon such factors as credit requirements, custom, and varieties of collateral available. The following summary reveals the manner in which a large New York cotton merchant with buying offices in several cities finances his cotton purchases:

As the cotton season opens and cotton begins to move, the buying offices borrow from the local banks, keeping the banks supplied with bills of lading or warehouse or compress receipts [1] as collateral. As the cotton movement gets too heavy for

[1] Cotton is compressed into bales of small size. While this process is performed, "compress receipts," similar in nature to warehouse receipts, are issued.

local banks to finance entirely, borrowing is done in New York both on line of credit and on bank acceptances. The bank acceptances are usually made for a period of 90 days and are secured by bills of lading or warehouse receipts as collateral. These acceptances run in various amounts, usually from $10,000 to $100,000 each. The money borrowed by us on our line of credit is also at all times secured by bills of lading and warehouse receipts as collateral, either put up with the New York banks in New York or being held by local banks for the account of the New York banks. In addition to secured loans, we usually borrow from $1,000,000 to $1,500,000 on unsecured paper.

Security Loans. Often a firm borrows on its own note, using marketable securities such as stocks and bonds of other corporations as collateral. Capital may be tied up, not in the form of merchandise in the warehouse or in transit, or in the form of machinery or buildings, but in securities that a firm does not want to sell. In that case, in order to supply temporary working-capital funds, the securities are pledged as collateral for a short-term loan.

Like the longer term collateral trust bond, such current obligations are protected by a pledge of marketable securities of a value substantially higher than the amount of the loan. The bank reserves the right to demand additional collateral should the market values decline and is empowered to sell these securities if necessary, in order to liquidate its claim against the borrower. Borrowers are permitted to replace pledged securities from time to time, subject to approval by the lending bank.

The purpose of such loans varies; the funds may be employed for commercial or trade purposes or to facilitate the carrying of certain attractive investment holdings or simply for security speculation.

Other Commercial Bank Loans. Under pressure of a situation in which their lending capacities were only partially used, commercial banks have gradually turned to other types of financing to supplement their traditional short-term loan policies. In addition to offering term loans (discussed in the previous chapter), they have gone into other fields such as accounts receivable financing and installment credit, which were formerly handled exclusively by special lending agencies. These latter forms of credit are described elsewhere in this chapter.

Through their personal-loan departments, commercial banks have also provided consumer credit facilities by dealing directly with individual borrowers. Buyers are thus placed in possession of funds that enable them to make cash purchases. Loans are usually made without collateral, depending upon the borrower's economic status. For large loans, one or more endorsers may be required. Interest is deducted in advance, generally at the rate of 6 per cent per annum. Loans are payable in installments, either on a weekly or monthly basis over a period of one year.

Where collateral is used, loans are sometimes made against passbooks, securities, and life insurance policies or against durable commodities, like automobiles.

Other Sources of Short-term Credit. The need for additional working capital or for special services not ordinarily provided by commercial banks caused many business establishments to turn to other sources of credit. This was particularly true of firms in a seasonal line of business which required more working capital for a relatively short period of time than was available on an unsecured open-line basis. It also applied to firms that could not obtain funds through ordinary channels because of their poor financial condition. To meet these special requirements, a variety of factoring companies, commercial credit companies, and finance companies came into being. Most of these companies offered short-term credit accommodations by offering to purchase or take on assignment a borrower's accounts receivable. *Accounts receivable financing* is defined as [1] "a continuing arrangement through which a financing agency makes funds available to a business concern by purchasing its invoices or accounts receivable over a period of time, or by making advances or loans, taking one or a series of assignments of accounts as primary collateral security." These arrangements are of two general types: *notification* and *nonnotification*. In the notification method, the purchaser of goods on credit is informed that his account has been sold and will be collected by a third party; in the nonnotification procedure, a company's debtors are not notified that their accounts have been assigned. Today, the leading notification financial houses are the *factors*, and the nonnotification institutions are commercial finance companies and banks.

Commercial Factors. In financing the movement of products such as silks and hosiery from the mills to the wholesaler or manufacturer, the commercial factor traditionally played an important part. He operated as buyer, sales agent, source of credit, and collector of accounts. In some lines such as raw cotton and turpentine, he often acted more as trader than as a banker. However, in present-day factoring, there has been a tendency to divorce the selling and merchandising functions from the financing function.

Textile or hosiery mills that require financing ordinarily employ commercial factors. The factor checks the credit risks and makes immediate cash advances against accounts receivable arising from approved sales by the mill or its sales agents. This involves the outright purchase of a company's accounts by the factor, generally without recourse for any credit losses that may arise and with full knowledge on the part of the company's

[1] SAULNIER, R. J., and N. H. JACOBY, "Accounts Receivable Financing," p. 1, *National Bureau of Economic Research*, 1943.

customers that their accounts have been transferred. The factor thus not only provides credit but also assumes the risk of credit losses, serves as collection agent, and maintains all receivables accounting records. Occasionally, as with the cotton-goods commission houses, which do a selling plus a factoring business, the mill obtains immediate payment for its goods by selling on the basis of sight draft against shipping documents. In rare cases, in addition to cash advances against receivables, factors extend credit against merchandise held in stock.

The cost of financing varies with the goods sold, with the extent of the services supplied by the factor, and with the elements of risk and time involved in extending the credit. Hosiery and silks are sold on a small margin and could not bear charges that might be imposed on manufactured goods on which the gross profit is fairly large. The factor usually charges a percentage of the gross sales rather than a monthly rate. In certain cases, factors supply the selling agent or mill with office and showroom space and take full charge of shipping and billing. In such instances, credit is checked by the factors and must be approved by them. By eliminating the need for a shipping and billing department, operating expenses of the merchant are lowered. It is this combination of services which accounts for the business demand for factoring as a supplement to the banking function. Commercial factors now serve not only the textile industries but also fur, lumber, glassware, shoe, and many others.

Nonnotification Financing. The financing of receivables on a nonnotification basis grew out of the needs of business to convert open accounts into cash in order to meet working-capital requirements, without informing either debtors or creditors that funds were being borrowed for this purpose. Inasmuch as firms of relatively weak financial positions made up the majority of borrowers, companies were reluctant to have it become known that they were selling or assigning receivables. While the short-term credit needs of an increasing number of businesses with high credit ratings are now being satisfied by this method, the practice of operating on a nonnotification basis continues.

The bulk of this business is done by *commercial finance companies.* All loan agreements are preceded by a thorough credit analysis of the borrower's books. Emphasis is placed on the moral risk and the soundness of the accounts purchased, rather than on financial ratios. The borrowing firm may be in receivership and still be eligible for a loan. Advances of from 75 to 90 per cent of the value of the accounts are made by the finance company, which either purchases these receivables or receives them as pledges or assignments for a loan. The client continues to collect payments from its customers and forwards these collections to the lender in repayment of the loan. In the event that any one of the pledged accounts be-

comes uncollectible and results in a bad debt, the finance company has full recourse against the borrower.

The rates of interest for such loans are high, varying from 1 to 2 per cent monthly. It must be remembered, however, that the commonly used trade terms "2 per cent 10 days, net 30" signify that in order to obtain the balance of 20 days' credit after the first 10 days have elapsed, buyers must sacrifice a 2 per cent discount. This is equivalent to 36 per cent on a per annum basis. Many merchants offer these or even better terms for cash payment within 10 days, and yet large numbers of buyers are unable to take advantage of the cash discounts or else prefer to wait for the expiration of 30 days before making payment. In some instances, it is sound economy to pay 24 per cent to a finance company if by so doing a saving of 36 per cent is effected, in taking advantage of cash discounts.

These higher rates are also partly offset by the fact that companies using these credit facilities discount their accounts receivable only as they need cash and do not carry excessively large balances to maintain a line of credit. Moreover, the importance of having liquid funds will often outweigh considerations of cost in obtaining credit.

Where state laws permit, commercial banks have taken over some of this business. However, most of these loans are handled by the larger banks and represent only a small portion of their total loan and discount activities.

The following advertisement of the Bankers Trust Company, addressed to manufacturers, wholesalers, jobbers, and importers, describes this variety of loan:

ACCOUNTS RECEIVABLE FINANCING

Non-Notification Basis

You may borrow up to 85% of the value of your accounts receivable, on a revolving credit basis. The loan is liquidated as the accounts are paid. The agreement is confidential. Your customers are not notified. Your money is ready when you need it and you pay interest only for the number of days the money is used.

Because of the risks associated with this type of financing, banks usually set a maximum limit to the accounts receivable that they are willing to handle for individual clients at any one time. Discount rates are also somewhat higher than for other classes of commercial loans.

Consumer Installment Credit. In the sale of high-priced consumer products on a credit basis, experience has shown the need for a systematic collection of deferred payments involving the retirement of fractional sums

at regular intervals over a period of time. This is known as the *installment*, or *partial-payment*, plan.

Installment selling is not a new idea. The sale of furniture was made on this basis in the continental countries of Europe in the seventeenth and eighteenth centuries. In the United States, the system was introduced in the furniture business as early as 1807. In 1856, the Singer Sewing Machine Company adopted the installment plan, and it spread rapidly to the company's competitors. The plan did not, however, become very significant until shortly before the Second World War, when it had been extended to approximately one-fourth of the total retail trade, notably in such lines as automobiles, furniture, pianos and radios, electrical appliances, machinery, clothing, and jewelry. During the war years, the federal government temporarily restricted the practice of installment selling; but with the elimination of war controls, the demands for consumer credit were renewed.

In practice, installment credit may extend from a period of a few months to two or three years, depending upon the nature of the product. Certain goods such as household appliances are usually sold on the basis of a 10 per cent down payment with successive monthly or weekly installments throughout the year. Other articles such as furs and clothing generally require a higher initial deposit in order to avoid the possibility of default, with consequent loss to the seller, because of the rapid depreciation and low repossession value of these commodities. Automobiles are usually financed by a 33⅓ per cent down payment, with the balance in 10 equal monthly installments.

The dealers who provide installment credit to their customers seldom are able to draw these funds from their own resources. To a certain extent, commercial banks are able to offer credit aid for this purpose. Several banks offer automobile, machinery, and household appliance loan plans which are arranged either directly with the consumer or through the dealer.

With the rapid rise in the volume of installment selling, however, finance companies have assumed the leading role in discounting retail installment paper and wholesale paper, particularly that arising from the sales of automobiles. The standard procedure is for the dealer or distributor to obtain a down payment in cash, with the balance in the form of a note or notes payable over a period of six months to two years. A formal contract of sale is drawn up involving either a chattel mortgage or a conditional bill of sale. The printed forms used and their special provisions vary with the type of commodity being financed, the policy of the bank or finance company, and the requirements of state laws.

Usually the finance company passes upon the buyer's credit application, makes arrangements for insurance of the commodity at the buyer's ex-

pense, and takes over the collateral security. Payments are made directly to the finance company. Under the so-called "recourse plan," the dealer endorses his customers' notes and is therefore contingently liable for their payments. On the "nonrecourse plan," the finance company assumes the entire risk of collection, and consequently the dealer suffers no losses in the event of default. A further variation includes a repurchase agreement, according to which the dealer agrees to buy back the repossessed article for an amount equivalent to the unpaid balance. Should the finance company fail to repossess the goods and deliver them in good condition to the dealer, it must bear the full loss.

Finance company charges for this discount service vary from 10 to 18 per cent of the selling price. This covers interest, insurance, collection, repossession, and general administrative costs. There is, however, very little uniformity in quotations for these financing services inasmuch as there is considerable variation in the risks assumed, the size of the contract, and the period of the loan.

It should be noted that the majority of finance companies secure credit through commercial banks, which buy commercial paper endorsed by these finance companies. The latter also raise funds through the sale of unsecured short-term notes to banks and commercial paper dealers and through the issuance of debentures or collateral-trust bonds and notes.

The consolidation movement in this field within recent years has resulted in the concentration of a large portion of the business in the hands of a few companies. Gradually, many of the old-line factoring companies were absorbed by the nonnotification finance companies which, in turn, diverted their resources on an increasing scale to the financing of installment sales. The Commercial Investment Trust Corporation and the Commercial Credit Company, for example, control a large share of the installment finance business in automobiles, household appliances, and machinery. They also lend on accounts receivable and through their subsidiaries probably control half of the factoring business in the United States.

Loan Companies. Institutions that specialize in loans to individuals or consumers sometimes call themselves "personal finance companies," "industrial banks," and "loan companies." They all operate in more or less the same manner, differing mainly with respect to the type of security that they require. Some demand chattel mortgages or salary assignments; others require no pledges whatsoever. The original Morris Plan banks make loans without collateral. The basis for a loan is the borrower's position and income. Small amounts are loaned on single-name promissory notes without endorsers, whereas larger sums require one or more comakers to the notes. Interest, usually at the rate of 6 per cent per annum, is deducted in advance and the borrower receives the net proceeds, *i.e.*, $94

on a $100 loan. Most banks make an additional service charge of 2 per cent or more, and some insure the life of the borrower for an extra fee. In general, the aggregate charges made by personal loan companies run as high as 2 or 3 per cent a month. The loan is repaid in weekly or monthly installments usually spread over a period of from 10 months to a year. Since interest is charged on an annual basis while the loan is repaid in installments, the borrower pays not 6 per cent but 12 per cent or more for the money that he actually uses. The higher rates quoted are for service charges. If the borrower fails to make regular payments, the loan company notifies the comakers of the notes and holds them secondarily liable. State laws provide for exemption of these lenders from the usual usury law restrictions. They are licensed by and subject to the supervision of the state banking departments.

Like the personal loans offered by commercial banks, such credit accommodations provide the final consumer with funds that enable him to make cash purchases and thus indirectly serve as a source of short-term credit for the retail trade.

Open-market Borrowing. In addition to direct credit accommodations afforded business by commercial banks and other lending agencies, an indirect extension of bank credit is made available to a select list of borrowers by means of the commercial paper system. Briefly, this is a method of borrowing through the issue of short-term negotiable instruments, chiefly unsecured promissory notes, which are sold in the open market, largely to commercial paper dealers. These dealers, in turn, maintain branches and distributive channels through which they sell the paper. Most of the buyers are banks which invest their surplus funds in this commercial paper.

These notes are issued by a very limited number of borrowers. Firms using this method of short-term financing are, because of their established reputation and high earnings record, regarded as the best of credit risks. Most borrowers of this type are concerns dealing in staple lines and capitalized at a quarter of a million dollars or more, and the majority of them have resources in excess of one million dollars. The notes are usually drawn to read "Pay to the order of ourselves" and are signed and endorsed in blank by the issuing company. Denominations range from $2,500 to more than $10,000, and maturities run from two to nine months. Other notes are endorsed, guaranteed, or protected by certain forms of collateral.

The chief advantage of open-market borrowing to firms that can avail themselves of this type of financing is the low rate at which substantial sums of money are borrowed. For many years, prime-name commercial paper with short maturities has been quoted at the rate of 1 per cent per annum or less.

A corollary advantage is that very large borrowings are made possible without the expense and inconvenience of opening several bank accounts. Both on the basis of managerial policy and in terms of legal restrictions, a given bank might be unable to supply a single interest with the amount of credit that could be obtained through open-market borrowing. With the growth in size of commercial banking institutions and the spread in branch and in chain banking, however, the advantages of open-market borrowing become less significant.

Questions and Problems

1. A bank advertisement stated "The well-informed businessman is familiar with the specifications of a good commercial loan." What are the general characteristics of a commercial loan? Give both the business and the banking aspects.

2. The use of the draft and trade acceptance in the United States is not so common as the open book account and the check. Account for the popularity of the open book account in American business. What important disadvantages characterize this system? What has held back the introduction of the trade acceptance in most lines?

3. Commercial paper is only as good as the promise of the debtor and should not be regarded as collateral or security. List the types of commercial paper in general use for short-time loans, and next to each mention the kinds of collateral that supply the lender with additional security. Describe the function and use of each type of collateral that you mentioned.

4. You are shipping some goods by railroad and receive a bill of lading. Explain in detail how you might use this instrument in order to obtain credit at your bank.

5. "It is usually cheaper to borrow at prevailing rates from a commercial bank than to accept short-term credit from a concern that sells to you on a 2% 10 days/Net 60 days basis." Explain the truth of this statement.

6. Contrast the short-term borrowing arrangements that might be sought by a poultry farmer, a wholesale chemical firm, and an automobile sales agency with respect to

a. Probable purpose of loan.

b. Length of time normally required.

c. Available sources of credit.

7. Mention two ratios that might be used by a credit manager in analyzing a firm's financial statements, and show what they are meant to reveal in the company's credit position.

8. What is a conditional sales agreement, and how is it used? For what classes of merchandise are installment sales especially recommended? Why is consumer credit not appropriate for all types of retail selling?

9. What is the factoring business? How does it differ from the nonnotification basis of accounts receivable financing offered by commercial banks and finance companies? Explain the difference between open-market borrowing and the use of the finance company as a source of short-term credit.

10. Commercial banks have expanded their activities into fields that were formerly exclusively the province of other types of financial institutions. What are examples of such banking services? What institutions traditionally offered these services? Why have commercial banks entered these branches of financing?

CHAPTER XXV

FOREIGN-TRADE FINANCING

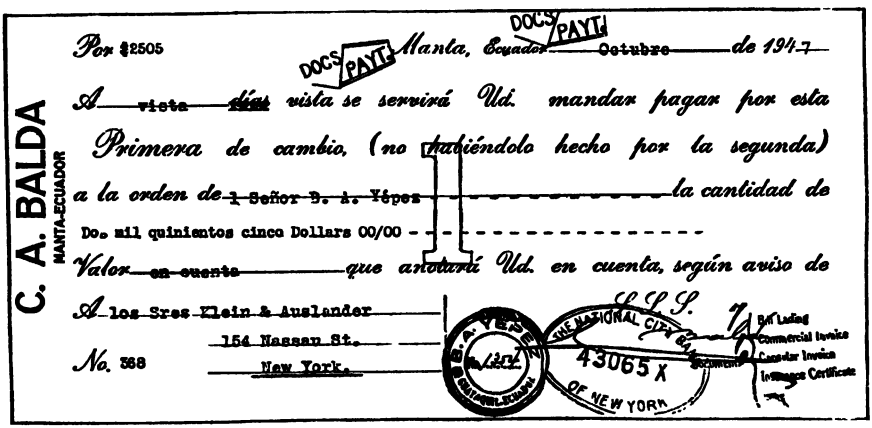
Characteristics of Foreign-trade Financing. Because of the possible risks in transactions involving the citizens of different countries, each with its own monetary standards, trading practices, languages, and laws, the basis for credit in foreign trade is not exactly the same as that found in domestic trading relations. Foreign-trade financing is far more dependent upon secured negotiable paper than is the case in the extension of short-term domestic credit. The majority of transactions are financed by means of drafts and acceptances drawn as either trade bills or bankers' bills—particularly the latter. The methods of financing vary considerably, however, with the terms of sale quoted by different firms and with the customary practices that have developed in some countries.

The open-book account, so widely used as a device in short-term financing of domestic trade, is therefore seldom employed in connection with foreign transactions except among the highest grade credit risks or in transactions between an American manufacturer and his branch plant or sales office abroad and between American and Canadian firms which have built up an almost domestic relationship. Sellers are reluctant to ship goods to distant lands when their only records consist of their own book entries and copies of bills of lading, receipting the shipments that they have made. In the event of a suit for claims, such records are difficult to defend even in a domestic court. The problems of presenting a case in a foreign court on the strength of such evidence would be still greater. The burden of this form of financing rests entirely upon the seller.

An arrangement is sometimes made (particularly during periods of monetary difficulties) for the buyer to render full payment or part payment in cash at the time of placing the order or else at the time of shipment. This goes to the opposite extreme of placing the burden of risk upon the buyer, for he must put full faith and confidence in the integrity of the foreign exporter. In trade with Canada, Cuba, and Mexico, such payments are often made by the buying firm simply by mailing a check drawn against its own bank account. Most overseas remittances are, however, effected by means of the purchase of sight drafts or cable transfers drawn by banks upon one of their correspondents abroad.

Neither open-book accounts nor advance payments are well suited to the requirements of foreign trade. Both are burdensome, to the exporters in the one case and the importers in the other, without providing any special advantages that could not be obtained by alternative financing arrangements.

Bills of Exchange. In most transactions in foreign trade, the seller or exporter takes the initiative in obtaining payment by drawing a draft or a bill of exchange for the amount of the invoice. This consists of a trade bill, drawn directly on the importer, or a banker's bill, drawn against some designated bank; it can be a sight draft or a time draft; it may be protected



Trade bill of exchange sight draft.

by documentary security; or it may be a "clean bill," *i.e.*, without documents attached. Finally, if it is a documentary bill, provision is made for the release of the shipping documents either against payment or against acceptance.

The commercial documents generally required in international trade include (1) negotiable ocean bills of lading, usually endorsed in blank, so as to convey full control of shipment; (2) commercial invoice, indicating type of shipment, quantities, prices, and terms; (3) consular invoice or certificate of origin, specifying class of merchandise, number of packages, weight, value, destination of shipment, and other details required by the importing country; (4) marine insurance certificate, protecting against marine and other insurable risks; and (5) shipper's export declaration, required by the U. S. Customs Service for all shipments to foreign countries or noncontiguous territories of the United States. Other documents such as packing lists and inspection certificates are sometimes included.

Trade Bills—Sight Drafts. The accompanying bill of exchange illustrates several features just described. The exporter, C. A. Balda of Manta,

Ecuador, drew a sight draft for $2,505 directly upon the importer Klein & Auslander of New York. The set of commercial documents (consisting of the bill of lading, commercial invoice, consular invoice, and marine insurance certificate) was attached. The bill was stamped "documents against payment," signifying that the papers would not be released until the draft had been honored in New York by the importer.

The bill was discounted in Ecuador, and C. A. Balda received the net proceeds immediately. The Ecuadorian bank then sent the draft and documents to the National City Bank of New York for collection. Upon arrival, the draft was presented to the importer for payment. The bank then released the bill of lading and the consular invoice which the importer needed in order to obtain the shipment. Thus the exporter was able to obtain immediate funds from his own bank, by discounting the bill and agreeing to stand liable in the event of default on the part of the importer; the importer did not have to make payment until the shipment had arrived in New York.

Trade Bills—Time Drafts. Instead of a sight draft, a time draft may be used. The latter is generally worded to be payable a specified number of days after presentation and acceptance or after a given date appearing on the instrument. This gives the importer more favorable credit terms if provision is made for the release of the documents upon acceptance. If, however, release is made against payment, no special credit advantage is obtained by the importer except postponement or delay in completion of the transaction. The goods in the latter case cannot be claimed until payment is made.

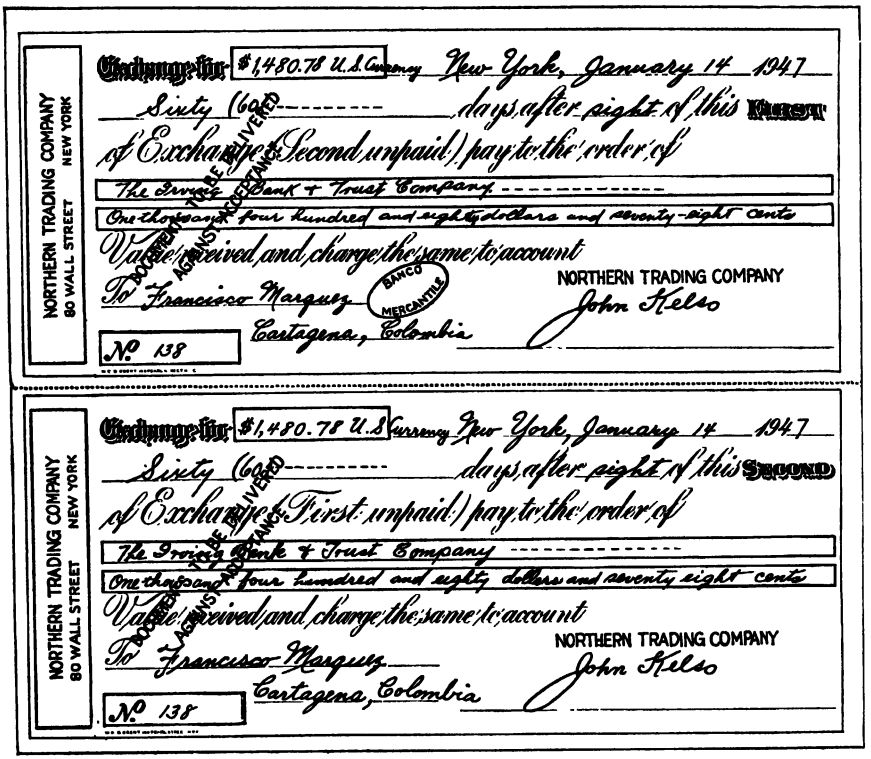
The bill of exchange on page 552 illustrates the use of a time bill with provision for the delivery of documents against acceptance. The "second of exchange" is a duplicate of the "first" and is sent in order to safeguard against the possibility of delays or losses. The first draft is often dispatched by international air mail and the duplicate by steamer mail. One instrument becomes worthless as soon as the other is honored.

The Northern Trading Company, having sold some railroad supplies to Francisco Marquez in Cartagena, Colombia, drew on him at 60 days' sight. The draft with documents attached was taken to the Irving Trust Company, where it was discounted. The Irving Trust Company then sent the draft, with documents attached, to its correspondent, the Banco Mercantil de Colombia in Cartagena. The Banco Mercantil presented the draft to Francisco Marquez, who, upon accepting it, received the documents that entitled him to the shipment.

Sixty days after the date of presentation, the Banco Mercantil presented the draft to Marquez for payment and notified the Irving Trust Company in New York that payment had been made. The Irving Trust Company

charged the Northern Trading Company with the interest and collection charges.

Often in discounting a draft, a bank gives the exporter only 80 per cent or less of the value of the shipment. Therefore, when the draft is finally



Trade bill of exchange—time draft, with provision for delivery of documents against acceptance.

paid, the interest and collection charges are deducted from the balance due him.

Bills of exchange arising in foreign-trade transactions are known as "commercial" or "trade bills," and their selling value takes into account the credit ratings of both drawer and drawee. Should the credit standing of either one be unknown or unfavorable, the exporter would have difficulty in discounting his drafts or might be charged a higher rate.

Frequently, instead of discounting the bill, the bank advances a loan to the exporter with the bill, plus documents, as security. When the credit position of the merchant is not well known, such loans are sometimes as low as 25 or 20 per cent of the face value of the draft. If the exporter is not interested in discounting his draft or in borrowing against it, he

FORM D

THE NATIONAL CITY BANK OF NEW YORK
55 WALL STREET

IRREVOCABLE CREDIT NO. 00000
$8300.-- U.S.CY.
A AND B COMPANY
15 LA CALLE BLANCO
MONTEVIDEO
URUGUAY

NEW YORK 15, N. Y. JULY 3, 1945

ALL DRAFTS DRAWN MUST BE MARKED:
DRAWN UNDER CREDIT NO. 00000

DEAR SIRS:

WE HEREBY AUTHORIZE YOU TO VALUE ON THE NATIONAL CITY BANK OF NEW YORK, NEW YORK

FOR ACCOUNT OF X.Y.Z. WOOL COMPANY, 31 RIVER DRIVE, CHICAGO, ILLINOIS
UP TO THE AGGREGATE AMOUNT OF EIGHT THOUSAND THREE HUNDRED DOLLARS,U.S.CY.
AVAILABLE BY YOUR DRAFTS AT NINETY DAYS SIGHT - - - - - - FOR 100% - INVOICE COST
TO BE ACCOMPANIED BY CONSULAR INVOICE - - - - - - FULL SET ON BOARD BILLS OF LADING
DRAWN TO THE ORDER OF THE NATIONAL CITY BANK OF NEW YORK, SHOWING FREIGHT PREPAID
NOTIFY X.Y.Z. WOOL COMPANY, 31 RIVER DRIVE, CHICAGO, ILL.
AND COMMERCIAL INVOICE EVIDENCING SHIPMENT OF WOOL C&F NEW YORK DURING AUGUST TO NEW
YORK CITY, NEW YORK.
THE ON BOARD ENDORSEMENT APPEARING ON THE BILLS OF LADING MUST BE SIGNED BY
THE STEAMSHIP COMPANY OR ITS AGENT.

COPY

MARINE AND WAR RISK - - INSURANCE COVERED BY BUYER
BILLS OF LADING MUST BE DATED [redacted] DURING PERIOD INDICATED
BILLS OF EXCHANGE MUST BE NEGOTIATED NOT LATER THAN SEPTEMBER 15, 1945
A COPY OF THE CONSULAR INVOICE, COMMERCIAL INVOICE, AND ONE BILL OF LADING MUST BE FORWARDED
BY FIRST MAIL DIRECT TO THE NATIONAL CITY BANK OF NEW YORK, NEW YORK
AND A STATEMENT TO THAT EFFECT MUST BE ATTACHED TO THE DRAFT. ALL REMAINING DOCUMENTS MUST
ACCOMPANY THE DRAFT.

WE HEREBY AGREE WITH THE DRAWERS, ENDORSERS AND BONA FIDE HOLDERS OF DRAFTS DRAWN UNDER
AND IN COMPLIANCE WITH THE TERMS OF THIS CREDIT THAT THE SAME SHALL BE DULY HONORED ON DUE
PRESENTATION TO THE DRAWEE.

YOURS VERY TRULY,

THE NATIONAL CITY BANK OF NEW YORK

COM. BANK REV. 12-41

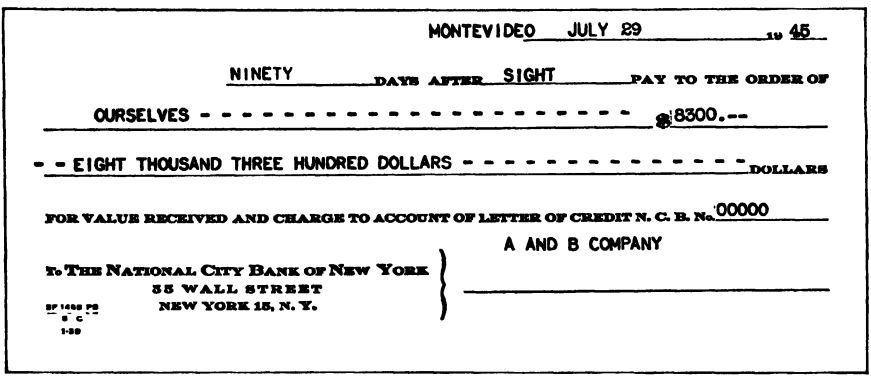
Irrevocable import letter of credit. (*Courtesy of National City Bank of New York.*)

simply deposits it, together with the necessary documents, and instructs his bank to send it abroad for collection. A nominal fee is charged for this service.

Bankers' Bills. When a draft is drawn on a bank that has previously agreed to accept it, there is little question of its being honored. Such a

draft is known as a "bankers' bill," and not only does it find a ready market, but it can be sold at more favorable rates. Obviously if exporters could draw on banks instead of on merchants, they could get better discount terms for their bills and thus realize more from the sale of their goods. To accomplish this, the commercial letter of credit has been devised.

Letters of Credit. The importer makes possible the substitution of a bankers' bill for a trade bill by applying to his bank for a commercial letter of credit. This is an instrument notifying the exporter that the importer's bank will agree to honor drafts drawn against it for the account of the


MONTEVIDEO JULY 29 19 45

NINETY DAYS AFTER SIGHT PAY TO THE ORDER OF

OURSELVES - $8300.--

- - EIGHT THOUSAND THREE HUNDRED DOLLARS - - - - - - - - - - - - - - DOLLARS

FOR VALUE RECEIVED AND CHARGE TO ACCOUNT OF LETTER OF CREDIT N. C. B. No. 00000

A AND B COMPANY

To THE NATIONAL CITY BANK OF NEW YORK
55 WALL STREET
NEW YORK 15, N. Y.

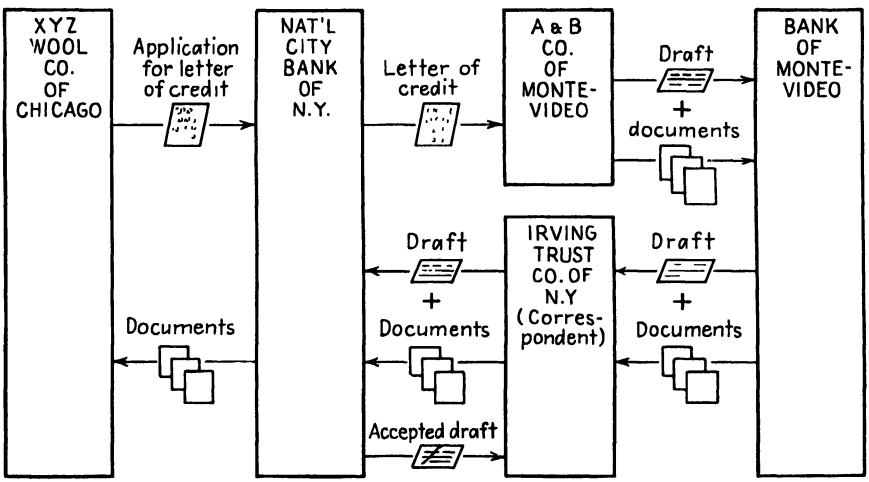
Bankers' bill, drawn under an irrevocable import letter of credit.

importer. American banks handle several varieties of these letters of credit. *Import letters of credit* are issued on behalf of American importers, providing foreign exporters with legal authority to draw drafts against specified American banks. *Export letters of credit* arise when exporters in the United States are provided with credits by foreign buyers through some designated bank in this country. Either the latter is "confirmed" (in which case the American bank guarantees it and acts as a principal), or it may be solely an "advice of credit" conveying no responsibility on the part of the American bank, except as intermediary; it may be irrevocable or revocable (*i.e.*, legally binding or subject to withdrawal or cancellation); and it might authorize payment in dollars or in some specified foreign currency.

The illustration on page 553 is an example of an irrevocable import letter of credit. The National City Bank of New York authorizes the A and B Company in Montevideo to draw at 90 days' sight against it for the account of the XYZ wool company of Chicago, to cover a shipment of wool up to an aggregate amount of $8,300 in United States currency. The foreign exporter, after shipping the goods and obtaining his documents, draws a draft on the New York bank (see illustration above) that has

issued the letter of credit. He presents the bill, together with the documents and the letter, to his own bank. His bank will then discount or buy the bill and forward the papers to an American correspondent for acceptance. Upon being honored by the New York bank on which it was drawn, the draft becomes a banker's acceptance and is either held until maturity or sold in the open market as "prime paper" by the correspondent bank. The documents are released to the importer, who is obligated to make payment to his bank according to the terms of the letter-of-credit agreement that he made at the start.

The diagram below shows the several steps involved in the foregoing transactions.



An example of a confirmed, irrevocable export letter of credit appears on page 556. In this case the Time Manufacturing Company applied for a letter of credit to its bank, the Hour Bank and Trust Company in Shanghai. The latter made arrangements through the National City Bank for the handling of this $5,000 credit on a confirmed basis. As a result, the New York exporter (Dough and Company) was empowered to draw sight drafts in dollars against a New York bank and hence to receive immediate payment as soon as all shipping papers were in order.

The same transaction, on an unconfirmed basis, involves the issuance by the American bank of a correspondent's irrevocable straight credit. In this instance, the draft must be drawn against the Hour Bank and Trust Company of Shanghai, and the National City Bank will serve as correspondent in forwarding it to China for collection.

A variation from this practice, particularly in relation to the Far Eastern trade, is what is known as the *authority to purchase.* This is a letter.

usually addressed by a foreign bank to its correspondent abroad (*e.g.*, in the United States), authorizing the latter to buy or negotiate drafts drawn by an American exporter on a specified Far Eastern importer. In other

THE NATIONAL CITY BANK OF NEW YORK
55 WALL STREET
NEW YORK 15, N. Y.

CONFIRMED IRREVOCABLE STRAIGHT CREDIT — NEW YORK JULY 4, 1947

DOUGH & COMPANY
41 SMITH STREET
NEW YORK 4, NEW YORK

ALL DRAFTS DRAWN MUST BE MARKED: DRAWN AS PER ADVICE CON. 999999

DEAR SIRS:
WE ARE INSTRUCTED BY HOUR BANK & TRUST COMPANY, SHANGHAI, CHINA

TO ADVISE YOU THAT THEY HAVE OPENED THEIR IRREVOCABLE CREDIT IN YOUR FAVOR FOR ACCOUNT OF
TIME MANUFACTURING COMPANY, SHANGHAI, CHINA
UNDER THEIR CREDIT No. 4112 FOR A SUM OR SUMS NOT EXCEEDING A TOTAL OF $5,000.00
(FIVE THOUSAND DOLLARS)

AVAILABLE BY YOUR DRAFTS AT SIGHT - - - - ON US

TO BE ACCOMPANIED BY SIGNED COMMERCIAL INVOICE IN TRIPLICATE
FULL SET ON BOARD OCEAN BILLS OF LADING CONSIGNED
TO OPENING BANK, MARKED NOTIFY BUYER, DATED LATEST FEBRUARY 30, 1948
LEGALIZED CONSULAR INVOICE
MARINE AND WAR RISK INSURANCE POLICY OR CERTIFICATE

SPECIMEN

EVIDENCING SHIPMENT OF WATCHES AND CLOCKS FROM NEW YORK TO SHANGHAI
PART SHIPMENTS PERMITTED

EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, THIS ADVICE IS SUBJECT TO THE "UNIFORM CUSTOMS AND PRACTICE FOR COMMERCIAL DOCUMENTARY CREDITS" (FIXED BY THE SEVENTH CONGRESS OF THE INTERNATIONAL CHAMBER OF COMMERCE) AND TO THE RELATIVE GUIDING PROVISIONS, ALL AS ADOPTED BY CERTAIN BANKS AND OTHER CONCERNS IN THE U S OF A.

THE ABOVE MENTIONED CORRESPONDENT ENGAGES WITH YOU THAT ALL DRAFTS DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS CREDIT WILL BE DULY HONORED ON DELIVERY OF DOCUMENTS AS SPECIFIED IF PRESENTED AT THIS OFFICE ON OR BEFORE FEBRUARY 30, 1948
WE CONFIRM THE CREDIT AND THEREBY UNDERTAKE THAT ALL DRAFTS DRAWN AND PRESENTED AS ABOVE SPECIFIED WILL BE DULY HONORED BY US.

YOURS VERY TRULY,
THE NATIONAL CITY BANK OF NEW YORK

COM. 511 8 PARTS REV. OCT. 41
S. C.

A confirmed, irrevocable export letter of credit. (*Courtesy of National City Bank of New York.*)

words, the importer's bank in the Orient is endorsing the former's credit standing. Upon shipping the goods, the exporter then draws a trade bill on the importer, presents the draft and documents to the bank, and obtains payment under the terms of the authority. The basic difference between this method and the procedure under a commercial letter of credit is that

the latter gives rise to bankers' bills rather than trade bills. Moreover, the authority to purchase provides no guarantee of payment of drafts drawn thereunder—the exporter remaining liable until the importer has honored the bill.

Foreign Exchange. Thus far in the discussion, attention has been focused solely upon the instruments used and the mechanics of effecting payment in international trade. Only passing reference has been given to the important differences in the currencies among nations. Each nation has its own banking and monetary system; and in order that people in different countries might do business with one another (unless transactions are conducted on a strict barter basis), it becomes necessary to provide some means of converting monetary claims established in one nation into the currency values of other nations.

Exporters and importers are naturally inclined to think in terms of their own currencies. Thus, an American exporter, whether quoting prices in pesos or lire, expects to receive payments in American dollars. Similarly, American importers, although settling their obligations in a foreign currency, calculate the dollar value of such transactions. How much does the importer have to pay for his sterling exchange? Or, when the exporter draws upon his customer in England, how much will the latter have to pay for dollars? What determines these foreign-exchange rates?

Foreign-exchange rates are merely quotations of the number of units of the money of some foreign country that can be bought with domestic funds. In other words, the quotation of the Mexican peso at 20 cts. in New York means that American merchants buying or selling in terms of pesos are trading in money units equivalent in value at that time to 20 cts. in American money. It also signifies that an American wishing to establish a credit of 1,000 pesos in Mexico must pay approximately $200 for the exchange.

There is at present no exchange floor where trading in foreign currencies takes place. Yet the foreign-exchange market is world-wide in character—all the large financial centers of the world being in constant communication with one another in the quotation of rates. Most of the buying and selling is conducted by commercial banks, investment bankers, and foreign-exchange brokers, for their own account or for individuals and corporations that receive payments from abroad or wish to settle foreign obligations. So close is the quotation of rates among these institutions that for any given time, there is practically one market quotation for any single foreign-exchange facility. Any discrepancies are almost immediately corrected by arbitrage trading which takes advantage of the differences.

Quotations vary, however, with respect to accommodations offered. Instead of a single rate of exchange for each country there is a variety of rates, depending upon the type of service demanded.

Bankers' demand bills are drawn against credits abroad for the accounts of the banks' customers. Foreign exchange may also be bought or sold by telegraph or cable. Such transfers are usually drawn by banks on their foreign branches or correspondents. They are not strictly bills of exchange but have all the effects of bills, the fundamental difference being that the order is telegraphed rather than written, and payments can therefore be made without delay.

Cables command the highest price of all exchange. Their quick transmission renders them a very useful means of covering sight or time bills on the day of their maturity. Not only is this advantageous in that the transfer of funds is effected at once, but it also eliminates the risks due to possible fluctuations in exchange.

Commercial rates are quoted on trade bills which bankers will buy. The highest rates are offered for demand drafts. The lower rates on the 60- and 90-day paper allow for various charges including interest on the funds for the time interval involved.

Fluctuations in Exchange Rates. The American importer who has to meet a draft in pounds or francs will arrange with a bank for a foreign credit for the amount due. In similar fashion, the exporter who draws a draft against a customer or a bank will sell this instrument at prevailing rates. The price that he obtains will be slightly influenced by the terms according to which the instrument is drawn. A more important influence upon the rate will be the state of the international market and the currency situations in the countries in which the transaction is being arranged. The rates sometimes fluctuate widely—resulting either in large extra profits or in heavy losses.

An importer, when placing his order for goods, calculates the cost of merchandise on the basis of the price in foreign currency at the current rate of exchange. If the dollar should fall before payment is effected, the cost of the goods would rise proportionately, since the American importer has to pay more for foreign exchange. The importer can insure himself against changes in the cost of foreign currency by purchasing bills of exchange maturing at approximately the time that his drafts will be due and payable. The increased cost of goods due to a rise in foreign exchange would be offset by the increase in the value of the exchange purchased as a hedge. This is known as forward or future exchange.

The rates quoted in the United States depend mainly upon the domestic demand for foreign exchange and the demand on the part of foreigners for dollars (which is equivalent to a supply of foreign exchange). The following newspaper report of foreign-exchange rates in New York is typical of the daily quotations of some of the foreign currencies expressed in American dollars.

FOREIGN EXCHANGE

Monday, June 23, 1947

	High.	Low.	Final.	Friday's Final.
STERLING	$4.02⅜	$4.02¾	$4.02¾	$4.02¾
CANADA				
(free)	91.69	91.50	91.62	91.62

Europe

	Monday.	Friday.	Week Ago.	Year Ago.
STERLING—Basis: $4.03 per pound, rate under International Monetary Fund.				
Cables	4.02⅜	4.02⅜	4.02⅜	4.03½
30 days'	4.02 11/16	4 02 11/16	4.02⅝	..
60 days'	4 01⅞	4.01⅞	4.02⅛	....
90 days'	4.01 11/16	4.01⅛	4.01⅜	.
BELGIUM—Basis: 2.28167 cents per franc, rate under International Monetary Fund.				
Cables	2.29	2.29	2.28¾	2.29
DENMARK—Basis: 20.837 cents per krone, rate under International Monetary Fund.				
Cables	20 92	20.92	20 92	...
FRANCE—Basis: 0.8395 cents per franc, rate under International Monetary Fund.				
Cables	0.84½	0.84½	0.84½	0.84
HOLLAND—Basis: 37 695 cents per guilder, rate under International Monetary Fund.				
Cables	37.80	37.80	37.80	..
NORWAY—Basis: 20.15 cents per krone, rate under International Monetary Fund.				
Cables	20.22	20.22	20.22	....
PORTUGAL—Basis: 7.49 cents per escudo.				
Cables	4.03½	4.03½	4.03½	....
SWEDEN—45 37 cents per krona.				
Cables	27.85	27.85	27.85	23.86
SWITZERLAND—Parity changed Sept. 28, 1936; new value not yet determined.				
Com'l franc	23 40	23.40	23.40	23.40
Free franc	26.15	26 37	25.94	.

Other Continents

AUSTRALIA—Basis: $4.03 per pound, rate under International Monetary Fund.				
Cables	3.23½	3.23½	3.23½	3.23½
NEW ZEALAND—Basis: $4.03 per pound, rate under International Monetary Fund.				
Cables	3.24½	3.24½	3.24½	3.25
SOUTH AFRICA—Basis: $4.03 per pound, rate under International Monetary Fund.				
Cables	4.02⅞	4 02⅞	4.02⅞	4.03½

Far East

HONG KONG—Basis: 25.1875 cents per Hong Kong dollar.				
Cables	25.20	25.20	25.20	.
INDIA (Calcutta)—Basis: 30.225 cents per rupee, rate under International Monetary Fund.				
Cables	30.22	30.20	30.20	30.33

Latin America

ARGENTINA—Par 71.8724 cents per Argentine paper peso.				
Cables	24.45	24.45	24.45	24.60
BRAZIL—Par 6 06 cents per paper cruzeiro.				
Cables (free)	5.46	5.46	5.46	5.25
CHILE—Basis: 3.225 cents per peso, rate under International Monetary Fund.				
Cables	4 00	4.00	4.00	4.00
COLOMBIA—Par 57 14 cents per gold peso.				
Cables (offcl)	58.00	58 00	58.00	58.50
CUBA—Par $1 per silver peso.				
Cables	100.12	100.12	100.12	100.12
MEXICO—Basis 20 5973 cents per peso, rate under International Monetary Fund.				
Cables	20.70	20 70	20.70	20.70
PERU—Basis: 15 3846 cents per sol, rate under International Monetary Fund				
Cables	9.50	9.50	9.50	15 75
URUGUAY—Par 65.83 cents per peso.				
Inland	56.40	56.40	56.40	56 50
VENEZUELA—Par 32 67 cents per bolivar.				
Cables	30.15	30.15	30 15	30.15

Note: In the quotations above the sterling currencies are in dollars and decimals of a dollar, others represent cents and decimals of a cent.

Each currency is quoted in terms of a par value or basis rate under the International Monetary Fund. This international organization, established under the Bretton Woods agreements which became effective in December, 1945, has as its primary purpose the promotion of international monetary cooperation and exchange stability. As a first step in this direction, the Fund adopted a common denominator in terms of a gold standard base, the basis value of the currency of each member nation being expressed in terms of the United States dollar of the weight and fineness in effect on July 1, 1944.

The actual market rates will differ, however, from the basis, depending upon movements in foreign trade. One of the tasks of the Fund is to use its resources either to maintain these rates or to determine new ones that

will more adequately reflect important changes in the flow of international payments.

The day-to-day rates at which foreign exchange is traded are determined, like other prices, in the competitive money markets of the world.

Many influences are at work in affecting bids and offers. The principal classes of factors other than speculation, which influence the demand for and supply of foreign exchange in New York, are summarized in the following outline:[1]

Supply	Demand
1. Trade.	1. Trade.
Exports of commodities.	Imports of commodities.
2. Capital.	2. Capital.
Sale abroad of American securities.	American purchase of foreign securities.
Repurchase by foreigners of foreign securities held in United States.	American repurchase of American securities held abroad.
Payment of principal of foreign securities held in United States.	Payment of principal of American securities held abroad.
Payment of interest and dividends on foreign securities held in United States.	Payment of interest and dividends on American securities held abroad.
Placement of short-term loans by foreigners in the American money market.	Placement of short-term loans by Americans in foreign money markets.
Foreign investment in American properties.	American investment in foreign properties.
3. Miscellaneous.	3. Miscellaneous.
Commercial.	Commercial.
Shipping, insurance, and other services rendered by Americans to foreigners.	Shipping, insurance, and other services rendered by foreigners to Americans.
Noncommercial.	Noncommercial.
Expenditures by foreign tourists in the United States.	Expenditures of American tourists abroad.
Remittances by foreigners to friends and relatives in the United States.	Remittances by immigrants and others in the United States to friends and relatives abroad.

The most important items affecting supply and demand for foreign exchange are the commodity imports and exports. These are known as the *visible items*. The difference between a country's imports and exports is the *balance of trade*. When exports exceed imports, the country is said to have a favorable balance of trade. The balance of trade, favorable or unfavorable, is offset by the *invisible items*. These include services, loans, investments, tourist expenditures, and many other transactions affecting the demand for foreign exchange or dollar exchange. It is axiomatic in

[1] STEINER, W. H., and E. SHAPIRO, "Money and Banking," p. 683, Holt, 1941.

foreign-trade relations that the people of one nation can draw foreign-exchange instruments only in amounts equivalent to the claims that they collectively succeed in establishing (whether through exports of commodities or services, specie shipments, or loans) in the rest of the world.

The demand for dollars or for foreign exchange is influenced to an important extent by speculation in exchange. Speculative movements result from rumors, panics, loss of confidence in a country's financial or political stability, or the return of confidence when a country takes steps to stabilize its currency. Speculators try to anticipate the effects of these movements by buying or selling foreign exchange in order to profit from the fluctuations in rates.

Another factor to consider in the determination of these rates is that the market in the currencies of a good many nations is not free. Widespread controls have been introduced in order to direct the channels of trade and the flow of payments in a manner most advantageous politically to the governments wielding these powers. Such exchange controls, implying a virtual government monopoly over all bills of exchange issued against foreign balances, result in the quotation of "official rates." In most of these countries, because of attempts to maintain these rates artificially, an illegal or black market tends to flourish, producing exchange transactions at depreciated rates and undermining world-exchange stability.

Questions and Problems

1. Evaluate the use of accounts receivable, sight drafts, and time drafts in foreign trade.

2. Describe the financial arrangements and collateral security used in connection with a shipment from New York to a dealer in Sweden. Be specific.

3. In most types of foreign-trade financing, the bill of exchange is accompanied by a full set of documents. Enumerate the documents used in a foreign transaction, and give the function of each. Which of these is the "keystone," or the most important?

4. Discuss the function and purpose of a letter of credit. Why is a time draft, drawn under an export letter of credit, usually of greater advantage, both to importer and exporter, than most other methods of financing foreign-trade transactions?

5. The American Woolen Company opens a letter of credit through a New York bank to finance a shipment of wool from Melbourne, Australia. By means of a diagram, trace the steps through which this transaction is completed.

6. In a free market, rates of exchange are determined by supply and demand. What factors create a supply of or a demand for foreign exchange? Differentiate between visible and invisible items in international payments.

7. If the dollar value of the foreign-exchange rate quotation of pesos in New York were to rise, what effect would this produce on the business of American exporters *vs.* American importers in their trade with Chile?

8. Most foreign exchange is subject to varying types of control. What are some of the controls exercised by governments that interfere with the free movements of

foreign exchange? Give reasons for these controls and their effect upon international trade.

9. Show that if countries had free access to gold supplies, gold would act as a common denominator in stabilizing foreign exchange. What is a gold-exchange standard?

10. Show that stable foreign-exchange rates are essential for world trade. How does the International Monetary Fund serve to stabilize foreign exchange?

Part VIII

PROBLEMS IN TAXATION AND INSURANCE

CHAPTER XXVI

TAXATION OF BUSINESS

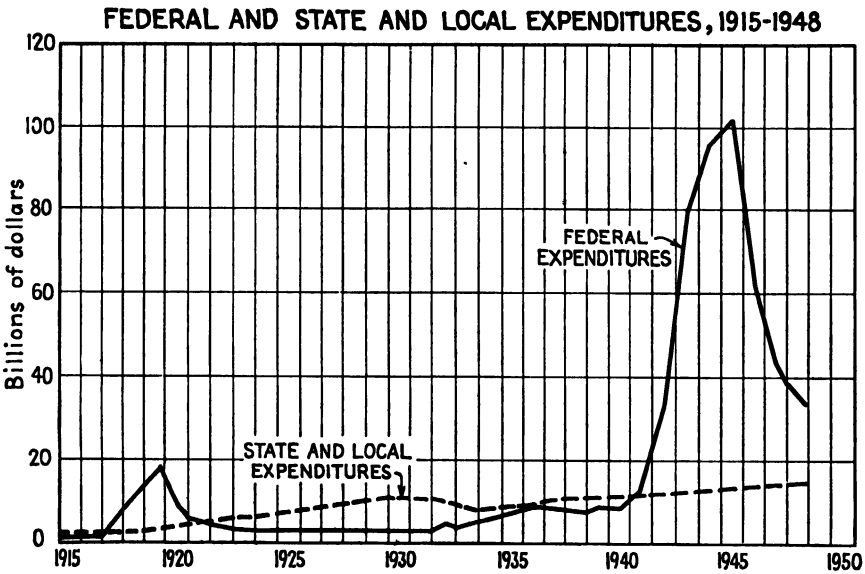
The Role of Government. Businessmen look to the government for national defense, the preservation of internal order, the guarantee of property rights, the enforcement of contracts, and the protection of life and property. They seek guidance and help from the government in developing the resources of the nation, in constructing public improvements, in extending markets, in regulating and controlling production and prices, in adjusting disputes, in obtaining credit, and in solving countless problems that arise in industry. The government is thus a stimulative and guiding element in the economy, facilitating and complementing the efforts of business enterprise. This calls for vast sums of money, which must be provided largely through the collection of taxes levied upon business and private individuals.

The role of the government in raising revenues necessary to finance these functions is not popular. For many years, it has been a general practice to list among the unfavorable developments in business "the burden of additional taxation." Editors in every part of the nation call attention to the increasing costs of government and to the need for economy. Business leaders in general decry excessive taxation which, they agree, is one reason "why times are hard." Some of these complaints against mounting public expenditures come from those who resent what they regard as an undue extension of the scope of government. On the other hand, there are critics who, while objecting vigorously to the rising costs of government, are just as adamant about retaining or even expanding the particular government services that interest them. It is, of course, impossible for organized governments to make heavy disbursements without having correspondingly large revenues. In a business economy, the public purse cannot be tapped indefinitely for expenditures in connection with desired economic and social programs unless it is filled with revenues derived from private sources.

That the present generation has seen a significant increase in the cost of government is clearly shown in the chart on page 566 relating to federal, state, and local governmental expenditures.

Federal disbursements during this period were concerned largely with the staggering costs of economic depression and war. Normal peacetime

appropriations are for such measures as public works (including the construction of public buildings, housing projects, highways, river and harbor works; flood control; and reclamation projects), aids to agriculture, and social security payments and for the operation of established federal departments and agencies. However, these expenditures are dwarfed by continuing high federal costs related to the national defense, plus accumulated burdens of past wars and depressions. The latter include outlays for

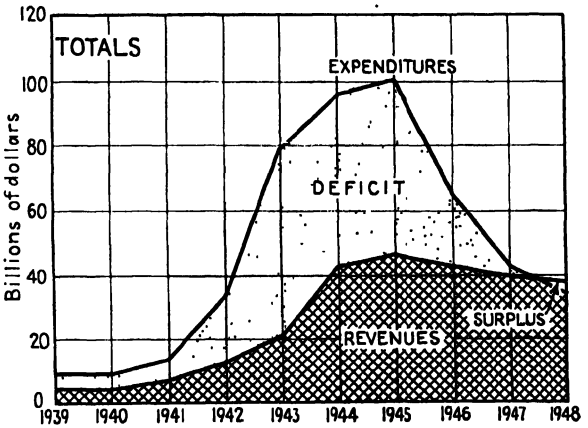


veterans' pensions and benefits, interest on the public debt, and debt retirement.

State and local expenditures are mainly for education, highways, charities, hospitals, and correction. Next in line come such services as police and fire protection, the care of streets, health and sanitation, water supply, and sewage disposal. Interest on the public debt is also a heavy charge, particularly in the larger cities where provision for debt service ordinarily requires from one-tenth to one-fifth of the total budgetary allowance.

Unlike the private individual, who, in drawing up a budget, begins with a fixed or approximate income and then plans his expenditures accordingly, governmental budgets usually start with estimated expenditures. Revenues are then sought to balance these costs. If the estimated income falls short of the proposed expenditures, economies have to be effected or new sources of income must be tapped. The only alternative is to raise funds by means of loans—which is merely a postponed form of revenue collection. Either method will directly or indirectly influence business. Taxes,

resulting in increased burdens upon the community, will be borne in part by business; loans, particularly if they are extensive, compete with private industry for available capital funds and add further to government costs because of financing charges. The following chart reveals the extent of this difference between federal receipts and expenditures for a number of years:



Federal expenditures, revenues, and deficits. (*Data from the National Industrial Conference Board.*)

Nature of Taxation. A tax is a compulsory levy by the government for defraying the costs of public functions. It is in no respect a voluntary contribution, nor need there be any connection between what an individual or corporation pays and what is received in direct benefits from the state. It is an enforced payment without anything specific being received in exchange.

Since the primary purpose of taxation is to raise revenue, the essential test of a tax from the standpoint of the government is the adequacy of its yield. But many other factors must be considered in judging the desirability or soundness of a tax system. In addition to providing revenue, taxes also exert broad influences over production, consumption, and distribution. Because of this, they are frequently used as measures designed for regulation or control. Liquor taxes, protective tariffs, and excess profits taxes, for example, obviously involve elements of social control and are not solely revenue measures.

From the *fiscal* standpoint, the measurement of productivity is supplemented by tests for elasticity and stability; *i.e.*, aside from yielding adequate returns, the tax system must have the capacity to respond quickly to changes in demand for funds and to maintain a stable flow of revenue. Then come a series of *administrative* tests: economy or efficiency in collection; sim-

plicity, so as to be easily understandable; certainty, so that both taxpayers and tax officials know when each tax is due and how it is computed; and convenience as to time, place, and manner of payment. In terms of *economic* and *social* considerations, several other criteria are applied. First is that of equity; *i.e.*, the burdens should be distributed on a fair or just basis. This involves a degree of universality, so that exemptions and exceptions are definite and are clearly defensible in the public interest. It also necessitates an approach to uniformity of levy upon like classes. This does not imply absolute equality, but rather relative equality of burden. Although this is frequently achieved through a distribution of burdens on the basis of estimated benefits, greater justice is secured through adjustment of taxes according to individual abilities to pay. The poor, the sick, the aged, and the unemployed cost society billions of dollars annually—yet they would not be expected to contribute the large sums required to care for them.

Proportional taxation seeks to achieve the goal of uniformity of burdens by imposing the same tax rate upon all. A small store appraised at $8,000 pays the same real property tax rate of, say, 3 per cent as an office building valued at $15,000,000. *Progressive taxation* proceeds a step further, on the assumption that ability to pay taxes increases with the growth in size of the resources of the taxpayer. Tax rates rise as the taxable base expands. Federal income and inheritance taxes are computed in this way. A person with a high income may pay an average rate of 50 per cent in income taxes, whereas one with lower income might be required to pay only 20 per cent. *Regressive taxation* has the reverse effect, with the tax rates becoming lower as the base increases. Capital stock taxes are sometimes of this character, with diminishing rates applicable to corporations with larger capitalizations.

Taxes on Business. It is noteworthy that in the collection of public revenues, government bodies depend to a large extent upon industrial organizations, particularly corporate units. The largest and most important group of taxpayers are the organized industries. It is upon them that the greatest number and variety of tax levies are imposed.

A survey [1] concerning the cost to business concerns of compliance with tax laws revealed that a group of 163 corporations filed an aggregate of 31,100 primary tax returns in one year. Of these, 6,368 were for federal and 24,732 were for state and local taxes. This is an average of 39 federal and 152 state and local primary returns for each corporation. In addition, the group filed nearly 160,000 informational and other reports to the tax officials, *i.e.*, approximately 1,000 for each corporation.

[1] Conducted by Prof. Robert M. Haig for the Council for Research in the Social Sciences of Columbia University.

There is no such thing as a general business tax on all business organizations, incorporated and unincorporated, and applying to all classes of industry. Instead, there is a wide assortment of federal, state, and local taxes applicable to corporations, as well as miscellaneous license taxes and excises on special classes of business or products. Furthermore, a number of general revenue measures imposed upon individuals or payable by the owners of property also apply to business establishments.

Some of these taxes are levied directly upon business as a taxable unit. Thus, federal taxes on corporation net income, state franchise taxes, and local property taxes on factories, store buildings, and inventories are expected to fall upon business establishments themselves. On the other hand, employee income taxes withheld at source by employers, federal excise taxes, and state and local sales taxes are regarded as revenues from other taxpayers that are collected through business organizations.

Impact vs. Incidence. Impact, in the language of public finance, denotes the imposition of the tax upon the person or company that pays it in the first instance. It is recognized that through a process of transfer known as "shifting," the ultimate settlement or "incidence" of the tax burden may be upon an entirely different set of individuals from those from whom the taxes were collected originally. The original taxpayer who turns the revenue over to the government is not necessarily the one who assumes the burden of supporting the government.

It has been said that [1]

> . . . the average person thinks that if the tax collector never calls upon him that he, personally, does not pay any taxes—he fools himself, or he allows others to fool him, because every time he buys anything he pays his share of the tax bill of the nation. If he lives in a house, wears clothes, eats food, travels from one place to another, buys a newspaper, goes to the movies, in fact, spends money in any way, he cannot help paying his share of the taxes which Government lays on property and industry. . . . It must be so because . . . industry cannot pay that . . . tax bill out of its own pocket. The only way it can get such a huge sum of money to pay the Government is by adding it to the cost of what it sells, whatever that may be. . . .

However, this process of shifting the tax is not altogether automatic; in fact there are many economic obstacles of such a character as to make this transfer of the tax burden virtually impossible in some instances. Were this not so, the paradoxical result would be that everyone but the original taxpayers would be bearing the tax burdens.

It is because of the variation in the diffusion process that so many forms of taxation have been devised. Some of these imposts have been placed

[1] Benjamin Rusk, president, Insurance Company of North America.

upon individuals or groups of individuals with the express purpose of making them bear a share of the cost of supporting the government; others have been levied with the full expectation on the part of the lawmakers that they will be shifted in such a way as to fall indirectly upon the shoulders of others. The net effect of such legislation is intended to provide for a collection of public revenues from the broadest possible base.

Nevertheless, the tax systems of the country have been so developed that the one upon whom the impact of the tax falls is frequently expected to keep records, prepare calculations, and make such adjustments as will facilitate the efficient administration of the various fiscal measures. Regardless of the theoretical implications that a given tax may have, from the standpoint of "ultimate burdens," the very real problems that the taxpayer faces are the determination of his exact taxable status, the requirements of the tax laws, the possible adjustments of his affairs so as to allow for the tax, and the penalties imposed.

To what extent is industry concerned with these matters? In other words, from the standpoint of impact of the tax alone, is the tax problem a business problem? The answer is yes—and to an ever-increasing degree. As organized business, particularly in the form of corporations, continues to absorb a greater and greater share of the capital of the nation and hence to assume the function of providing the bulk of the national income, it will also become answerable for a larger proportion of the taxes. This will be so (1) from the point of view of justification of such added burdens on the grounds of special privileges received or of ability to pay and (2) from the standpoint of administrative convenience. With reference to this latter point, the collection of taxes from a few responsible units that can be carefully scrutinized is naturally far simpler than is the attempt to reach thousands of individuals by a more general form of levy.

The possibilities of being forced indirectly to bear the burden of certain taxes, coupled with the direct tax liabilities imposed upon American concerns as tax collection agencies, call for a special consideration of this subject on the part of businessmen in general. The interpretations of the actual final incidence of these taxes on business houses are legion. No attempt will be made in the discussion that follows to develop a thorough analysis of this angle of the tax problem. Attention will be called rather to the various types of tax liabilities for which certain classes of industry may become responsible, and to some of the problems that arise in the administration of those measures.

Property Taxes. With the exception of those industries for which special forms of taxation have been devised, virtually all types of business are taxable on the assessed value of their properties. Although not intended specifically as a business tax, these property taxes constitute an important

element of cost in American industries—either directly as tax payments or indirectly (in the case of real estate) in the form of higher rentals which include at least part of the tax burden. Inasmuch as the tendency in most localities has been to levy the tax on the property itself rather than on the owner, no distinction is made among individuals, partnerships, and corporations as far as the tax rate is concerned.

The taxable status of a company will, however, differ materially in terms of the geographical location of that business. The major differences are with reference to

1. Whether the tax applies to real estate, tangible personalty, intangible personalty, or all three classes of property.
2. Whether the value of the property is assessed for tax purposes at 100 per cent of the estimated true value.
3. The accuracy and frequency of assessments.
4. The level of the tax rate.

Scope of the Property Tax. The term *property,* for tax purposes, does not always have the same meaning. Originally, in all states, the general rule was that property should be taxed under a uniform set of regulations and at a basic rate, applicable to all classes, except where the law provided specific exemptions. Real estate, consisting of land and buildings or improvements, and personalty, including all tangible and intangible wealth other than realty, were taxed alike under this system. As the social and industrial structure became more complex, the problems of assessment increased in difficulty. Real estate, physically present and obviously difficult to conceal, could be assessed conveniently in the district in which it was located. Personalty, on the other hand, was movable and, as such, could be transported freely from place to place. Bulky tangible property such as machinery, livestock, and warehoused merchandise in general could be counted and evaluated. However, such intangibles as patent rights, royalty agreements, leases, stocks and bonds, and other securities, which frequently constitute a substantial percentage of corporate assets, were easily concealed. The difficulty in reporting the value of much of this personal property led to widespread tax evasion. At present, in the leading cities of the United States, the percentage of personalty to total property reported for tax purposes is consistently below its true ratio—the range being from 1 to 48 per cent with the average at about 25. In other words, the fiction is created that 75 per cent of the property titles held by individuals or companies in the United States relate to real estate. In some jurisdictions, such as New York, the property tax now applies only to real estate.

Assessment. The property tax is based upon the assessed value of the property. There is considerable variation in legal standards among cities

in the United States concerning the determination of this "assessed valuation" for purposes of taxation. The most common rule is to list all property at its full value, adhering as closely as possible to the principle that this valuation should equal the market price of the property as it would be determined by the meeting of the minds of a seller, willing but not forced to sell, and a ready buyer who is not being coerced into making the purchase. Another widely accepted guide is that the assessors should appraise the property on the same basis as it would be evaluated in payment of a just debt due from a solvent debtor.

These general rules are, however, extremely vague and can be interpreted in many different ways. The personal judgment of the assessor is an important element in the process wherever this mode of property evaluation is applied. The individual or corporate owner may disagree with this judgment. Provision is ordinarily made for the filing of protests against inequitable assessments and for hearings on such protests. If a concern challenges the valuations on its properties, it must provide definite evidence to substantiate its position. Affidavits relating to sales offers or price bids on the property, actual sales prices, financial statements showing costs and gross revenues, and other pertinent evidences of value may be necessary to convince the assessors of the legitimacy of the claim.

Where, as in some localities, the taxpayer is personally called upon to submit a report of property value, local boards of review accept or modify these reports. In any event, the importance of the human element in the determination of assessed values explains in part the wide degree of variations in standards of valuation that prevails among different tax jurisdictions. Certain assessors are elected; others are appointed; some (in small townships) devote a month or two per annum to this work; others, in larger cities, hold office throughout the year. In addition, it must be noted that assessors vary in education, training, and experience as well as in diligence and honesty. Moreover, the laws in individual jurisdictions differ with reference to assessment procedure. In some localities, property valuations must be compiled annually, whereas two- and five-year intervals between assessments are allowed in others. In a few states, the legal basis of assessment is less than 100 per cent of true value—in some instances as low as 25 per cent.

Property-tax Rates. Property taxation is largely a local form of taxation, levied and administered by approximately 175,000 local taxing jurisdictions, although it also serves as an important source of revenue to many of the states of the union and is subject to the control of state tax commissions. Because of its local character, the rate of tax levied by one authority is seldom likely to be at the exact level of that imposed by some other locality, except by chance. The method by which the tax rate is established for any given year is as follows: (1) The assessed valuations

of all taxable properties are computed. (2) The estimated financial needs which are payable out of the general property tax revenues of the local governments [1] are prepared. The tax rate that must be applied in order to raise these revenues is determined by dividing the aggregate assessed value of the taxable property into the budgetary total. Average local tax rates are approximately 3 per cent, with a range of from 1 to 5 per cent for most jurisdictions.

The Role of the Taxpayer. The application of the tax rate to the assessed valuation of the property determines the amount of the annual tax. Since the tentative valuations are usually published in the preceding year and the tax rate is announced well in advance of due dates for tax payments, a company can estimate the amount of its property tax and calculate it as an element of cost that must be considered in the formulation of price policies or in the closing of contracts. In the meantime, the assessment rolls are made up on the basis of assessments as amended by all changes in valuations; the tax rate is applied to each individual assessment; the firm then receives its tax bill. Interest penalties are usually imposed for failure to pay promptly.

In some cities, several local tax bills must be paid to different tax authorities. This sometimes involves separate calculation of state, county, and city property taxes and, in addition, special school taxes and highway taxes. Apart from the administrative detail that this entails, there is the much more serious problem of lack of uniformity in tax burdens. Differences in aggregate tax rates cause properties in one town to bear heavier tax loads than those situated in another near-by locality. Moreover, the general laxity that prevails in most states in the enforcement of the tax against intangible personalty results in relatively higher burdens upon companies owning real estate and tangible personalty. This unevenness in tax burdens puts one company in a strategic competitive position over another and may ultimately result in a shrinkage in the value of the latter's assets. The same problem arises when there is underassessment of the real estate of some companies coupled with accurate valuation or perhaps even overassessment of the property of others.

Severance Taxes. The general application of the property tax to mineral deposits and timberlands has frequently led to unfortunate social effects. Ordinarily, timberland is more valuable while the trees are standing than when the land is denuded; mines have a higher value at the start than when they have become depleted. Thus, under the general property tax, the tax is highest when the trees are standing or when the mine is still rich in ore. The temptation on the part of shortsighted speculative interests to net themselves a quick return on capital without paying excessively high

[1] The property taxes frequently support several governmental units: city, county, and state as well as school districts.

taxes during the process of liquidation frequently resulted, in the past, in ruthless destruction of timberlands or in extravagance and waste in mining methods. In order to adjust their tax policies on a more scientific basis with respect to conservation and preservation of natural resources, several of the more prominent states in which this problem had become acute passed so-called "severance" taxes. Briefly, these taxes involve a levy on the extracted raw material, with little or no burden upon the value of the resources that remain. Alabama, Arkansas, Montana, Nevada, West Virginia, and Pennsylvania have such taxes on coal and mineral products. Rates average from 1 to 2 per cent of gross value of products extracted. Connecticut, Louisiana, and Wisconsin have passed similar legislation with respect to timberlands, and Kentucky, Montana, New Mexico, Oregon, and Texas with reference to petroleum.

The Federal Income Tax. The basis of the federal income tax is net earnings, *i.e.*, net profit after all authorized expenses have been deducted from gross receipts. Individual enterprises and partnerships are not taxable in the name of the firm, but the tax is levied, collected, and paid for each taxable year on the basis of the personal incomes of the individuals associated with the venture in proportion to their shares of profit in the business, whether or not such income is distributed. Although not taxable as such, each partnership must, however, make a return to the government for each taxable year, stating the gross income, deductions allowed, names and addresses of individuals entitled to share in the net income, and the specific amount of each share. Corporations, recognized by law as independent entities, are required to file returns and pay taxes on their annual net incomes. The law specifically exempts certain corporations from the application of this tax.[1]

Calculation of the Federal Tax. In computing the income tax, the manager or accountants of a firm must include income from whatever source, except tax-free interest on securities and other classes of income specifically declared to be tax exempt. From this gross income are deducted all ordinary and necessary expenses paid or incurred during the taxable year in carrying on the business. These expenses include costs of materials, wages and salaries, advertising, interest, rent, specified taxes, business losses not compensated for by insurance, bad debts, depreciation, and depletion.[2]

[1] These include labor, agricultural, and fraternal organizations; mutual savings banks and loan associations; religious, charitable, and educational organizations; chambers of commerce; real estate boards and boards of trade not organized for profit; farmers' cooperative associations; and corporations that are instrumentalities of the United States.

[2] Individuals are also granted credits for personal exemption and for the support of dependents.

The general rule in the computation of the tax is that the net income shall apply to a 12-month accounting period equivalent to the taxpayer's fiscal year or to the regular calendar year.[1] Successive acts have varied the rates applied to this net income and have set up separate rate structures for individual and corporation income taxes.

Blanks are provided by the federal government for individual and corporate returns and must be filed on or before March 15 if the calendar year is used or, if it is not, then on the fifteenth day of the third month following the close of the fiscal year. Corporate returns must be sworn to by the president, vice-president, or other principal officer and by the treasurer, assistant treasurer, or chief accounting officer. According to the law, individuals and companies must keep records, render special reports, and make returns which are prescribed by the commissioner of internal revenue.

Withholding Tax. In addition to filing income tax returns of their own, employers are required, under federal law, to serve as collection agents for personal income taxes against the wages of their employees. This method of collecting the tax at the source on all wages above basic exemptions claimed by employees was first introduced by the federal government in 1943. Every employer is required to deduct and withhold the tax from wages paid to his employees. The amount of tax to be withheld is determined from tables prepared by the U. S. Bureau of Internal Revenue, setting forth taxes applicable to given wage brackets for specified payroll periods. Quarterly returns of income tax withheld from wages must be filed with the collector of internal revenue for the district in which the principal place of business of the employer is located. Employees are entitled to withholding statements, issued by the employer on prescribed federal forms, showing the amount of tax deducted from their pay. Copies of these statements are filed with the federal government and are used as a basis for determining whether individual employees have additional tax liabilities or are entitled to tax refunds when they file their own final returns on or before March 15 of the following year. It is mandatory that companies shall keep such records as will indicate the persons employed during the year, their periods of employment, the amounts and dates of payment to such persons, and the amount of tax withheld. Such records must be kept at all times available for inspection by internal revenue officers.

State Income Taxes. The majority of state income tax laws are modeled on the federal law, although the rates are much lower and personal exemptions are generally higher. Many states have amended the definition of

[1] Salaries and wages are subject to a withholding tax. Final tax returns filed the following year enable the taxpayer to make adjustments between the amount of tax due and the amount already paid through withholding.

net taxable income so that it differs slightly from the meaning used for federal taxation. The chief problem—that of allocation of revenue earned by the taxpayer—is common to all states. Individual proprietors and members of partnerships are usually required to file personal income tax returns on their entire net income if residents of the taxing state and on taxable net earnings derived within the state if nonresidents. Most states attempt to segregate the earnings of corporations on a geographical basis where business is done within and outside the state.

In recent years, the trend has been toward the use of the so-called "Massachusetts formula" in the geographical allocation of taxable net income of business corporations. This formula makes use of three factors: tangible property, payroll, and sales or gross receipts. A concern's state total for each of these variables is compared with its national total, and a single average allocation percentage is computed. This percentage is applied to the company's total net income in order to arrive at a suitable tax base for the state in question. Corporation tax rates range from about 2 to 6 per cent and are proportional in character, but several states have progressive rates. A minimum tax payment is required in some states even if a corporation enjoys no net earnings. Basic exemptions, methods of collection, and dates of payment vary considerably.

In addition to its taxes on individuals and corporations, New York State imposes a tax upon the net incomes of *unincorporated* business. This is a new departure in tax policy, since it tends to place upon other types of business organization a burden almost as large as that previously imposed upon the more privileged corporate form. Exemptions of $5,000 are provided, and reductions in taxable income are permitted, up to a reasonable amount, for salaries of owners or partners. The law also applies to apportioned net income of unincorporated business units from other states.

Organization and Entrance Taxes. In terms of tax burdens, the cost of becoming a corporation is greater in some states than in others. Furthermore, the privilege of doing business in states other than the one in which a firm is incorporated calls for the payment of a special tax. The former levy is referred to as an organization tax; the latter, as an entrance tax. Both are payable only once, *viz.*, at the time of legal recognition of the company by the state, unless there are changes in charters or in financial structure that would involve additional payments.

To do business in all the 48 states would therefore necessitate a fair-sized initial outlay on the part of a new company. The amount of this levy would depend upon the selection of the state in which the company obtained its charter, the amount of the corporation's authorized capital stock, the amount of this stock which has been issued, and the geographical distribution of its assets.

The most common practice among the states in the levying of organization taxes is to charge a percentage rate on the authorized capital stock of the corporation. These percentage rates vary from about 0.01 per cent to as high as 0.2 per cent. For a corporation capitalized at $10,000,000, for example, the application of the latter rate would involve a $20,000 tax. Instead of applying a percentage rate of this sort, some states establish fixed flat rates for a given minimum capitalization and levy additional fixed charges for larger capital issues or apply percentage rates above this minimum.

Entrance taxes are customarily calculated on two bases. Either a flat charge of a fixed amount is imposed on all corporations, regardless of size, or a percentage rate is applied to the estimated issued stock which is to be employed in the taxing state. These flat charges vary from $10 to $3,000, with the lower levies predominating. The percentage rates, in general, approximate those levied in the organization taxes, although occasionally the rates applied to foreign corporations are higher than those levied against domestic companies.

These taxes are, in effect, special levies that business establishments must pay for the privilege of organizing in the form of corporations. They do not apply to unincorporated business. Unless a special license is required for the conduct of some business or profession, such as is frequently found relating to pharmacists and real estate brokers, individual enterprises or partnerships are entitled to conduct their operations in most states without becoming subject to a fee or tax for the privilege.

Corporation Franchise Taxes. If the taxes just referred to are considered special burdens levied exclusively upon corporations for privileges bestowed upon them by the states, corporate franchise taxes must be defended on the same grounds. Like the organization charges, these taxes are imposed solely on corporate ventures. Unlike the former, they are annual levies and usually higher in amount. The special grant on the part of the government that gives a company a long term of life or even perpetual existence, limits the liabilities of its owners, and makes possible an ease of transfer of ownership is considered to give to that venture an economic advantage over unincorporated firms sufficiently great to justify a special franchise tax.

Practically all states now levy some form of special annual tax upon corporations, but there is considerable variation in the basis of taxation and in the rate applied. In some states, the income tax on corporations serves this purpose. In other states, which do not have income taxes or where corporation income taxes are regarded as part of a comprehensive tax system (levied upon all incomes, of which corporate income is simply a part or division), supplementary franchise taxes are usually imposed.

The most common form of corporate franchise tax which was at first developed in the United States and which still prevails today in the majority of states is the annual capital-stock tax. This tax is levied upon all corporations except those specifically exempt under the law. The basis of its calculation is the par value of the capital stock employed within the state. Some states use the authorized capital stock as the base, and others add to the value of issued stock the amount of the corporate surplus and undivided profits. In the case of corporations with shares of stock of no-par value, an arbitrary value is sometimes assigned to such shares, or a tax levy in dollars per share is made. In all other cases, the tax is expressed as a percentage rate which is applied to one of the tax bases mentioned.

Annual tax rates on these several bases vary from 0.01 per cent to as high as 0.5 per cent. Most states tax foreign corporations by means of so-called "privilege taxes," which put upon these outside corporations substantially the same annual burdens as those imposed upon domestic firms. The purpose of such legislation is obviously to prevent undue competitive advantages between the two classes of companies. Practically the same technique is employed relative to these taxes collected from foreign companies, except that the principle of taxing only that part of the capital stock which can be allocated to the taxing state is more closely followed.

Social Security Taxes. The taxing provisions of the Social Security Act require a federal insurance contributions tax and a federal unemployment tax. The former, designed to provide revenue for old-age benefits for employees is divided into two parts: an excise tax upon employers with respect to the wages of individuals in his employ and a tax of corresponding amount levied against all employees and withheld from their wages by the employer. Only the first $3,000 of annual remuneration paid to an individual by an employer is subject to these taxes. The rate of each of these taxes for old-age insurance was originally fixed at 1 per cent. Subsequently Congress voted to retain this rate until 1949 and to increase the tax gradually in the following years. Under the federal unemployment tax, employers of eight or more individuals are subject to an excise tax of 3 per cent on the first $3,000 paid to each employee.

These federal taxes are all payable on a quarterly basis to the Bureau of Internal Revenue. In addition, however, each state has its own law paralleling the unemployment tax feature in the federal law. The Social Security Act provides that employers will be permitted to credit against the federal unemployment tax all contributions paid into approved state unemployment funds up to 90 per cent of the amount of the federal tax. Thus, a company paying state unemployment insurance taxes of 2.7 per cent would be required to pay the federal government only 0.3 per cent

instead of the 3 per cent that would otherwise be due. This provision in the federal statute was intended to induce states to pass reasonably uniform unemployment compensation laws.

From an administrative standpoint, the effect of this legislation has been to multiply the number of tax returns to be filed. Business establishments with branches in the 48 states must now prepare, usually on a quarterly basis, separate tax forms for each of the states in addition to those returnable to the federal government. In some of the larger concerns, the extra work involved has necessitated an expansion in staff and mechanical office equipment in the accounting, tax, and legal departments.

Excise Taxes. Billions of dollars are collected annually through indirect taxes on consumption. Ranking first in importance in terms of revenue yield are the federal excises on liquor and tobacco products. Next in rank come the taxes on gasoline and motor fuels. Finally, there is a miscellaneous group of excises including those on playing cards, lubricating oil, automobiles, electrical energy, refrigerators, radios, toilet preparations, furs, sporting goods, telephone and telegraph messages, theater admissions, matches, and chewing gum. The importance of this latter list of items has varied as the federal government imposed emergency revenue measures during depression and war.

Besides being subject to federal excises, many of these same products have been singled out as sources for state and local revenues. For example, a majority of the states have levied cigarette taxes ranging up to 5 cts. per standard package. This is in addition to the federal tax of 7 cts. per package. Similarly, high state levies on alcoholic beverages and on gasoline have been added to the federal taxes on these products. Municipal imposts have, in some instances, supplemented these burdens. Several states have developed a list of special excises on cosmetics, soft drinks, electrical energy, and admissions to amusement places.

An excise tax is of the nature of an impost on a commodity, the ultimate purchaser of which pays for both the tax and the value of the merchandise. Nevertheless, the impact of such taxes almost always falls upon some business establishment—whether it be original producer, wholesaler, middleman, or ultimate retail distributor. Government authorities look to these business houses as administratively convenient sources for the collection of taxes, levied indirectly upon the consumer. The result of this situation is that a series of tax problems are introduced in the affairs of the companies so affected. The major forms that these difficulties take are as follows:

1. Inability to shift the entire tax on each sale, because of special competitive or marketing considerations.
2. Loss in volume of business.
3. Rise in administrative costs.

The first two problems are usually the most serious. What in theory appears to be a perfectly feasible method of shifting the tax may not work out in actual practice. The factor of custom in the determination of certain prices, the possibility of sudden shifts in consumer habits, the element of monopoly, the danger of tax-free competition, and a host of other considerations interfere with the 100 per cent collection of an excise levy from the firm's customers. By collecting its revenue from business establishments, the government makes them unofficial tax collectors, and any failure on their part to gather the revenue is their loss. During periods of rapidly rising prices, the ability to collect these tax levies is enhanced. Conversely, under conditions of constant or of declining price levels, it becomes increasingly difficult to add new imposts to commodity prices. The burden of such taxation is shouldered (at least for a time) by the business units themselves.

Closely associated with this question is the problem of a loss in business volume. Some excise taxes act more or less as regulatory measures influencing the consumption of the commodities taxed. In addition to their revenue-producing qualities, a feature of these taxes is to discourage the consumption of certain goods. The higher these levies are made the more will the consumption of such merchandise tend to be checked. A considerable part of the support for the passage of liquor and tobacco taxes in this country comes from those people who seek to restrict the use of these products. Whatever the moral issues on the subject may be, it is perfectly clear that from a strictly business point of view, any important decline in consumption resulting directly from the imposition of a tax would have the effect of burdening business to this extent. Inasmuch as most manufacturing ventures operate under conditions of decreasing costs, any decline in sales volume resulting from such taxes would result in a rise in production costs per unit of output and, consequently, in a decrease in profit margins. Viewed from this standpoint, an excise tax might be the cause of substantial losses to certain classes of business, without yielding any compensating amount of revenue to the government.

The third problem confronting business in connection with taxes of this description relates to costs of administration. Not only are companies called upon to make tax payments for the account of the customers to whom they sell, but they are required to go to some expense in properly administering the tax. Periodic reports relating to output, sales, and tax liabilities must be sent to state and federal governments. Moreover, the duty of affixing a stamp upon each product is frequently required of either the manufacturer or the distributor. Slight as these costs may be, the combination of several tax measures, each requiring different petty duties of this type, results in a noticeable added cost of doing business.

Customs Duties. Under the constitutional authority, the privilege of collecting revenue through the taxation of imports to the United States is given exclusively to the national government. The American tariffs have been influenced for more than a century by the policy of providing protection for American industries and workmen faced with foreign competition. Regulation has been of prime concern; revenue-producing capacity has therefore been of secondary interest. Under the circumstances, the levies imposed by the tariffs have not been uniform for all goods or values brought into the country, nor has the determination of special rates been based upon the anticipated tax yield or on any principle of ability to pay. As a matter of fact, the amount of the tariff imposed upon certain imported commodities is supposed to be equal to the differential existing between domestic prices and delivered cost prices of foreign goods sent to the United States. Where no severe competition from foreign producers is found, the tariff is very low or the product in question is completely exempt and is placed on the free list. It has been estimated that from a revenue standpoint, some three-fifths of the total of customs duties is paid by fewer than 24 commodities, although hundreds of different types of products are separately listed in the tariff schedules.[1]

Like excise taxes, customs duties, from the theoretical standpoint, are supposed to be shifted, in part at least, to the final purchasers or consumers. Moreover, from the point of view of the sponsors of protective legislation, the effect is to place foreign producers at a competitive disadvantage with respect to domestic producers in the market. If the protection is effective, American consumers pay higher prices for domestic articles that do not have to compete with the foreign products. Under such conditions, there are few imports or none at all, and the government gets no revenue.

In spite of the tariff, however, importers obtain large orders for certain foreign goods that are subject to customs duties. In the handling of this merchandise, American importing firms must maintain appropriate records and are responsible for the payment of the federal taxes. At the time any foreign merchandise enters an American port, it is subject to inspection and tax appraisal under the law. Customs duties are immediately payable by the importing firm, and the appropriate clearance papers must be filed before the goods are released for admission into the country. Until payment is made, such commodities are held by the federal government for the account of the importer.[2]

Sales Taxes. Another form of consumption or commodity taxation imposed by states and municipalities is the sales tax. Instead of levying

[1] See LUTZ, H. L., "Public Finance," 3d ed., pp. 568–571, Appleton-Century.

[2] See Chap. XVIII for a further discussion of the tariff.

special rates upon selected commodities, a general rate or schedule of percentages is imposed upon all commodities (and even services in some instances) except those specifically exempted. Several forms of sales taxation may be distinguished: retail sales taxes, general sales taxes (extending to the business of extractive industries, manufacturers, and wholesalers), and gross receipts taxes (including sales of intangibles and receipts from services). The tax is usually of the first-mentioned variety and is levied upon all sales "at retail"—the term retail being defined as a sale not intended for resale. In other words, the idea of this legislation is to impose the tax upon the actual user or final consumer of the goods. This does not necessarily limit the application of the tax to goods commonly purchased by individuals in the regular retail-trade channels. A commodity as industrial in character and use as a steam shovel becomes subject to the tax as defined, inasmuch as the contractor who buys the steam shovel obtains it for actual use and not for resale. The tax is collectible from those business enterprises whose sales are other than for resale. Consequently, manufacturers, wholesalers, jobbers, converters, and importers, as well as retailers, are liable in most states for payment of this tax if part or all of their sales are made to ultimate users or consumers of their products. In general, the rates of taxation vary from fractions of 1 to 3 per cent of the retail selling prices.

Aside from the fact that the physical handling of tax reports and the remitting of checks in payment of the tax result in a slight increase in the administrative costs of operation (especially where the laws call for monthly reports), additional problems arise. For example, in states in which the rates of tax are graduated in terms of aggregate volume of sales or in states providing basic minimum exemptions below a certain volume of sales, business establishments subject to the tax at the higher rate have difficulty in shifting all the tax to consumers, because of the potential competition from less heavily taxed business units. Furthermore, if the tax is comparatively high and neighboring states do not impose a tax of this character, the temptation arises for business to drift to the tax-free areas. It is only along the borders, however, in sections where the proximity of some competitive area forces firms to assume the tax burden themselves that this influence is most definitely felt.

Another problem that has been encountered by business houses in adjusting themselves to this form of tax is the matter of charging the correct amount of the tax on each article of sale. On the very low-priced articles, it is obviously impossible to calculate the exact amount of the tax, as the result is in terms of fractional parts of one cent. Groups of merchants have sought to remedy this problem in some states by providing for the use of specially prepared fractional coinage.

On goods having well-established advertised prices or customary prices, it is difficult to charge a sales tax, as this would involve an attempt to change firmly entrenched consumer habits. Some firms have sought to escape this seeming impasse by changing the weight, size, or quality of the product offered for sale by an amount sufficient to compensate for the tax. Others have simply resigned themselves to the need for absorbing the tax on such products and have sought to economize elsewhere or to make a larger increase in prices for other products sold.

In several sessions of Congress, attempts have been made to pass a federal general sales tax to be levied upon manufacturers in the United States. This type of tax would be payable by manufacturers and would be included in the selling prices to the middlemen handling their products. Although these efforts were defeated, renewed attempts may be made in the future to tap this lucrative source of revenue for the federal government. It is not surprising to find among the sponsors of this legislation a large number of representatives of American business who desire it as a substitute for other varieties of tax legislation which appear to them to be still more burdensome. In particular, state sales taxes are assailed on the ground that they result in unintended discriminatory burdens because of the many evasions which are now possible in view of the nontaxable element of interstate trade. Business leaders who favor a uniform federal sales tax on manufacturers suggest a division of revenues from this source among the states.

Special Business-tax Legislation. In addition to the various taxes that have been cited, special tax measures have been devised for certain classes of business. These special forms of taxation are levied by the states and vary considerably from one state to another. In general, insurance companies, banks, railroads, express companies, and public utilities are the leading types of enterprise for which such tax legislation exists. However, other ventures such as mines, shipping concerns, grain elevators, and lumber companies are frequently singled out for special tax consideration.

Besides these taxes, some states impose a large variety of license taxes upon selected types of business—both incorporated and unincorporated. Liquor licenses, for example, for the privilege of producing and distributing liquors are in existence in many of the states. Maryland imposes a traders' license. Missouri makes a similar levy and in addition issues licenses to dairies, auctioneers, hotels, ferries, and other lines of business. Minnesota has an extensive system of licensing, ranging from milk, butter, and egg dealers' licenses to commission merchants' and warehouse licenses. Various manufacturers, distributors, and professional groups come under these license laws.

Taxation of Railroads and Public Utilities. Many of these special forms of taxation have been levied because of the greater ability to measure a concern's taxpaying powers or the greater ease in assessment than is possible under general tax laws.

In the railroad industry, for example, the application of local assessment methods in the physical appraisal of real estate owned by the road in that vicinity was often found to be far from satisfactory. In fact, unless the road happened to be entirely within one state, even state-wide valuation of the property for tax purposes had serious defects. It has been recognized that the most satisfactory guide in taxing interstate railroads is to consider the value of the whole property on the basis of total investment and net income. Once this value has been established, each state's share of the total property value may be allocated on the basis of the percentage distribution of actual location of physical property in each state or on the basis of relative mileage traveled by cars and locomotives within each state. An equitable rate of tax must then be applied against this railroad property value allocated to the state.

Some states, seeking to avoid this difficult operation of evaluating railroad properties, have selected gross earnings of the roads as a basis of taxation. The difficulty involved here is in arriving at a satisfactory method for the apportionment of gross earnings among the several states in which a company operates. The methods employed are analogous to those used in the property tax. Track mileage, freight tonnage carried through the state, car mileage, or even physical property valuation have been used for this purpose. The last measure, although not serving as the base for the tax, is employed as a guide to the distribution of the earnings used as the basis of taxation. In this case, the problems of evaluation reappear.

The same considerations that apply to railroads also relate to other classes of public utilities with the exception, perhaps, that in many of the utilities, the service is largely local or intrastate rather than interstate in character. This reduces the problems of allocation of property or business for state tax purposes. The difficulty of assessing such firms equitably on a local basis makes state control of taxation of these concerns desirable. The most commonly found tax bases for public utilities such as gas, water- and electric-supply, telephone, telegraph, pipe line, and express companies are either gross receipts or corporate capital stock. The general methods used in allocating these revenues are proportionate property values within the state and mileage of routes, poles, pipes, and lines used within the state relative to total mileage in service.

Special forms are usually provided by the state on which these types of business are required to report the necessary data for the calculation of

their tax liability. Such blanks usually call for the name, address, and nature of business of the company; its date and place of organization; the amount and type of authorized and outstanding capital stock; the assets, liabilities, and surplus; and a statement of income. Moreover, a listing of the separate assets owned within the state, the calculated use of equipment or the extent of the service figured on a prorated basis, and other pertinent data relating to allocation of the business are usually demanded. On the basis of these data, together with other actual materials available to the taxing authorities, the tax is calculated and becomes a lien against the corporation, payable at a stipulated time.

Taxation of Insurance Companies. Premiums collected annually have become the almost universal base for the taxation of insurance companies under special state insurance tax laws in the United States. The federal government, while separating life insurance concerns from other business subject to the income-tax law, imposes a special income tax upon them. All other insurance companies are liable to the regular provisions of the income-tax law.

In the states, however, the gross-premiums tax prevails. This is really a tax on gross income and therefore resembles the other special classes of taxation applying to public utilities. The average rate of tax on insurance premiums is 2 per cent, although some states levy annual license fees in addition to this tax. The tendency is to tax domestic and foreign companies on substantially the same basis. When there is a discrepancy in rate, it is usually in favor of the domestic companies. Some states do not place any premiums tax on domestic life insurance firms.

From the administrative standpoint, jurisdiction is somewhat divided in the collection of these taxes. In a few states, the tax commission is empowered to administer the law. In others, however, the insurance department is authorized to receive the revenues, or there is a straddling of these powers by state tax and insurance authorities, on the one hand, and by local village, town, or county groups, on the other. Especially is this the case in administering fire and casualty insurance taxes. The effect of this lack of uniformity in tax measures for companies doing business in several states is to force them to prepare many different varieties of special tax reports to various jurisdictions and to draw thousands of small checks to local authorities where these taxes are not centrally administered.

Taxation of Banks and Financial Institutions. The special problem of bank taxation arises from the fact that national banks, as the creations of the federal government, may not be taxed by state and local jurisdictions without sanction from that authority. Indirectly, this limits the power of the state to tax state banks and trust companies, since these institutions compete for business with the national banks. If the discrepancy in tax

burdens became too great, the state organizations would seek national charters so as to escape such oppressive taxation.

The National Banking Act permitted states to tax the real property of national banks like other forms of real property and declared that shares of outstanding stock of national banks could be taxed as personal property —with the limitation that tax rates imposed must not be higher than on other moneyed capital. The result of this legislation was that for half a century, all states were practically forced to tax banking institutions on their local real estate and to levy personal property taxes against the private owners of bank stock. As a result of a series of amendments to this national legislation, banks are now taxed on the basis of net income, and state laws relating to the taxation of financial houses have been adjusted to this new base.

Other Business Taxes. To some extent, all states impose special license taxes on business. In several states, such as Minnesota, these license taxes might almost be regarded as a complete system of business taxation with differentiated rates varying from one line of business to another. In some instances, these taxes are defined as "payments for the privilege of conducting" a stated kind of business but are levied as excises on the commodities sold. Others, however, are paid as annual lump sums, levied as fixed charges or as graduated payments measured by sales volume, production value, or some other base—such as number of seats in theaters or number of rooms or beds in hotels.

The lines of business most frequently singled out for such license charges are

Chain stores.	Cotton spinners.	Advertising concerns.
Department stores.	Tobacco shops.	Real estate brokers.
Soft-drink stands.	Warehouses.	Pool parlors.
Liquor stores.	Theaters.	Bowling alleys.
Bottling factories.	Restaurants.	Race tracks.
Canneries.	Hotels.	Shellfish beds.

Variation in Business-tax Burdens. When all these miscellaneous forms of business taxation are reviewed and the relative burdens of different classes of business are studied, an immediate reaction is a recognition of the lack of equality and uniformity in tax levies among the several types of business activity.

In part, this situation arises from the very differences found in business units themselves. Some are large-scale establishments; some own great quantities of real property; some do business in several states; some receive special grants or privileges. Under these circumstances, it is to be expected that the tax liability of one company will be different from that of another. In addition, however, the local, state, and federal governments

make deliberate tax levies on given classes of business with the purpose of subjecting one group to higher tax burdens than others. Such moves may be prompted by a desire to discourage business activity in certain directions—or to prevent the burdens of taxation from falling on those least able to pay—by imposing very high taxes upon enterprises that shift the ultimate burdens of the tax onto the wealthy classes in society. Whatever the motives, the resultant of all these legislative measures of a fiscal character is the creation of a special series of business problems of "tax calculations" involving the preparation of reports to the various taxing authorities and resulting in important cost considerations in both production and marketing. Because of the complex character of this general fiscal structure relating to business in the United States, the method of handling these problems varies greatly from industry to industry and among firms in any given industry.

Questions and Problems

1. Why is the ability of the government to balance its revenues and expenditures essential to the maintenance of stability and confidence in business? How does government spending affect business?

2. What makes the tax structure in the United States so complicated? From the standpoint of business concerns, what overhead problems of record-keeping and paper work are entailed?

3. Cite illustrations to demonstrate the correctness of the statement that the various government bodies in the United States depend to a large extent upon industrial organizations as tax-collecting agencies.

4. "All taxes are eventually passed along to the consumer in the form of higher prices." Show why you agree or disagree with this statement. Distinguish between impact and incidence of a tax.

5. Varying meanings are attached to the terms *property* and *assessed valuations* for tax purposes. Clarify the meaning of this statement. To what serious problems do these discrepancies lead in the local taxation of business?

6. Distinguish between single, nonrepetitive taxes imposed upon corporations and those charges which are recurring in nature.

7. How are federal income taxes calculated on personal incomes of business proprietors and partners? How are they determined for corporate income? Do stockholders pay additional income taxes on their dividends?

8. What is the general sales tax? How does it differ from federal excises? Under what circumstances is it difficult to shift sales taxes to the final buyer?

9. The Social Security Act and supplementary state legislation imposed a number of new taxes upon business. List the federal and state tax levies that constitute a part of the social security program.

10. For what classes of business have special taxes been devised? For what reasons?

CHAPTER XXVII

INSURANCE AND THE CONTROL OF RISKS

Business Risks. "There goes my whole year's work," says the farmer who, in a pathetically helpless position, watches the hail beat down his wheat crop. With even greater swiftness, fire razes an industrial plant and destroys virtually the entire physical-property investments of a corporation. With similarly disastrous results, a merchant sees his whole shipment of goods sold at a price that has dropped far below his original costs.

These are the risks of business. Risk and uncertainty characterize the entire industrial community. Certain industries appear more hazardous than do others; some risks are more pronounced in one line of business as compared with another; but in all types of business, there are different elements of risk and varying degrees of uncertainty. Considerably less damage in terms of dollars may be caused by fire on a farm than in a coal mine or in a factory. On the other hand, the destructive effects of a hailstorm upon the crop of a farmer would probably far exceed the losses sustained by a factory on account of broken windows resulting from the storm. Price fluctuations, however, may be of equal damage to a farmer, industrialist, or merchant.

Some of these business risks can be reduced or even eliminated; some can be controlled to a great extent; and still others shifted or diffused. The ability to do this, however, naturally involves costs, some of which are so great that it becomes difficult to decide between the assumption of the risks and the shouldering of these expenses.

Physical-property Damage or Loss. *Natural Causes.* A considerable number of business risks are classified as property hazards. Some arise from natural causes. Severe winters with heavy snowfalls, reaching blizzard proportions in certain sections of the country, cause untold injury to telephone and electric-power lines and to properties of trucking, bus, railroad, and aviation companies. Successive experiences with heavy rains, floods, and dust storms have resulted in billions of dollars of damage throughout the United States.

Aside from rain, snow, sleet, hail, wind, or electrical storms and such natural phenomena as earthquakes, floods, or eruptions, the annual

damage caused by insect pests and plant diseases must also be set down as "natural" causes of industrial hazard. The extent of the destruction caused by the cotton boll weevil, the corn borer, the Mediterranean fruit fly, and the Japanese beetle is well known. Although chiefly of concern to the farmer, the orchardist, and the lumberman, such pests may at times threaten other industrialists. For example, termites, or white ants, through their habits of boring into timber construction, have undermined foundations of buildings, reduced telegraph poles to thin shells, and weakened the underpinnings of wooden bridges and trestles. Grasshoppers and locusts have been known to swarm on roadways and on railroad tracks in sufficient numbers to imperil bus and train transportation.

Fire and Explosion. Fire is perhaps the greatest single industrial hazard resulting in property damage. Almost half a billion dollars' worth of property in the United States is annually destroyed by fire. A large part of this loss is sustained by business enterprises. Many fires are caused through sheer carelessness, negligence, or gross ignorance; others result from dangerous technical processes or operations involving the use of inflammable materials. Petroleum-refining plants, gasworks, and resin, paint, varnish, and celluloid products companies are examples of this latter type. Timber fires—often involving the loss of hundreds of acres of trees—are caused all too frequently by one of the first-mentioned conditions. Occasionally fires are started or are spread by natural causes, such as lightning, drought, and high winds.

Explosions may be the originating disturbances that lead to a fire, or sometimes they follow a fire. Whichever is the case, additional destruction usually results. Another risk arises when water or chemicals are used to put out a fire. The damage done by water is sometimes greater than that caused by fire. This is especially so in silkworks or in a flour mill, where thousands of dollars of merchandise are sometimes ruined by water when the loss through fire might have been negligible.

Technical Risks and Accidents. Another series of risks are those associated with the technical aspects of industry. A valuable diamond drill breaks; a transmitter blows out during a broadcast. The failure of a switchman to understand signals results in a train wreck; the improper adjustment of a cutting machine ruins hundreds of yards of cloth; the omission of an ingredient in the mixing room of a bakery requires the scrapping of thousands of boxes of biscuits.

Crime and Acts of Violence. Loss of property through theft, robbery, or burglary is a common business risk. Payroll holdups, bank robberies, thefts and holdups in retail stores, and petty pilferage are daily occurrences. Burglary on a large scale, though less frequent, usually involves losses

running into hundreds of thousands of dollars in jewelry, furs, garments, furniture, and other valuable products.

Willful demolition of property or accidental destruction resulting from riots, insurrection, civil commotion, or invasion causes heavy financial losses. Sabotage, strikes, and other symptoms of industrial unrest are further business risks.

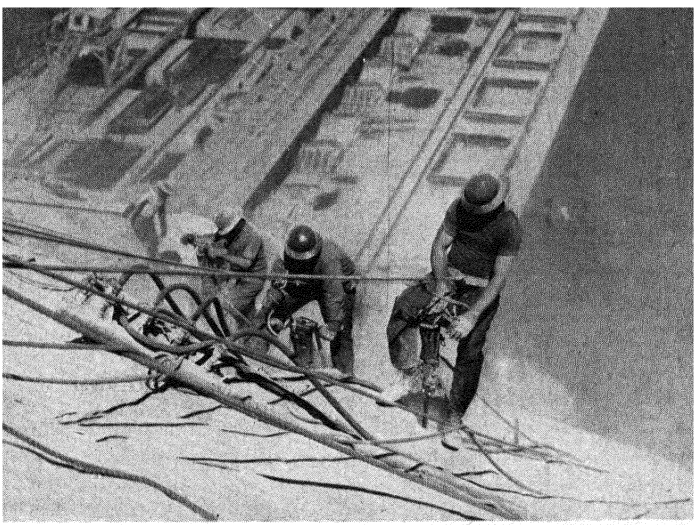
Storage and Shipping Risks. In addition to the hazards already cited involving loss or destruction of physical properties, two other common causes of loss are those related to the storage and shipment of materials and products. Many goods are perishable and cannot be kept for long periods of time. Delays occasioned through the temporary breakdown of the production or marketing process, hence requiring the holding of materials or goods in process of production, are disastrous for some classes of producers. Particularly does this apply to farmers and to food producers such as dairies and manufacturers of ice cream. It also applies, however, to other classes of producers such as manufacturers of films and chemicals.

Damage and complete loss of goods often occur in transit. Perishables deteriorate through delays in shipments and exposure to intense heat or cold. Truck breakdowns, smashups, train wrecks, stranded or sinking ships, theft, and fire are familiar occurrences which illustrate the many risks that are taken in the transportation of products from place to place.

Personal Injury and Loss of Life. In the preceding discussion, the possibilities of property damage and losses have been stressed as important business hazards. In addition, industries are confronted with risks involving human life, which may prove to be even more serious from the standpoint of financial losses incurred.

Technical processes, already referred to, require the use of dangerous tools or machinery which, if improperly handled by workmen, will cause the loss of a limb or even death. Sawmills and planing mills, printing shops, and metal-stamping works are examples of industries presenting these risks. Certain plants make use of extremely heavy weights, intense heat, or superhuman power. Iron blast furnaces, steel mills, locomotive and machine works are of this description. Any loss of control of these forces usually results in destruction of human life or in severe personal injury. Other industries are hazardous chiefly because of the use of dangerous explosives in the industrial process. This is seen, for example, in construction work, such as the building of tunnels and dams, and in quarrying involving the frequent blasting of rock. Explosions and cave-ins of mines, the escape of poisonous fumes and gases in coal mines and in industrial works, and the bursting of steam vats or of chemical tanks are well-known industrial hazards imperiling human life.

Over two million industrial injuries are reported each year, involving a death toll of thousands of lives. Estimates show that aside from human values, these accidents involve monetary costs of billions of dollars. Although the trend in injury frequency and severity rates has been downward in recent years, the toll is still high in American industry.



Industries are confronted with risks involving human life.

Taking industry as a whole, the following are the chief causes of industrial accidents:

1. Handling objects.
2. Falls.
3. Machinery.
4. Using hard tools.
5. Falling objects.
6. Stepping on or striking objects.

Other industrial processes are less spectacular in their harmful effects in the sense that the damage is more gradual and results in ill health rather than in physical injury. The fine steel dust arising from metal-cutting and grinding operations fills the air and is inhaled by workmen. In felt-hat factories that do not have modern air-conditioning equipment, the hair and light fuzz in the humid atmosphere of the turning, shrinking, and blocking departments cause similar unhealthful conditions of work. Caisson diggers are prohibited by law in some cities from remaining underground for more than two hours, because of "cramps" resulting from high atmospheric pressure.

Accidents involving the injury or death of people who are not employees of a company sometimes result in heavy damage claims upon the management. Railroads, bus and trucking companies, and steamship and airplane transportation lines suffer losses of this character. Theaters, private schools, and hospitals also expose themselves to this hazard because of the large numbers of people assembled there. All industry assumes this risk, however, unless completely isolated from centers of civilization. Truck transportation of goods to the market also may result in an accident involving personal injury to outsiders.

The death of an individual frequently occasions serious loss to a company because of the importance of that particular man to the firm. Specialists in some art or skill are often valuable employees whom a concern cannot afford to lose. Managers who have ably directed the affairs of their companies for many years cannot readily be replaced. Particularly in certain lines of business in which personal contacts are of great importance to customers or clients are such losses keenly felt. In partnerships in which the death of a partner means the withdrawal of his financial interest from the firm, "loss of life" is sometimes synonymous with "complete business collapse" for the concern in question.

Other Business Losses. Many losses arising from business risks are neither the results of damage or loss of physical property nor the effects of personal injury, sickness, and death. They grow out of the complex assortment of legal obligations, titles, and claims; changes in technical processes, market prices, and valuations; and business, social, and political interrelationships. Insolvency, bankruptcy, and the failure on the part of debtors to fulfill contractual obligations offer possibilities of staggering losses to creditors and businessmen relying upon the settlement of claims. Defective titles to real estate sometimes involve burdens more crushing than the physical destruction of such properties. Forgery, dishonesty, and fraudulent practices are conditions sufficiently frequent in occurrence to make necessary the careful scrutiny of all transactions.

Risks vs. Profits. The single feature that is present in virtually all these business risks is uncertainty or inability accurately to foretell the magnitude of the loss or the time at which it will occur. If it were possible to forecast with certainty that losses of a definite amount would take place on a specific day, the hazard would largely disappear. In most instances, steps would be taken to make allowances for such known losses in the regular cost calculations.

To a certain extent, business profits thrive on the existence of risks. This does not mean that large risks guarantee large profits, for it is known only too well that the losses are greatest and the failures most numerous in those industries in which there are serious risks—either in physical

production or in marketing. The reason why profits of considerable magnitude are frequently found in hazardous ventures is that they involve a premium paid for the successful assumption of a series of risks. Few individuals or companies are willing to engage in ultrahazardous pursuits. The result is that the commodities or services arising from these activities are relatively scarce and must be paid for dearly by those who desire them. In spite of the high prices received for their efforts, such enterprisers frequently fail because losses are greater than aggregate revenues. Consequently, when the limited group of ventures that remain in such business triumphantly ride over the risks and come out on top in spite of all the hazards, their shares of return are usually high.

If risks are practically nonexistent or are remote possibilities and enterprise becomes a "sure thing," what happens? From far and wide, people flock into such business with the hope of participating in gains that are virtually assured in advance. The outcome is that competition becomes so keen that ultimately the gains are reduced to a minimum and profit margins become unattractive.

This accounts for the statement that profit and risk go together. It should be noted, however, that the profits are not rewards for the taking of risks but are obtained through successfully coping with these risks. This leads to the conclusion that where it is possible to minimize risks or to shift risks upon others at not too great a cost, the chances of obtaining profits are enhanced.

The Control of Risks. In most cases, it will be seen that the problem of risk is the inability to predict its extent or amount rather than an utter ignorance of the probability of its happening. Most businessmen know that they face certain hazards. They do not know to what extent they will be affected or when misfortune will strike.

Preventive Measures. In order to reduce the possibility of suffering losses from such hazards, they employ preventive measures. The farmer sprays his crops in order to ward off insect pests. He chooses seed varieties that are disease-resistant. He builds irrigation works to combat droughts and constructs ditches and tiles to fight floods. The coal miner uses safety measures to prevent explosions; the industrialist screens in dangerous machinery to protect his workmen; sprinkler systems and buildings of fireproof construction are used to minimize the fire hazard; burglar alarms and night watchmen are employed to prevent theft. Such measures add to the cost of doing business. If, over a period of time, losses arising from these industrial risks are diminished through the use of preventive measures, the added expense is justified in terms of increased profits.

Investigation, Research, and Technical Advance. The U. S. Weather Bureau, though not infallible in its forecasts, is, nevertheless, sufficiently

accurate to be of great value to all farmers and industrialists to whom advance knowledge of weather conditions is of value. Private and governmental geologic investigations and studies have helped to define more clearly the mineral structure of the earth and to reduce losses resulting from ignorant prospecting on the basis of "hunches."

Market research conducted by trade associations and other cooperative groups enables companies to discover trends in demands and potential fields for further development. Data collected from these studies also provide danger signs and warnings against excessive production if saturation points are noted. Several industries have organized mutual credit-information bureaus. These organizations, through the maintenance of central files, have been able to inform members of the credit risks involved in dealing with certain clients.

Studies by the Bureau of Mines of methods for the reduction of mine explosions and maintenance of laboratories by the National Fire Underwriters for the study of fire prevention and for the examination of fireproofed materials are examples of other types of investigation designed to help in combating risks. In the same fashion, extensive research is conducted by the U. S. Department of Agriculture in discovering remedies for plant and animal diseases, in perfecting insecticides and sprays for destroying insect pests, and in developing new disease- and drought-resisting crops.

Technical advancement and the invention of new devices have done much to reduce risk. Improvements in methods of refrigeration have minimized losses through spoilage. The invention of vacuum methods of canning and bottling has had a similar effect. Transportation improvement has led to the reduction of risks in shipment; new developments in communication have practically eliminated space and have so greatly increased the speed of transmittal of market information as to reduce most price irregularities between markets. Perfection of mariners' instruments, invention of the radio beam and radar, and the application of radioelectrical communication to moving vehicles have contributed to the reduction of accidents.

Cooperative and Governmental Action. In addition to research activities of the government and of cooperative groups of businessmen, other functions have been performed by these bodies for purposes of reducing various kinds of risk. Price fixing, price regulation, and control measures have been introduced in order to achieve stability and reduce losses through fluctuation. Police departments and cooperative business groups have sought to stamp out crime. Fire departments in most communities are equipped to combat the fire hazard. The construction and maintenance of lighthouses is another example of collective activity for mutual welfare.

Combining of Risks. It is almost impossible to predict losses for individual or isolated groups of firms. However, when large aggregates of similar cases are brought together, the ability to forecast losses is increased. The owner of two or three sheep has no way of knowing whether he will lose one or all three or when such unfortunate events may occur. The owner of a flock, on the other hand, knows from experience that he may normally expect an annual loss of 8 per cent or more, caused by coyotes, wildcats, storms, straying, diseases, and noxious weeds. This percentage he allows for in his costs. Large-scale operation thus reduces variable risks into fairly definite cost calculations.

Another aspect of larger scale operation from the standpoint of risk is that a combination of several activities may be so made as to reduce certain hazards. The combination of mining with manufacturing activity, meat packing with the production of by-products, peanut growing with cotton production prevents "putting all eggs in one basket" and permits the possible success of one function to outweigh the failure of another. In other words, risk reduction can be had through a process of diversification of investments. The Standard Oil Company (New Jersey) is an excellent example of a concern that has diversified its activities through the use of by-products. General Electric Company has expanded its interests from the production of domestic and scientific electrical appliances to railroad, marine, and aeronautical equipment and radio and amusement apparatus. Grain farmers have found that hog and poultry raising and dairy farming are supplementary functions that help to reduce the risks incurred when reliance must be placed upon the success of a single crop.

Hedging. Price risks are reduced or completely eliminated by making contracts in advance for the purchase of needed materials or services at an agreed-upon price. Then, regardless of later fluctuations, the agreement is binding, and losses from this source need not arise.

Producers frequently contract with middlemen to deliver their entire output at an agreed-upon price. This relieves the producer but puts the risk of loss on the middleman. He in turn may pass on such risks to the people to whom he sells.

In a large number of commodities, especially in raw-material staples where marketing problems are great because of price fluctuations, facilities have been provided for the transfer of such risks. Merchants and producers handling these staples may, through the practice of hedging previously discussed in Chap. XX, arrange to shift the risk of loss through price fluctuations to the shoulders of speculators. The latter assume such hazards in the hope of making large profits by anticipating price changes. Through such action, gains or losses arising from price fluctuations are reduced to a minimum, for practically the same result is secured

as though an agreement had been made in advance as to the prices to be paid.

Insurance. Certain losses arising out of risks, though not definitely predictable in individual cases, are sufficiently uniform in occurrence for large aggregates over a period of time to make possible a fairly accurate estimate of the probable percentage of loss in a given group. So, for example, among 10,000 manufacturers, it is possible to say with reasonable certainty based upon past experiences that not more than 60 plants will burn down within three years.

The damage will probably be such that a contribution from each manufacturer of $1,000 per year will more than cover all the losses. Whose plants will burn down, and when will the fires occur? Nobody knows. But the proportion of buildings of that character which have burned in previous years and the relative size of the losses have been such that a prediction of the kind suggested may be relied upon. A manufacturer prefers to pay, say, $1,000 a year rather than assume the risk of losing a $500,000 plant through fire. In the event of a fire, his annual payments of $1,000 entitle him to a recovery of the greater part of his losses. This arrangement is known as insurance. It represents a shifting of risks. Instead of having one individual or company assume the entire hazard, a group of concerns faced with similar risks pool their interests in carrying the burden of loss. This procedure enables the risk bearer to substitute for a loss, uncertain both in occurrence and in amount, a known cost which may be reckoned as a regular expense of doing business.

Insurable Risks. Not all industrial hazards lend themselves to insurance protection. However, a surprisingly large number of them are guarded against in this way. Insurance companies are agencies that provide the machinery for the spreading of risks. Where it is possible to foretell with some accuracy the probable losses that will occur in a collective group, the amount of loss can be apportioned equally among all members of that group in advance. In other words, insurance can be applied wherever losses from the risk follow the law of averages and where a reserve built up of relatively small payments will be sufficient to take care of a few large losses. The essential requirement for the operation of a sound and successful plan of insurance is to get a sufficient number of "insurers" to pool their interests, so as to provide a large enough working base for the spreading of risks and for supporting the costs of administration.

The farmer who buys hail insurance or crop insurance may not suffer any destruction of crop, but his small contribution helps to pay for the losses of other insured farmers, or it provides a fund for protection against future losses. A steel company may end the year with a 100 per cent record of safety in operation, but the next year 12 of its employees may

be injured in a single accident. Workmen's compensation insurance takes care of this emergency. In the same fashion, insurance may be provided against losses from theft, shipwreck, breakage of glass, bad debts, broken contracts, etc. Life insurance, too, has come to be regarded as an important form of industrial insurance, and many companies have insured the lives of their employees.

The extent to which insurance is used for protection against several possible varieties of financial loss in a single business is illustrated in the following statement made by the president of a large furniture company: [1]

> My policy . . . is to insure . . . against any unpredictable disaster than might conceivably beset it [the company]. . . . Our many insurable risks can be noted from a list of the kinds of insurance that we carry. They are: fire, life (on officials, with the company as beneficiary), group life, general liability, elevator liability, boiler, sprinkler leakage, burglary, forgery, marine and fraud. And getting these risks covered adequately and yet at minimum cost we have found to be largely a result of attention to details and a knowledge of our needs.

The fact that these many different classes of insurance are available does not imply that all companies take advantage of such facilities. On the contrary, most industrial risks are assumed by business establishments and are not protected by insurance. This is so because the losses may be small and, if they should occur, would impose no great hardship upon the firm, because the probability of loss is remote and the managers are willing to take the chance, or because the average losses are less than the costs of insurance. In the second instance, failure to insure (assuming that the losses are great) might result in embarrassment or complete financial ruin of the company. The assumption of the risk is a speculation against the probability of its occurrence. In the first and third case, self-insurance replaces cooperative association with others in the sharing of risks and is usually practiced in the interests of economy. The Standard Oil Company (New Jersey) has set up extensive reserves of its own for contingent losses that may arise. This, it finds, is cheaper than to pay the heavy charges of insurance premiums demanded in that business. A large department store in Brooklyn does not insure its plate-glass windows against breakage. The annual costs of plate-glass insurance exceed, on an average basis, the costs of replacing the broken glass.

Advantages of Insurance. However, where such economies are not possible and the internal organization of a company is insufficiently large to enable each unit to bear a small proportion of the burden of a fairly heavy loss, it appears advisable to insure against insurable risks. The

[1] GRUNBAUM, OTTO S., Insuring Service Profits by Spreading Risk, *System*, p. 380, March, 1925.

insurance company has the advantage of obtaining a distribution of risk among a large number of clients, and hence the premium charges necessary to build up sufficiently adequate reserves for losses are less, on the average, than would be the case in an individual concern. Aside from its major function in transferring risks, however, insurance of various kinds offers other indirect benefits to business establishments. Chief among these is its influence upon the credit position of a firm. Banks and other lending agencies are reluctant to extend loans to classes of business involving heavy risks. If, however, many of these risks are covered by insurance and the lender is made a beneficiary of the policies, there is a much greater possibility of obtaining necessary funds. Property offered as collateral for loans is not acceptable unless protected by insurance against fire or other risks of loss.

Insurance companies also perform many useful services, often of considerable value to a business. For example, several conduct extensive research studies or operate experimental laboratories in order to discover methods for reducing risks against which they insure. They also take direct steps to reduce these risks on the basis of their findings. Fire insurance companies conduct educational campaigns against carelessness and the maintenance of fire hazards. They inspect plants and recommend methods for eliminating firetraps. They endorse fire-fighting apparatus and fireproofed materials. In some large cities, fire underwriters operate, in conjunction with the local fire department, a salvage corps, whose duty it is to protect goods against water damage. When fire occurs, the corps responds to the alarm. Its duty is to cover all merchandise with rubber blankets, in that way reducing considerably the indirect damages caused by the fire.

Life insurance companies maintain health clinics and endeavor to prolong the average length of life; burglary and theft insurance companies recommend various alarm systems and occasionally maintain watchmen and patrol services of their own.

Several risks that involve possible liabilities to outsiders for losses suffered by them quite naturally lead to legal suits for damages. Insurance companies protecting the assured against such hazards usually include as a part of their services all negotiations and attention to details of legal proceedings. Summonses or other process papers are handled by them, and their attorneys relieve the assured of most of the burdens associated with the settlement of claims.

The rates of insurance depend largely upon the degree to which the losses are predictable in the aggregate, the number of cases over which the losses are spread, and the frequency and size of the losses. The rates are lowest when the losses are predictable with mathematical precision, when

large numbers are insured and the risks spread over many participants, and when losses, although large, are relatively infrequent.

Fire Insurance. Fire insurance is one of the most common forms of insurance carried for the protection of property. One reason for this is, perhaps, that most improved real estate in the country is pledged as mortgage collateral against real estate bonds, which usually carry the provision that the pledged property be insured against loss from fire.

Standard Policies. The risks provided for in the standard policy are losses due to damage from fire, water, and smoke. Unless specifically protected by a rider or supplement to the standard form, the following hazards are not usually covered:

1. Losses of accounts, deeds, evidences of debt, money, securities, manuscripts, drawings, or patterns.
2. Losses directly or indirectly caused by invasion, insurrection, riot, civil war, or other commotion.
3. Act of civil authorities (*e.g.*, the order of a fire department to burn a building in order to prevent the spread of fire).
4. Damage caused by explosion or lightning unless fire ensues.
5. Fires resulting from the maintenance of certain described explosives or inflammable materials on the premises.
6. Theft of property during a fire.

A fire insurance policy relates to a specific property. Before a policy is issued, a careful physical inspection is made of the premises. A detailed report of this examination or survey is drawn and forms the basis for the preparation of a policy and for the determination of the insurance rate. The following are condensed excerpts from a report covering a shoe factory:

Location of Estimated Values. Risk consists of several sections; main factory is divided into (2) approximately equal sections by good brick wall and (1) standard fire door at communications; office section is separated from main factory by good brick stair shaft, with substandard but good protection at communications; fire-resistive boilerhouse in yard, cut off from main factory by exterior wall and fair protection at communication; coal pocket, open to boiler room, is under first floor of office section rear, which is used as garage but has heavy concrete floor with no openings. Values approximately evenly distributed in main factory section; office and boilerhouse sections with relatively small values.

Prominent Desirable Features. Heavy construction. Wired-glass windows in part. Good outside protection. Sprinkler protection extends over practically all of risk. Good care of fire appliances. Good cleanliness. Sectional risk. Floors arranged to drain in part.

Prominent Undesirable Features. Special hazards, use of volatiles throughout factory; also garage not cut off from office properly. Meter in sprinkler connection. Sprinkler pipe can be used for other than sprinkler service.

For any given locality, most fire insurance companies quote the same rates. These are determined by a central exchange or rating organization.

Basic rates are established for certain communities, depending in amount upon local conditions. Chief attention is given to the water-supply system, the local fire department, fire-alarm system, police department, building laws, special hazards, and general structural and climatic conditions. Specific differentials are added to these basic rates for special types of property. These differentials are determined by the nature of the individual properties. Major influences consist of such factors as the nature of building materials, *i.e.*, whether of brick, stone, or wood, size of building, age of building, type of roof construction, kind of heating equipment, kind of chimney, use to which building is put, etc.[1]

Supplementary Provisions. If it is desired to obtain protection against risks not covered in the standard policy, additional policies or contracts known as riders must be written and higher premiums paid. Supplementary agreements of this variety frequently include protection against

Use and Occupancy:

1. Losses arising from inability to use the premises for productive or mercantile purposes on account of fire damages. Such losses may include
   a. Continuing overhead expenses or charges.
   b. Business losses due to failure to operate.
   c. Additional costs sustained in leasing and moving to temporary quarters.

Profits Insurance:

2. Losses of profits through destruction of sold merchandise or goods made on contract.
3. Losses of rental income suffered by landlords or owners of leaseholds during the period of reconstruction or repair.

Water Damage:

4. Losses suffered because of water damage on account of sprinkler leakage.

Most fire insurance companies also write policies for insurance against direct loss and damage to property resulting from earthquakes, tornadoes, windstorms, cyclones, hail, rain, flood, and other natural disturbances. They also issue insurance covering any property destruction resulting from riot, civil commotion, and explosion. For the most part, these policies resemble fire insurance policies in their general provisions and, in some instances, are merely attached as brief riders to the standard fire insurance forms. Where destruction of crops or livestock from these natural hazards is involved, special crop insurance is usually procured.

Co-insurance Clause. If fire-fighting facilities are at all adequate, damage resulting from fire is seldom complete. Most fires result in partial losses, and in view of this there is naturally a temptation on the

[1] Part of the foregoing data were taken from a monographic report, "Is the Real Estate Tax a Benefit Tax?" by Edwin H. Spengler, to the N. Y. Commission for the Revision of Tax Laws, 1932.

part of owners to insure for only a fraction of the value—the assumption being that the risk of total damage is slight. Since insurance is intended to provide indemnification for loss, there is not much incentive to seek protection in excess of estimated losses. Consequently insurance companies are in danger of collecting inadequate premiums from certain policyholders. In order to prevent this tendency and to penalize insurers who wish to reduce insurance expenses in this way, the so-called co-insurance clause is written into the contract. For most industries, this is an "80 per cent" co-insurance clause. According to its terms, at least 80 per cent of the replacement value of the property must have been insured at the time of the fire in order to collect full damages for loss up to the amount of the policy. Policies carrying insurance for a lesser amount would receive as compensation only a fraction of the total loss sustained. The liability of the insurance company under this clause is expressed as follows:

$$\frac{\text{Face value of the policy}}{\text{80 per cent of the replacement value}} \times \text{loss} = \begin{cases}\text{liability of insurance}\\ \text{company}\end{cases}$$

If, for example, a $100,000 property were insured for $50 000 and a $40,000 loss occurred, the insurance compensation would be

$$\frac{50{,}000}{80{,}000} \times 40{,}000 = \$25{,}000$$

If, however, the loss should exceed 80 per cent of the value of the property (in this case $80,000), the insurance company would be liable for the full amount of the policy, *i.e.*, $50,000.

Requirements in Case of Loss. In the event of fire, the insured firm is required to give immediate written notice to the insurance company of any losses or damage. A complete inventory must be made of destroyed, damaged, and undamaged property, and a sound appraisal value attached to all goods. A written and acknowledged statement of the time and origin of the fire, the interests of the insured and of all others in the property, and the specific amount of losses or damage on each item is also required. In addition, if any changes in the use, location, or possession of any properties took place between the time of issuance of the policy and the occurrence of the fire, this must be stated. The insurance company has the right to obtain books, invoices, bills, checks, plans, blueprints, or any other papers necessary or helpful in determining the amount of the claim. The insurance company also reserves the right to take all or part of the damaged articles at the agreed-upon value and to repair, rebuild, or replace any lost or damaged property by goods identical in kind and quality.[1]

[1] These terms are stipulated in most of the standard fire insurance forms used throughout the United States.

Casualty Insurance. Other insurable property damage and losses are usually protected against by some form of casualty insurance. The most common types of insurance policies in this group include automobile property-damage, automobile collision, other property-damage and collision, plate-glass, and burglary and theft insurance.

All these classes of insurance may be obtained from one concern. Hundreds of casualty companies handle risks of this description and, in addition, write policies for accidents and losses arising through personal injury. As in the case of fire insurance, standard forms are prepared, and virtually the same terms and conditions are specified by each company. Most casualty insurance policies contain co-insurance clauses, although the operation of the clause differs slightly in some cases from its application in the case of fire insurance.

In the event of loss, collection of damages usually requires immediate written notice with full particulars regarding the character and extent of the damage or loss and all pertinent facts relating to the case. An adjuster then inspects the property and obtains any other data necessary to determine the liability of the insurance company to the assured. When properties of third parties are involved, the insurance companies usually reserve the exclusive right to settle any claim or suit at their own costs at any time.

Rates for casualty insurance of different kinds vary considerably with the degree of risk of loss. Automobile property-damage and collision insurance is much more expensive in the congested urban centers than in rural districts. Burglary and theft insurance rates vary with the nature of the business, the general environment, protective services, the articles insured, whether exposed or locked in a safe, etc. The moral risks of the assured must also be considered. As in fire insurance, careful inspections and investigations are necessary, particularly if the policy is for a large amount.

Public liability insurance also falls into this category. This includes liability for damages arising from personal injury to outside individuals or groups of individuals through accidents of any kind that occur within the premises of a concern or as a result of any of the activities of its employees while performing their assigned tasks. Manufacturers', contractors', and owners' public liability policies and elevator, theater, and automobile liability insurance cover these risks. Another form of this insurance is manufacturers' and distributors' "products liability insurance." Injury resulting from faulty construction of a product, such as an automobile or a boiler, or sickness and death caused by consumption of candy, bakestuffs, or beverages containing too large a percentage of harmful ingredients, are hazards, the financial consequences of which are protected by such insurance.

Workmen's Compensation Insurance. Compensation to workmen or to their families for ill health, personal injury, and death, caused as a result of their employment within a company, is a burden imposed by state laws upon most classes of business. Statutory requirements debar the employer from pleading ignorance or negligence on the part of the employees to evade damage suits. Regardless of the cause of accident, with the exception of willful misconduct on the part of the employee, the business is usually considered responsible and liable for the payment of benefits. Benefits vary from state to state; but in general, the compensation scale ranges from one-half to two-thirds of the weekly earnings of employees at the time of injury or for any average period preceding it, plus the costs of medical and hospital care. Compensation is provided in most cases only after a waiting period of about two weeks. It is usually limited to from 5 to 10 years for partial disability but is paid for life by many states in the case of permanent disability. In the event of death, funeral expenses are paid, and death benefits, either in a lump sum or in the form of a pension or annuity to the beneficiaries, are ordinarily provided.

In order to meet these obligations, companies purchase workmen's compensation insurance, either through state-maintained insurance funds or from casualty insurance companies. Premiums vary with the character of the work, the past accident experience in the industry, the individual accident record of the company, and the size of the payroll. This type of insurance, though often regarded purely as a social safeguard, really affords protection to the employer. The business is insured against costly suits for damages and is spared the expense and loss of time that would be involved in endless litigation.

Life Insurance. The application of life insurance to business has been in two main directions, *viz.*, the insurance of the lives of selected key men in a company and the insurance of the lives of all employees. The purposes in each case have been different. The insurance of the life of a special employee or partner is to protect the concern against losses that might arise were the company deprived of his unusual abilities or contacts. For example, when Cecil De Mille's contract with the Famous Players-Lasky Corporation terminated, he became head of the Cinema Corporation. In view of Mr. De Mille's ability, a group of capitalists agreed to finance the company on an increasing scale over a period of years. Under this arrangement, Mr. De Mille's life and the continuance of his ability were of vital importance to everyone interested in the company. Realizing the risk taken, this company insured Mr. De Mille's life for $1,000,000, making itself the beneficiary in the event of his death. Moving-picture companies that expect to spend several hundred thousand dollars on a picture insure the lives of the featured stars; corporations employing skilled craftsmen

or artists whose work is characterized by its originality frequently insure their lives.

The other forms of business life insurance, through which all or most employees are insured, are known as group life and wholesale life insurance. A life insurance company will provide insurance covering the lives of individual employees within a given concern under group life insurance policies which are issued usually for groups of 25 or more employees. In some instances, the employer pays the entire premium, although in most cases the employees share in the costs. Medical examinations usually conducted by life insurance companies before policies are issued are not required under this arrangement. Employees are insured for a specified term of years or while they remain in the employ of their company. If they withdraw, they may convert what payments they have to their credit into another policy, with, of course, higher premium rates. Hundreds of concerns have inaugurated group life insurance plans for their employees within recent years. The low cost of the insurance is what appeals to employees; the employers regard it as a desirable adjunct to a general policy of developing loyalty and more permanent interests in the company on the part of employees.

Life insurance is widely held in the United States. The usual life insurance policy consists of two elements: saving and protection. Combinations of these two features are offered in various types of policies to suit the needs of the insured. Insurance companies, in order to promote sales, often use special terms or names to describe their contracts, but most policies are variations of three basic forms. These are endowment, ordinary life, and term insurance.

In endowment insurance, there is more saving and less protection. The insured pays a high premium but, at the policy's maturity, receives a lump sum that exceeds his payments. This type of insurance is not suited to those who are primarily interested in protection. It appeals to those who seek large cash reserves in later years.

Ordinary or whole life insurance offers more protection at less cost. The cash surrender value of the policy is less than in the endowment policy; but for an equal premium, almost twice as much protection can be purchased.

Term insurance is the type used by industry to protect executives or specific employees. It is pure insurance containing no savings at all. Like fire or other insurance, the premium is paid for protection; and at the expiration of the policy there is no cash surrender value. This type offers most protection at least cost.

Credit, Fidelity and Surety. Losses resulting from bad debts can be reduced through credit insurance. Each credit risk is separately investi-

gated, and the insurance company limits the amount of credit for which it will stand liable for any specific debtor. In the standard or regular policies, insurance covers only such debtor firms as are given a preferred credit rating by one of the rating companies such as Dun & Bradstreet, Inc. Higher rates are charged for combination policies or those including concerns with lower credit ratings. Other factors that influence rates are the nature of the business, the character of the clientele to which it caters, the past history of credit losses, and the terms of sales. Credit insurance companies, in addition to maintaining reserves against losses, usually operate collection departments which help to reduce bad debts.

In their daily transactions, firms have dealings with individuals, agents, or other company representatives, domestic and foreign, whose identity and general responsibility may not be well known. Many of these people or corporations are perfectly good risks, and their credit and moral standing may be high, but sufficient numbers among them have fraudulent schemes to make unprotected dealings with them a real hazard. The main work of fidelity and surety companies is to present endorsements or guarantees of reliability of these parties. They are able to do this by investigating all available sources of information that can be tapped for purposes of ascertaining the past history, reputation, and ability of such individuals and concerns. If satisfied with their findings, they issue bonds for certain amounts as security.

Fidelity companies in general specialize in guaranteeing against moral hazards or dishonesty of individuals. Employees who are placed in a position of trust are often bonded, in order to protect their employers against losses from pilferage or embezzlement. Should the employee prove to be dishonest, the fidelity company must make good the losses, up to the amount of the bond. Other surety companies concentrate on the underwriting of the ability or capacity of people to carry out contractual obligations. There are no sharp separations of function among these firms, and a large number of them not only issue their bonds or certificates of financial endorsement for various purposes but also write casualty insurance policies of all types.

Akin to such underwriting is the role of title insurance. The purchaser of real estate, desiring to remove any possibility of loss arising from defective title to the property or from liens for unpaid taxes, interest, mortgages, and other items, obtains title insurance. This is a guarantee of good title and is issued after a careful search and examination of the sequence of passage of title in the official real estate records. It protects the owner against subsequent losses arising from claims existing prior to his taking of title. A lump-sum fee is charged for this service, and the protection thus purchased continues in perpetuity. State systems of official

title registration accomplish the same result. In the latter case, a state fund or protective reserve must suffer any losses that arise from defects in titles. In the former, private company reserves are maintained for this purpose.

Marine Insurance. One of the most important classes of insurance is that which provides protection to shippers of ocean freight against losses occasioned by perils at sea.

Domestic shipments made by rail or express do not require special insurance, since the carrier is liable for loss or damages except when they occur through the negligence of the shipper or because of the perishable or destructible nature of the goods or as a result of conditions beyond the control of the carrier (such as those events classed as "acts of God," seizure by the government, or armed intervention by public enemies). The shipper is ordinarily responsible for loss or damage arising on account of improper marking, labeling, or packing of goods; the carrier is responsible for damage due to negligence, rough handling, fire, theft, defective equipment, wrecks, delays, and errors in shipment directly attributable to the carrier. However, the ocean bill of lading contains a long list of risks and liabilities from which the carrier is exempt. The following is only one of 33 such paragraphs on one particular bill of lading:

b. The carrier shall not be liable as carrier or otherwise for loss or damage occasioned by the perils of the sea or other waters, by fire from any cause or wheresoever occurring, by theft or pilferage, by barratry of the master or crew, or by act of God; by enemies, pirates or robbers; by arrest or restraint of princes, rulers, or people, riots, strikes, or stoppage by labor; by explosion, bursting of boilers, breakage of shafts, or any latent defect in hull, machinery, or appurtenances, or unseaworthiness of the vessel, whether existing at time of shipment or at the beginning of the voyage, provided the owners have exercised due diligence to make the vessel seaworthy; by heating, frost, decay, putrefaction, rust, sweat, change of character, drainage, leakage, by stowage or contact with or by smell, evaporation, leakage, escape of contents, or taint, of other goods, the vessel being privileged to carry any other articles, although hazardous or contraband; by breakage, vermin, or by explosion of any goods, whether shipped with or without disclosure of their nature, or for any loss or damage arising from the nature of the goods or the insufficiency of the packages; nor for land damages; nor for the obliteration, errors, insufficiency, or absence of marks, numbers, address, or description; nor for risk of craft, hulk or transshipment; nor for any loss or damage caused by prolongation of the voyage; nor shall the carrier be responsible for the correctness of statements herein of quality, quantity, gauge, contents, weight and value.

The ordinary marine policy covers many risks; chief among them are sinking, stranding, burning, collision, contact with sea water, piracy, mutiny, and willful barratry. The last-named occurs when the captain turns pirate or destroys or steals the vessel or cargo. Most policies also include coverage against *general average*, a term seldom understood by shippers. General average, meaning general loss, occurs when a sacrifice

of cargo or part of the vessel (like the chopping away of a mast or superstructure) is made to save the entire ship and cargo. The loss must then be shared by all who have an interest in the ship or its cargo, in proportion to the value of such interest. Briefly, this means that if, during a storm or other peril, some of the cargo must be jettisoned or thrown overboard to save the ship, the loss is borne proportionately by the owners of the vessel and by all the shippers. The liability of the insurance company that has insured one of the shippers is limited to the extent of his share of the total loss.

Particular average consists of partial loss or damage to an individual shipment when caused by risks other than those mentioned in the previous paragraph.

By partial loss is meant the damaging of some of the goods contained in one or more sacks, cases, or packages. For instance, if in a shipment of 1,000 sacks of flour 10 bags were completely spoiled or damaged, they would be considered a *total* loss and therefore not subject to particular average. If, however, owing to a burst pipe, 10 per cent of the contents of each of the thousand sacks were spoiled, the loss would be covered by particular average. Marine insurance protects the shipper or consignee against losses of this kind when, for an additional premium, this risk is added as a rider to the policy. The value of the cargo is determined for the purpose of insurance in advance of departure of the vessel. This valuation is fixed and determines the liability of the company in the event of total loss. There is usually provision for minimum or small losses for which the insurance company will not be liable; *i.e.*, if losses are but 3 per cent of the value of the shipment, each package or case being considered a separate risk, the insurance company will pay no damages. If, however, the damage exceeds this percentage, the full amount of the loss will be paid.

Marine differs from other forms of property insurance in that there is usually 10 to 20 per cent "overinsurance," the coverage being entirely up to the shipper. The extra percentage compensates the shipper for expenses and profit margins associated with each transaction. Underwriters permit this overinsurance because marine insurance has one great guaranty that is lacking in other forms of property insurance such as fire insurance, for example. A man may insure his building or his stock and then destroy it, without necessarily risking life or limb. But when a ship is at sea, there is an intimate and inescapable relation between the safety of the ship and that of the men who are responsible for her. This relation is fully recognized as an important protection to the underwriters in all maritime underwriting ventures. Other risks, depending on the nature of the cargo, are also covered by marine insurance on the payment of additional premiums. These may include theft, pilferage, breakage, war, steamer

CERTIFICATE OF INSURANCE

UNITED STATES LLOYDS, Inc.

Home Office: 1—3 South William Street, New York

APPLETON & COX, INC., ATTORNEY

$ 2038.00 No. B460018

NEW YORK, June 21st, 1934

WE HEREBY CERTIFY, that on the Twentieth day of June, 1934 we the undersigned, insured under Policy No. U-112262 made for Black-Auslander Co. Twenty hundred and thirty eight—00/100—Dollars, on 250 bags of Ivory Nuts

Valued at sum insured

Per S/S "Sarphos" and convs.

at and from Guayaquil, Ecuador to New York; direct or otherwise.

Black-Auslander Company

loss, if any, payable to the order of endorsed on this Certificate, which, upon said payment, is to be surrendered and assigned without recourse. It is understood and agreed that this Certificate represents and takes the place of the Policy, and conveys all the rights of the Original Policy Holder (for collecting any loss or claim) as fully as if the property were covered by a Special Policy, of the form in use by the undersigned direct to the Holder of this Certificate, and free from any liability for unpaid premiums.

APPLETON & COX, Inc., Attorney

By Douglas P. Cox

President

Countersigned by C. Curtis Mayo

ORIGINAL and DUPLICATE issued one other being accomplished of which stand void

Marks and Numbers	
APC Danes	As per policy

Warranted free of any claim based upon loss of, or frustration of, the insured voyage, or adventure, caused by arrests, restraints or detainments of kings, princes, or peoples.

Warranted not to cover the interest of any partnership, corporation, association or person, insurance for whose account would be contrary to the Trading with the Enemy Acts or other statutes or prohibitions of the United States and/or British Governments.

The condition of Payment under the Certificate is that all claims shall be reported to Messrs. BRODRICK, LEITCH & KENDALL, LIMITED, the Company's Agents at Liverpool (B. 18 Liverpool & London Chambers), or to any other Agent according to the list on the back of this Certificate, as soon as the goods are landed, or the loss known, to be adjusted according to usages of British Lloyds and the special conditions of the contract of insurance.

The Revenue Laws of Great Britain require that this Certificate be stamped within Ten Days after receipt in the United Kingdom, otherwise Loss cannot be collected there. Such stamps to be at expense of assured.

Marine insurance certificate covering shipment to an American importer.

sweat (damage caused by heat), and fresh-water damage resulting from the bursting of a pipe.

Other Risks. Certain so-called "insurable risks" are really misnamed. Strictly, to be insurable, as has been noted previously in this chapter, a risk must lend itself to such analysis that it is possible to foretell, within a fairly close range of accuracy, the probable losses that will occur in a collective group over a period of time. When this cannot be done, any scheme where premiums are paid for the protection against financial losses is merely a gambling contract in which the insurer puts up the greater odds. If the loss occurs, the insurer loses; if it does not occur, he wins. Policies that six months ahead of time guarantee snow on a carnival day, that guarantee the election of a certain candidate, or that "insure" dozens of people against the death of a specific individual are of this character. The element of sound actuarial practice in being able to predict losses is missing here. Yet, to the insured, such contracts are often of value and serve the same purpose as regular insurance. Lloyds, of England, is the most famous organization known to guarantee risks of this variety. They have developed the reputation of insuring against any risk, provided the insured is ready to pay the premium that they require. In 1938, this company insured businessmen who were spending millions of dollars in preparation for the New York World's Fair against the possibility of loss should the fair fail to materialize because of unsettled international conditions.

The risks of industry, whether physical, technological, social, or economic, may be reduced or completely eliminated, or they may be partly or completely shifted to the shoulders of others. All these operations involve expense; and although the chances for making a profit become greater as one by one these risks are eliminated the size of the profit becomes correspondingly smaller as these expenses mount. Business executives are called upon to make choices between indefinite losses and known costs. Occasionally this presents some very baffling problems. These risks cannot be ignored. The business must be prepared either to assume the losses that they entail or to pay for the privilege of being relieved of these contingencies. Each individual business presents risk problems of its own. Needless to say, this is one of the chief reasons why the costs of production are not the same for all producers in the same industry.

Questions and Problems

1. To a certain extent, business profits thrive on the existence of risks. Does this mean that large risks guarantee large profits? Discuss the relationship of risk to profit.

2. Technical advances and experimentation have done much to reduce risks. Illustrate in one of the following: commercial aviation, railroading, ocean shipping, manu-

facturing of furniture, operation of hotels or theaters. In the business that you have chosen, what are the usual risks and what means have been taken to eliminate or reduce them?

3. Farming is beset by so many risks that the crop is a gamble. Compare the risks of the farmer with those of the manufacturer, the retailer, the wholesale merchant. Which risks can be reduced or eliminated? Which can be controlled or diffused? Which can be covered by insurance?

4. "Risks to be insurable must be predictable." On what basis are risks of loss predicted? Which classes of risk are most accurately forecast? Why?

5. Thomas and Jones, a general partnership, manufacturing bronze castings, carry the following insurance policies:

Workmen's compensation insurance.
Public-liability insurance.
Fire insurance.

Explain and justify the necessity for each. Indicate the risks covered by each type of insurance. Are any essential and insurable risks uncovered?

6. If a piece of property valued at $70,000 is insured against fire losses for $40,000 and a fire loss of $35,000 should occur, what would be the approximate indemnification by the insurance company, assuming the existence of an 80 per cent co-insurance clause? Explain the meaning of the co-insurance clause.

7. What is meant by a "combination of risks" as a method of reducing losses in business?

8. Most life insurance policies contain two features: savings and protection. Mention various types of life insurance, and show how they differ with respect to these elements. What form of life insurance has no cash-surrender value?

9. What risks are usually covered in the ordinary marine insurance policy? Why is overinsurance common in marine insurance? Differentiate between general average and particular average.

10. What insurance protection may be obtained by businessmen with reference to the following risks: bad debts, embezzlement of funds, holdups or burglary, sickness or death of customers caused by deleterious foods?

CHAPTER XXVIII

INSOLVENCY AND REORGANIZATION

Business Failures. Businesses of all types encounter pitfalls and risks that must be avoided or surmounted if the enterprise is to be profitable. Failure to meet these difficulties may mean, not only no profit, but loss and disaster. There are many occasions in which faulty judgment or pure guesswork means the difference between profit and loss; there are conditions beyond control of the business that may engulf it; and there are times when enthusiasm and zeal, good qualities in themselves, have disastrous results.

In view of these possibilities, it is obvious that not all enterprises meet with success. Many are profitless and continue on the border line between profit and loss, hoping some day to reach a more satisfactory level; *i.e.*, the entrepreneurs are, for the time being, willing to accept nominal wages of management. In this case, the business merely pays its owner a living wage. Still others are so involved financially that a liquidation of their investment would be impossible without great loss. The latter classes of firms remain, though they find it relatively unprofitable. However, many are annually forced out of business.

It would not be correct to say that all firms that go out of business are failures. In many cases, the owners tire of losing money steadily and so quit while there is still an opportunity to save what is left of their investments. Voluntary dissolution also occurs when the time limit fixed in a corporate charter is allowed to expire or when a corporation, having accomplished the purposes for which it was organized, is legally dissolved by its stockholders.

Types of Insolvency. Legal definitions of failure or insolvency vary in the several statutes. In general, two classes of insolvency are distinguished. The first condition arises when there is a deficiency of total assets with respect to total liabilities, *i.e.*, where the company owes more money than its assets may ever be expected to pay. This is described by the National Bankruptcy Act as follows:[1]

A person shall be deemed insolvent within the provisions of this act whenever the aggregate of his property (exclusive of any property which he may have con-

[1] Section I of the National Bankruptcy Act.

veyed, transferred, concealed or removed, or permitted to be concealed or removed, with intent to defraud, hinder or delay his creditors) shall not, at a fair valuation, be sufficient in amount to pay his debts.

and is illustrated by the following balance sheet:

BALANCE SHEET OF COMPANY A

Assets		Liabilities	
Real Estate	$ 375,000	Capital Stock	$ 200,000
Machinery	160,000	Bonds Payable	250,000
Inventories	85,000	Accounts Payable	328,000
Cash	108,000	Notes Payable	250,000
Deficit	300,000		
	$1,028,000		$1,028,000

A second meaning of the term may be found where an enterprise, which either has ceased to pay its debts in the ordinary course of business or cannot pay its debts as they become due, is declared insolvent. This is because its assets, though greater than the liabilities, are "frozen" or non-liquid and hence are unavailable for the payment of current liabilities. For example, the following financial statement reveals this condition:

BALANCE SHEET OF COMPANY B

Assets		Liabilities	
Real Estate	$450,000	Capital Stock	$250,000
Machinery	250,000	Bonds Payable	200,000
Merchandise Inventory	110,000	Accounts Payable	350,000
Cash	81,300	Surplus	91,300
	$891,300		$891,300

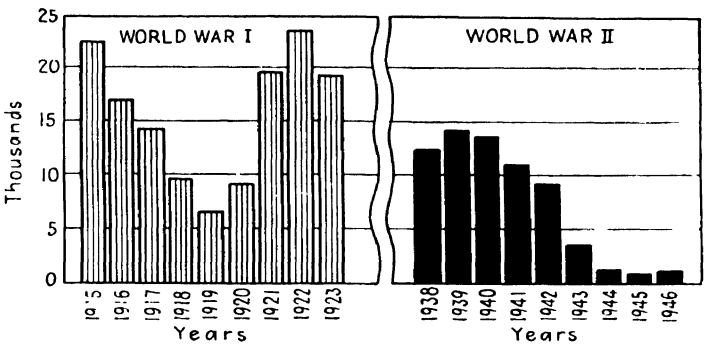
Accounts payable, due in 30 days, cannot be liquidated in the normal course of business.

Extent of Commercial Failures. The following charts show the extent of business failures in the United States for two different periods. Failures in numbers and amounts decreased during both war periods, but to a more marked degree in the Second World War when the economy of the nation was mobilized more than two-thirds to the war effort. During the latter period, however, there was an increase in average liability per failure. This was due to price increases and to some unusually large failures, especially in the iron and steel, machinery, stone, clay, and glass industries.

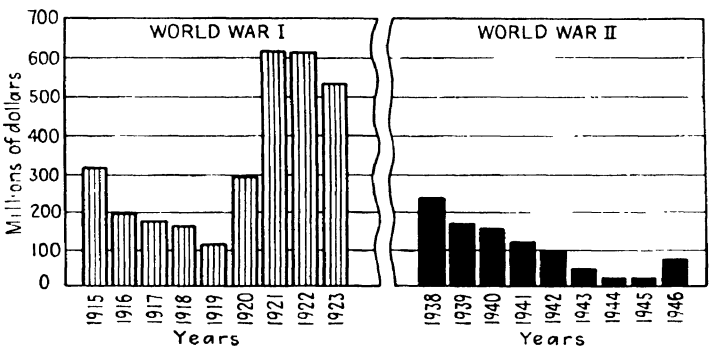
COMPARATIVE FAILURE TRENDS: 1915-1923; 1938-1946[1]

Total United States - All lines of business*

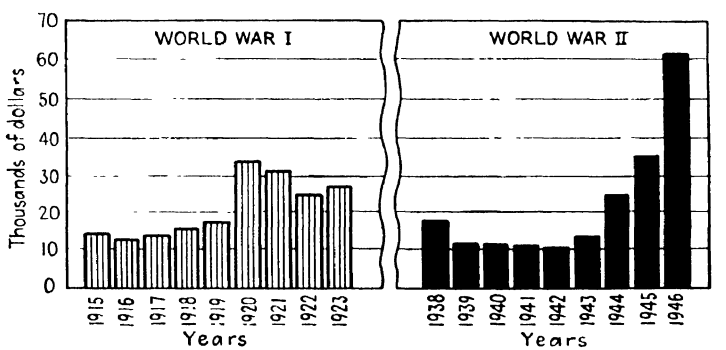
NUMBER OF FAILURES



AMOUNT OF LIABILITIES



AVERAGE LIABILITY PER FAILURE



* This includes all industries: mining, manufacturing, wholesale trade, retail trade, construction and commercial service

[1] Data obtained through the courtesy of Dun & Bradstreet, Inc. Compiled by the Marketing and Research Division

Data relating to the number of failures in the United States understate rather than exaggerate the situation. According to the figures compiled by Dun & Bradstreet and by the Department of Commerce, there are several voluntary withdrawals of firms in business for every commercial failure. For example, from 1921 to 1931 the average annual commercial failures were 22,750 but the average yearly withdrawals from business amounted to approximately 159,000.[1]

Probably, of those who withdrew from business, 50 per cent can be regarded as failures. Although the losses in many of these instances did not extend to creditors, they were losses to the owners themselves.

It may be seen, then, that while commercial failures come to less than 1 per cent of the firms in business, the withdrawals of firms in business average much higher, and of these it is estimated that half are really failures.[2]

Causes of Failure. The important causes of failures in American business can be discussed from two angles: the external causes and the internal causes.

External Causes of Failure. The frequency of commercial failure is generally associated with certain periods. Companies tha make money during an upswing of business sometimes do so regardless o the ability of their owners. They are swept along in a current of rising prices and business expansion. Such firms, however, do not outlast a period of deflation. Toward the end of a long period of depression and business inactivity, failures decrease because the inefficient and unstable firms have been forced out of business and those remaining exercise caution. It is also at such periods that many new enterprises are formed. These in most cases are very small and result from unemployment. Few large corporations or combinations are formed during recession periods. Probably the chief external failure, then, is the economic readjustment associated with the business cycle.

Another cause of failure is intense competition. When there are too many firms in business or when the productive facilities are greater than the ability of the market to absorb the products, business losses occur. In order to sell goods, prices are reduced below cost. Large firms, through price practices referred to in previous pages, force smaller rivals out of business. A corollary to this is that these failures, by embarrassing creditors, frequently result in other failures.

Changes in technique of production and in distributive methods are also considered as external causes of failures. Many concerns find difficulty

[1] See MILLER, S. I., Commercial Failures, *Jour. of the Amer. Statistical Assoc.*, March, 1933, Supplement, p. 143.

[2] FITZPATRICK, P. J., "The Problem of Business Failure," p. 45, Dolphin, 1936.

in adjusting themselves to change so that as the new firms enter in business older ones are forced to quit.

Many commercial failures are due to changes in style, in fads, and in habits. The shifts in consumer interests, the substitution of new wants for old, the upsurge in demand for given articles, and the sudden downswing in their use introduce elements of uncertainty that, in many cases, lead to financial disaster.

Finally, such specific conditions as natural disasters, including floods, storms, etc., and the destructive effects of war may be added to the list of external causes.

Internal Causes. Apart from these outside factors, the primary cause of business failures is poor management. This manifests itself in many ways, the most familiar of which is in the management of the finances, where it is discovered that the firm is embarrassed because of lack of capital. The leading internal causes of business failures are listed as follows:

General incompetence and inexperience.
Lack of suitable accounting records.
Lack of capital.
Unwise extension of credits and poor collection.
Speculation outside of regular business.
Neglect of business.
Personal extravagance.
Fraudulent disposition of property and embezzlement.
Sickness or death.

To these can be added such specific difficulties as insufficient reserve funds to meet emergencies, the lack of business connections, nonbalanced appropriations, and bad purchasing methods. Illustrations relating to some of these experiences have been given in previous chapters.

Readjustment of Insolvent Debtors. When the owners of a business or the directors of a corporation discover that they are powerless to satisfy the more and more urgent demands of banks, merchants, or other creditors, they must sooner or later take definite action in the matter. If not promptly initiated by the company itself, such action will probably be forced upon it by impatient creditors in an effort to secure a settlement of their claims.

In mild cases of insolvency, where a long-established firm with a good reputation is unable to meet its current debts, the officers deem it advisable to call a meeting of the creditors in order to seek a friendly solution to the problem. If the creditors are willing to be reasonable and if they have a fair degree of respect for the management, they should come to an agreement and accept a settlement that will permit the business to continue without interruption. Frequently they consider it prudent to keep the case out

of the courts, feeling that if the business is ultimately set on its feet again, they will be repaid without loss. Several plans have been devised.

If the outlook is fair, the creditors generally decide collectively to extend the time required for the payment of the company's debts. This is known as an *extension agreement*. The creditors grant a legal postponement of the settlement of accounts in the hope that the debtor company will be able to readjust itself during this period. An agreement of this kind is binding upon all parties to it,[1] and no creditor who has accepted the arrangement can press for payment except as provided under its terms.

Another concession on the part of creditors confronted with the problem of collecting from an insolvent debtor is to submit to a percentage reduction on their claims. This is called a common-law composition or a *composition settlement*. It is usually brought about by the debtor's action in offering a definite plan of adjustment to his creditors. In such cases a settlement is made for part cash, the balance to be paid in notes maturing over a period of time, or creditors agree to discharge their claims fully for a payment of a part of what is due them.

Occasionally a committee is appointed to take charge of the affairs of the enterprise for the benefit of those who hold liens against it. Provision is made for the return of the management of the company to its former owners when the claims have been satisfactorily adjusted.

Legal action is expensive, and most creditors are reluctant to protect their interests by this means unless all possibility of compromise appears futile. On the other hand, if the financial condition of the debtor firm is serious or if the creditors cannot agree upon a mutually satisfactory solution, proceedings are begun to bring the debtor under court control. Such action may be voluntary or involuntary.

Equity Receivership. A legal step designed to deal with the problems arising from insolvency without resort to bankruptcy proceedings is a petition addressed to a court of equity for the appointment of a receiver. Applications for a receivership are made voluntarily by the insolvent company itself or by a group of stockholders if it is a corporation. Creditors, both secured and unsecured, may also initiate such action.

A receiver is usually a disinterested party appointed by the court to hold, collect, care for, and dispose of the property of the debtor for the benefit of creditors, pending readjustment, reorganization, or litigation. He is a custodian under control of the court and derives his authority from the court and not from the parties at whose instance he was appointed. He may, however, be given power to continue the operation of the business

[1] It is not, however, binding upon creditors who refuse to sign the agreement. Such creditors are sometimes paid off in full by other creditors who desire to settle the problem in this fashion.

including the right to buy, sell, and even borrow, often in cooperation with a committee of creditors. This last function is especially true of receivers for railroads and public utilities where a stoppage of service would be socially undesirable. It also applies to "consent receiverships" which have as their goal, by mutual agreement on both sides, not liquidation, but rehabilitation of a company. In other instances, however, the prime task of the receiver is to liquidate or sell the business and to distribute the proceeds to the creditors.

In some cases, creditors recognize that a continued operation of the business will result in a further diminution of its assets. Delays in liquidating the business would merely decrease any proceeds that creditors might obtain. The solution then is quick liquidation of the firm's assets and a distribution of the proceeds to all creditors in proportion to their claims. The court requires that the receiver be bonded. A list of the firm's fixed and current assets, plus any other claims that can be turned into cash, is submitted to the court. After the business is completely liquidated, the receiver submits a complete accounting including a report of the moneys received and the expenses incurred. The statement includes also the fee or compensation for the receiver. The court then orders a distribution of the funds to the creditors. The law provides for preferential treatment of certain classes of creditors, such as payments due for labor, for example. Some of the claims are specific liens secured by mortgages or other forms of collateral. These latter claims are satisfied from the proceeds of the specific property that acted as security. Should the collateral be liquidated for less than the debt, the deficit becomes an unsecured liability of the business. The remaining cash is then distributed among all unsecured creditors in proportion to their claims.

The liquidation of a going concern is avoided by the courts and by creditors wherever possible. The assets of the business when turned into cash in this manner tend to shrink considerably so that creditors receive only a small portion of their claims. The fees obtained by receivers and officials employed in such a liquidation are frequently large expense items. Furthermore, the stoppage of a business is costly because real estate lies idle, machinery and other equipment have to be disposed of at a forced sale and usually realize only a small part of their value. In addition to this, there are some businesses where overhead costs are an important item, and these continue during the processes of liquidation.

The main object sought in the introduction of court administration of insolvent concerns in lieu of the more informal procedure on the part of the creditors themselves is to provide greater safeguards for all parties concerned. Court supervision assures a greater possibility of equality and fair play especially to the smaller or minority creditors. Federal and

state courts of equity appoint receivers whenever, in the judgment of the court, such action is necessary to protect the claims of litigants, to avoid waste or destruction of assets, or to enforce the decrees of the court.

The receiver is discharged by the court when he has successfully liquidated the business or restored its income-earning status or when, in the discretion of the court, the appointment is no longer justified. During the period of receivership, individual creditors are enjoined from bringing separate action against the insolvent business without the express permission of the court. This has somewhat the same effect as an extension agreement in postponing the date of payment of the firm's liabilities.

Assignments. Another device frequently employed in the liquidation of an insolvent firm is an assignment for the benefit of creditors. The debtor firm draws up a list of assets to be liquidated and a list of liabilities to be paid off by the proceeds. These schedules are turned over to an assignee approved by the court whose function it is for a specified period of time to dispose of the assets, to collect bills, to pay off debts, and to make a final accounting of all transactions to creditors, the debtor company, and the court. Although this procedure is legally regarded as an act of bankruptcy, it often has the advantage of escaping the unfavorable publicity of bankruptcy proceedings and the losses involved because of a forced sale, because it avoids the necessity of a petition in bankruptcy.

Insolvency and Bankruptcy Laws. In Art. 1, Sec. 8 of the Constitution, Congress is empowered to establish uniform laws on the subject of bankruptcy. The present law is the National Bankruptcy Act, passed in 1898 and amended several times during the twentieth century.

The purposes of this law were basically (1) to make it possible for creditors to seize an insolvent debtor's property and apply the proceeds to the satisfaction of their claims and (2) to discharge a debtor from his legal obligation and thus give him an opportunity to gain a new start. Recent amendments to the law have added a third objective, *viz.*, to keep the property of a business intact, where possible, and to effect a reorganization of a going concern rather than its liquidation if the circumstances would seem to justify such action.

The original federal bankruptcy laws applied to individuals and corporations—excepting municipal, railroad, insurance, and banking corporations and building and loan associations. These last ventures, when insolvent, were to be handled by courts of equity and never legally discharged from their obligations. Railroads and municipalities are, however, accorded the rights of reorganization in the bankruptcy courts under the provisions of the more recent amendments to the act.

Virtually all states have insolvency laws governing procedure with respect to insolvent firms. These laws are, however, valid only to the extent that they do not conflict with the federal law which supersedes them.

Bankruptcy. Two kinds of bankruptcy are provided for in the law—voluntary and involuntary. A voluntary petition is a simple sworn statement, setting forth that the individual or company has obligations which cannot be paid in full and that all assets or properties remaining are being surrendered for the benefit of creditors. The assets and liabilities and other pertinent facts are fully listed in schedules presented to the bankruptcy court. Upon receipt of the petition in proper form, the petitioner is declared a bankrupt.

Involuntary bankruptcy proceedings are brought against an insolvent firm by filing a petition signed by three or more creditors whose claims aggregate $500 or over.[1] The petition must set forth all necessary facts required under the law, including the statement that the concern has committed an "act of bankruptcy." The most common act of bankruptcy is the making of a general assignment for the benefit of certain creditors. The law defines six conditions that would be considered grounds for bringing bankruptcy proceedings.[2] The company is then served with a subpoena to answer charges set forth in the petition. If there is no answer, the concern is immediately declared a bankrupt. If an answer is made, a trial is held; and if the outcome is in favor of the petitioners, the debtor is declared a bankrupt.

Both in voluntary and in involuntary proceedings, the next step involves the appointment of a receiver by the court. An examination into the affairs of the bankrupt is conducted. This is followed by meetings of the creditors and arrangements for the liquidation of the assets and distribution of the proceeds. A final accounting and submission of reports by the receiver or a trustee in charge of liquidation wind up the proceedings and lead to the discharge of the bankrupt by the court from further legal liability for debts included in the case.

Composition Settlement. Instead of liquidating the properties, a majority of creditors under a bankruptcy proceeding can with the approval of the court agree to accept a percentage payment of their claims, restore the bankrupt in possession of his property, and release him from further liability. The debtor may offer terms of composition to his creditors, either before or after being adjudicated a bankrupt, but only after he has been examined in open court or at a meeting of his creditors and has filed a schedule of assets and liabilities. This type of settlement is in many re-

[1] However, if the creditors of a corporation are fewer than 12, one creditor with a claim of more than $500 may file a petition.

[2] Section 3 of the National Bankruptcy Act.

spects similar to a voluntary common-law composition previously referred to except that instead of coming into existence through contract, it is put into effect under the federal law. Moreover, instead of necessitating the consent of all or most of the creditors involved, it compels the acceptance of terms approved by a majority of creditors (in both number and amount) and by the court.

Reorganization. Frequently, when an enterprise is basically sound but is temporarily embarrassed financially because of mismanagement, overcapitalization, or a series of untoward situations that can be remedied in time, reorganization might be a feasible solution. This is particularly important where the breakup value of the plants, equipment, and materials would result in enormous shrinkages in capital values and would make inadvisable any immediate dissolution of the firm. In such cases, an attempt is made to salvage the business as a going concern by supplying the funds needed to give the company a fair start, by rearranging the capital structure, and by liquidating or adjusting the claims of the creditors on a scale-down basis. Steps are also taken to assure sound management, operating economies, and the removal of other difficulties that have led to the original problem.

It is necessary to secure the cooperation of all financial interests concerned if a reorganization of this sort is to be effected without resorting to court proceedings. This is so because any plan voluntarily set up that does not get the full support of the parties affected under it is imperiled by the possibility of refusal to abide by it and the filing of suit to have it set aside. Consequently most reorganizations, especially of corporate enterprises, have been handled through the courts.

Reorganization Plan. The most important feature of a corporate reorganization is the financial reconstruction of the company. This involves vital adjustments of various claims including those of the common and preferred stockholders and a series of bond-holding groups, secured and unsecured trade creditors, and banking houses. Since in a large organization the interests of these groups are widely separated, a complex struggle of conflicting rights has frequently resulted. A plan of reorganization of an insolvent firm must, therefore, be a skillfully drawn pattern involving a fine balance between relative gains and sacrifices of the several interests involved. Fundamentally, the plan is prepared for the purpose of charting a new course for the embarrassed firm. The main objects that must be kept in mind are, therefore, to make the financial structure as simple as possible, to keep fixed charges at a minimum, and to provide facilities for the raising of more capital. In order to accomplish this, existing shareholders might be required to accept a small amount of common stock for much larger blocks of common and preferred shares previously held, or

senior lien holders may have to yield their prior rights to permit new financing. Moreover, common stockholders are sometimes forced to invest additional cash so as to salvage even a part of their equity.

In a plan of reorganization of the Radio Keith Orpheum Corporation, submitted for approval in August, 1938, the following general treatment of the various classes of security holders was proposed: [1]

1. To the holders of 10 year 6 per cent gold debenture bonds, for each $100 principal amount, either 1 share of new preferred stock and 5 shares of new common stock of the reorganized company or 1 2/5 shares of new preferred stock.

2. To the holders of unsecured claims—10 shares of new common stock of the reorganized company for each $100 of claims.

3. To the holders of common stock—for each old share, 1/6 of a share of new common stock and an option warrant entitling the holder to purchase 1/2 share of new common stock at a price of $10 a share for a period of five years.

It often requires several months or even years to effect a complete reconciliation of the many interests—each struggling for personal advantage.

Steps in Reorganization. Prior to the passage of amendments to the Bankruptcy Act, the usual method of giving effect to a plan of reorganization was to apply for an equity receivership and arrange for sale or foreclosure of the property in default. The property put up for sale was then purchased by a representative of a joint committee, usually as agent for a newly formed corporation. The consideration offered as payment in the sale was the claims of the creditors and security holders against the old property. Thus a new company took over the business of the old firm, and its securities were distributed to all classes as agreed under the reorganization plan. Although the latter procedure is still available to those who wish to make use of it, the new provisions under the Bankruptcy Act offer special advantages that have attracted those seeking to bring about reorganizations.

Reorganization under Sec. 77b. In June, 1934, the United States Bankruptcy Act of 1898 was amended in several important respects. The changes that particularly affected business were contained in Sec. 77*a* and *b*. Section 77*a* merely extended the jurisdiction of the courts of bankruptcy to proceedings for the relief of corporate debtors. Section 77*b* provided the procedure. This law was especially designed to aid in the reorganization of helpless, yet solvent corporations and to afford relief to other overburdened debtors.

It was the intention of Congress to afford a means of rehabilitating corporations that would be more expeditious and less expensive than an equity receivership. It was the hope that this would give greater scope for adjustments than was formerly provided under bankruptcy proceedings and

[1] Minor details omitted.

that it would avoid the disruption of business and consequent economic strain.

According to various court decisions, the purpose and effects of Sec. 77*b* were as follows: [1]

The policy of Congress in enacting Section 77*b* was to afford a respite to corporations in financial difficulties so that their owners and creditors might effect a rescue. It avoids liquidation of property involved in a reorganization with a view to rehabilitate rather than to liquidate. It protects the debtor's interest in case it is not insolvent but is unable to meet debts as they mature; it keeps the property of the business intact; it provides for reorganization; and it develops a plan by which all parties may receive fair treatment. The essential purpose of the act is to preserve a going concern. It aids corporations solvent in fact but unable to meet maturing obligations. The debtor and creditor have an opportunity to submit a plan of reorganization so that the debtor may live and the creditors receive more than would be obtainable on a liquidation sale. It is a speedier and more efficient means for reorganization of embarrassed corporations than formerly existed with the elimination of multiple litigation and the prevention of delay.

An example of a corporation that wished to secure relief under this law is found in the case of the Roxy Theatre Corporation. On May 18, 1932, a receiver in equity was appointed. He took possession of the property and assets and continued operation until June 28, 1932. The receivership was extended by the court for a while, then was made permanent. The business carried on by the receivers finally sought relief under Sec. 77*b* because

1. The income of the receivership from the operation of the debtor while sufficient to meet operating expenses was not sufficient to meet current real estate taxes and other fixed charges or to meet any interest on principal of the indebtedness of the debtor, whether secured, or unsecured.

2. The receiver issued prior lien certificates in the principal sum of $250,000 to mature June 15, 1934. Interest was paid currently but the receiver had no funds on hand to meet the principal without substantial impairment of the working capital necessary to continue the business of the debtor.

3. Real estate taxes were overdue and could not be paid. Interest was owing on the first mortgage bonds and other sums were due to general creditors of the receiver. These were in excess of $4,500,000.

4. Earnings were insufficient to meet these expenses and maturing obligations; nor was the receiver in a position to sell bonds to raise the required funds.

The petition stated:

It is therefore necessary for the debtor or its creditors to effect a reorganization of the debtor pursuant to said Section 77*b* by which the various liens and claims against the property of the debtor may be readjusted and if necessary, scaled down

[1] "Collier on Bankruptcy," 13th ed., Cumulative Supplement, p. 350, Matthew Bender and Co., Inc., Albany, 1938.

and converted into different forms of obligations or postponed, as may be just and equitable.

The petition also asked that the receiver have the power to operate the business of the debtor until further order of the court. In this case, if it had not been for the new law, the property would have been liquidated to meet pressing obligations causing a great loss to all those who had claims against the corporation. It was thought that more would be salvaged by permitting the corporation to operate as a going concern; and under the law, this was possible with the approval of the court.

The Chandler Act. Further changes in the bankruptcy laws were introduced in the Chandler Act, which became effective September 22, 1938. Chapter X of this law embraces corporate reorganizations and is a revision of Sec. 77*b*. In passing this legislation, Congress sought to establish a better balance between the rights of creditors and debtors and to protect large numbers of individual security holders from unfair domination by inside groups, *i.e.*, the debtor management and the investment bankers.

A petition for reorganization must include a statement of the assets, liabilities, and financial condition of the debtor and must give evidence that there is a "reasonable basis" for expecting a reorganization of the concern. Where the debt is less than $250,000, the court may or may not, at its discretion, leave the debtor management in control under a plan of reorganization. Where the debt exceeds this amount, the court must appoint a disinterested person or entity as trustee. If the debt is in excess of $3,000,000, the court must refer reorganization plans to the Securities and Exchange Commission. The commission is required to examine and report on such plans, but only in an advisory capacity.

In reorganizations where the debtor is left in possession, the judge appoints an examiner to investigate the business. In either case, whether under trustee or examiner, the court orders a complete investigation of the general condition of the debtor firm, the cause of its difficulties, its financial status, and the expediency of continuing in business. The trustee or examiner is required to prepare a report of findings, particularly with respect to any evidences of fraud, misconduct, mismanagement, or other irregularities.

The next step is the filing of a plan of reorganization. This is prepared by the trustee. Opportunity is given to all interests, large and small, to participate in the formulation of the plan. Suggestions may be proposed by individual creditors, trustees, or groups of stockholders. Creditors and stockholders also submit their own plans within a specified period. Hearings are held, and objections or amendments submitted.

The plan finally adopted is formally approved by the court. If no plan is proposed or accepted within the time limit set, or if the trustee

reports that it would be improper or unfeasible for a plan to be filed, the judge may, upon due notice, direct the liquidation of the firm.

This procedure is illustrated by the case of the Portland Electric Company, a firm incorporated in 1906 under the laws of Oregon. After years of profitable operation, it found itself in financial difficulties. Unable to pay its debts as they became due and faced with accumulated interest of 30 per cent on its 6 per cent collateral trust income bonds, the company, on April 3, 1939, filed a petition in the United States District Court for reorganization under the Chandler Act.

On May 1, 1939, the Court appointed trustees, who subsequently submitted four plans for reorganization, all of which failed to receive the approval of the Securities and Exchange Commission. Finally, in cooperation with committees representing various grades of security holders, an acceptable plan was evolved.

The assets of the company were transferred to two associated corporations, the Portland Traction Company and the Portland General Electric Company, in return for cash and the common stocks of these companies. The bondholders, according to the class of bond held, received cash and common stock in the two companies in varying proportions as outlined in a schedule. Prior preferred stockholders received, in return for each share and accumulated dividends, 5.33 shares of common stocks of the Portland General Electric and 3.2 shares of common of the Portland Traction; each share of first preferred was allotted 0.23 shares of common of the electric company and 0.125 of the traction company. Common stockholders received nothing.

The Chandler Act was designed to strengthen and modernize the bankruptcy law in all its phases. In addition to the section on reorganizations, other chapters [1] were included in the law for the purpose of dealing with compositions and extensions (now called arrangements) and with the adjustment of secured and unsecured debts. The reorganization proceedings were altered in such a way as to give greater stress to the public interest. An attempt was made to provide a workable and equitable process for dealing constructively with "sick" businesses, in the interest of the public, the creditor, and the investor.

[1] Chapter XI, for example, provides relief to the debtor in cases of insolvency, by permitting him to formulate a plan of adjustment and retain possession of the property, operating the business under the supervision of the court.

Questions and Problems

1. Why do so many individual starts in business end in failure? What are the most frequent causes of business failure in the United States?

2. Contrast the causes of failure of a small retailer to those of a giant enterprise such as a railroad, a shipbuilding company, or a textile mill.

3. Business failures are a current index of conditions. Where would you obtain information concerning the extent of business failures? Tabulate current statistics of failures for a particular month; for a year. Do such figures show seasonal variations? If so, why?

4. A firm is insolvent when it is unable to meet its current obligations. Does this always imply insufficient assets? Describe the circumstances under which extensive assets may not prevent insolvency.

5. Not all insolvency results in a firm's going out of business. Explain the use of *extension agreements, composition settlements.*

6. Describe the conditions under which an equity receivership is granted.

7. Under what circumstances is a reorganization more desirable than the liquidation of an insolvent firm? Why?

8. Sometimes the process of reorganization involves an assignment for the benefit of creditors. Why is this done? Show that the interests of creditors are protected by this arrangement.

9. Briefly outline the philosophy of reorganization of business concerns under section 77*b* of the United States Bankruptcy Act, and under the Chandler Act.

10. On the stock market page of a newspaper, there are notations indicating that some stocks are of firms in receivership. Why are people willing to trade in such shares? What prospects are there for the stockholder in an insolvent corporation?

Part IX

INDUSTRIAL AND ECONOMIC PLANNING

CHAPTER XXIX

PLANNED PRODUCTION

Need for Planning. "A man with a plan, however much we may dislike it, has a vast advantage over a group sauntering down the road complaining of the economic weather and wondering when the rain is going to stop." Thus spoke Dr. Nicholas Murray Butler in an address in Paris in 1931. In doing so, he voiced the views of thousands of businessmen who have come to recognize the need for some form of economic planning that goes beyond the borders of the individual firm. The growth in size and complexity of the industrial system has served to emphasize the importance of the many interrelationships found in American business. Prosperous or depressed business conditions are quickly translated from one enterprise or one industry to another. Cyclical movements with their intermittent periods of unemployment, business disasters, and financial chaos have demonstrated only too well the mutual interdependence that exists in the several branches of industry.

Economic depressions generally awaken among businessmen a renewed interest in long-time measures of industrial control. Thousands of schemes have been brought forward as panaceas for the prevention of the repetition of industrial ills. Back of these suggestions, no matter how extreme or fantastic some of them may have been, is the common desire for stability and regularity. The goal is to attain a better balance between production and consumption and so to arrive at a more progressive and orderly state of business. In most instances, such programs involve a fairly close degree of cooperation among competitive firms and the surrender of independent management to group regulation and control.

Planning vs. Unrestrained Competition. One of the factors that marked the early development of American industry was the comparative lack of restraint on individual freedom and initiative. Business was largely directed by independent proprietors who managed their affairs as experience or judgment dictated. They produced or refrained from producing, made purchases when and where they chose, and employed workmen at wages that, under competitive market conditions, they felt they could afford.

When business units were small, this mechanical method of relating output to market needs worked with a fair degree of success. Inadequate

supplies induced more competitors to enter a given field; glutted markets discouraged other classes of producers. Miscalculations resulted in failures —but such losses affected but a small number of owners and their employees. Readjustments, although painful experiences at times, could usually be effected without great social repercussions.

With the development of large-scale industry and the spread of powerful combinations, these "automatic adjustments" in a laissez-faire regime have become increasingly severe and widespread in their influences. No longer are the penalties for mistakes in management confined to a handful of owners and employees. Thousands of investors suffer a decline in security values as losses replace profits. Thousands of employees find themselves jobless as a result of the collapse of a single concern. From a social, economic, and business viewpoint, unrestrained competition among the industrial giants in the modern economy has certain inherent disadvantages which are largely responsible for recurring periods of bad business and economic stagnation. This thought was clearly expressed by Justice Brandeis of the United States Supreme Court, in the quotation given in a previous chapter.[1]

Planless production, in the sense that individual firms produce without regard for the output of their competitors, on the one hand, and the ability of the market to absorb their product, on the other, is partly responsible for business disturbances and depressions. Such production is wasteful in many respects; it results in idle plants and machinery, duplication of equipment and facilities, inefficient methods, and high costs.

Each concern is affected by the actions of its rivals, and one industry suffers on account of conditions in other industries. Under the circumstances, the complete planning of production and output within the individual firm becomes an almost impossible task owing to the influences of external conditions. This has led to the conviction among many business leaders that if stabilization is to be achieved under the present form of economic organization, the business community as a whole must learn to control itself.

Because of the pecuniary organization of modern economic society, periods of depression or prosperity are indicated in terms of prices and money income instead of in terms of real wealth, *i.e.*, goods. Increased productivity, which should mean the increased supply of necessities and comforts for all, has often resulted in ruinous prices, in business stagnation, in monetary losses, and in unemployment. Economists agree that a country's wealth consists of goods and services. The more goods that are produced the higher should be the standard of living. But the pecuniary and social motives of production are often contradictory. As a result,

[1] P. 69.

remedies offered by different groups for the solution of economic evils are also contradictory. Some plans call for reduction in output, price stabilization, and protection of a reasonable profit. Others call for a more extensive, but coordinated, development of the resources of the country.

Initial Attempts at Industrial Planning. The first solution in attempting to stabilize industrial activity and to reduce competitive wastes was to form consolidations of competing interests. Many of the earlier pools and trusts were organized for the purpose of better coordinating and controlling activities in certain industries. Between 1860 and 1890, pools were created in several important industries—chiefly in salt, coal, whisky, and cordage. In the nineties, they also became common in certain branches of the iron and steel industry. During this same period, the well-known petroleum, sugar, lead, and tobacco trusts arose.

In nearly all cases, the formation of these combinations was preceded by a period of severe competition and falling prices. Consequently, their immediate purpose was most commonly to restrain competition and to restore prices to profitable levels. The long-run effect of their policies was seen in the formulation of carefully prepared production and marketing schedules or of price-stabilization measures. Because of the almost complete control that they exercised, these organizations were in a position to develop effective plans for the current operation and future growth of their industries.

In the steel- and iron-pipe industry, through the agency of the Addyston Pipe Pool, all orders for pipe were ingeniously allotted to individual members. By this method, each company could specialize in producing a certain type and gauge of piping—thus eliminating wasteful duplication of equipment. The Michigan Salt Association made possible a fairly steady schedule of output among its members by maintaining a central body through which orders were distributed to each unit in proportion to its previously established capacity. In the petroleum industry, the use of pipe lines was allocated on a geographical basis so as to secure greater marketing control. The cement and the steel industries made considerable progress in developing a "mutual understanding" among competitors in the matter of quoting uniform prices. Besides controlling prices, these policies resulted in the distribution of business among the producers on a geographical basis.

Success in achieving their initial objectives, *i.e.*, production and price control accompanied by equitable profit margins, led most of these combinations to seek greater monopolistic powers and larger profits. Output was limited, and prices were set at such excessive levels that there followed a general popular uprising against trusts and monopolies of all descriptions. The resulting state and federal laws designed to destroy these combinations and to restore competitive conditions in industry caused a

temporary halt in this general tendency toward coalition among competing producers.

Later Developments in Industrial Control Measures. It was not long, however, before substitute measures of control, in some respects more powerful than those which they replaced, were brought into existence. The mergers, holding companies, trade associations, and open-price associations of the twentieth century had substantially the same ends as those sought by the pools and trusts of the previous century. The formal types of combination, such as the merger and the holding company, led to an increase in size of the individual business unit. This carried with it the many advantages of large-scale business including the ability to control purchases, production, output, and prices for a substantial section of an industry. Internal planning on the part of individual companies assumed almost the proportions of industrial planning.

However, these combinations seldom obtained undisputed control within an industry. On the contrary, other equally powerful units tended to develop. Instead of resulting in more planning and regulation, this often aggravated the competitive situation. "Supercorporations"—each attempting to gain a maximum share in the business—vied with each other in expanding their production and marketing facilities. As was previously pointed out, this culminated in periodic disturbances far more serious in character than when smaller enterprises were involved in the struggle.

A community of interest on a broader scale was therefore deemed necessary. Most attempts in this direction, however, violated such regulatory measures as the Sherman and the Clayton Acts. In spite of this legislation, important groups of industrialists were able to set up agencies designed to secure a certain amount of cooperation among producers in the same industry. This was accomplished chiefly through trade associations and open-price associations by means of collecting and disseminating trade statistics among the members.

Statistics gathered by the various trade associations included figures relating to volume and value of output of each producer, wages and costs, employment data, stocks of raw materials and finished products on hand, shipments, orders, cancellations, and prices. These data proved to be of great value to leading competitive producers, particularly in such industries as sugar refining, cement, meat packing, automobiles, steel, lumber, and coal. Through the analysis of markets, coupled with a knowledge of stocks of goods on hand, production schedules, and price quotations of their competitors, business managements were better able to see the operations of an industry as a whole and to guide their policies accordingly. Uniformity in price quotations and well-organized production plans on the part of member firms were the result. In many instances, joint research

and advertising programs were launched by producers in these associations. The final step in the development of these bodies was seen in the provision for disciplinary measures against members who were recalcitrant in observing regulations mutually established by the entire group.

A strict enforcement of existing trust-control legislation would have outlawed most of these activities. The major reason why there was not a broader extension of the movement toward collective regulation and planning among competitive industries was the fear of the illegality of such action.

In 1933, however, with the passage of the National Recovery Act, many of these policies were given at least temporary legal sanction. This paved the way for the growth of industrial planning on a scale never before seen in this country. Hundreds of codes of fair competition were formulated and approved by the national government. Existing trade associations or quickly formed organizations of business establishments drafted these codes. Most of them provided for price-control measures—either by direct price fixing or by "open-price" posting. Certain codes carried with them regulations of output or even (as in the copper code) specific allocations for each member, with provisions for penalties in the event of production in excess of fixed quotas. In the textile, hosiery, clothing, and other related industries, a definite limitation was fixed on the number of hours per week during which productive equipment might operate. Minimum wages and hours were established in all codes. Many codes provided for regular reports and dissemination of statistical data by the code authorities.

After the Supreme Court ruled this legislation unconstitutional, many of these industries nevertheless sought to preserve at least part of their programs of industrial cooperation and planning. Trade associations have continued and probably will continue in their quest for industrial control.

Limitations of Planning and Control Measures. These various attempts at industrial planning are far from ideal. They have not succeeded in regularizing and systematizing the affairs of business in the manner in which it was hoped that they would function. Moreover, they have resulted in many new problems. When all firms in an industry, regardless of variations in efficiency, management, and size, have to operate under essentially the same conditions, the resulting evils may be worse than those which were to be corrected. The firm under capable management is limited and handicapped by those less efficient or less favorably situated. Individual initiative is restrained, and the freedom necessary for commercial development is restricted.

Since, in most cases, regulatory codes were drawn up by the important firms in an industry, the conditions set down tended to favor the large

concern as against small or medium-sized organizations. In some trade associations, not all firms in the industry were permitted to join or else membership conditions were made very difficult. In such cases, many in the industry were subjected to regulations that they had no part in formulating. A few large firms might thus have had a dominating influence over many small firms, reviving many of the evils and discriminations formerly associated with trusts.

Trade and open-price associations, though highly successful in some lines, were beset with many difficulties in others. For example, many of the associations that began with great emphasis on price and statistical work subsequently abandoned it, because the members decided that the work did not pay for itself. With reference to price data, an important reason for dissatisfaction was the discovery that unscrupulous members were making false or incomplete returns. Obviously, the value to association members of the exchange of facts is largely, if not completely, destroyed by any inaccuracies or by fraudulent reports.

Even in the main objective of most associations, *i.e.*, that of stability, the results have not always been favorable. The Federal Trade Commission report in this respect stated: [1]

> If open-price associations effectively stabilize prices, that effect is brought about in other ways by equally important factors, whatever they may be, so that the open-price commodities show no greater stability, or no more undue stability, as the case may be, than other commodities. In fact, they appear to show a trifle less constancy in their movements from month to month.

It is fair to point out that such an opinion is not conclusive, since the commission studied only a few of the 90 open-price groups and although this might have been true of the five large lumber-trade associations and of certain other groups investigated, it did not reflect a study of all or even a large part of the associations in existence.

Another aspect of stabilization is the fact that price stability does not necessarily result in stability in production. The same commission reported: [2]

> It does not appear that industries with open-price associations are better in respect to stability or regularity of operation than those that merely have trade statistics; indeed, the comparison, though on too narrow a basis, is more in favor of the latter.

One of the major criticisms leveled against these private regulatory schemes is that despite their apparent inclusiveness with respect to competitors in a given industry, they still lack the breadth and scope of pur-

[1] "Open-price Trade Associations," U. S. Federal Trade Commission, p. 357, 1929.
[2] *Ibid.*, p. 358.

pose needed for real economic planning. Ralph J. Watkins, director of the Bureau of Business Research of the University of Pittsburgh, in discussing the need for this wider program of planning, said:[1]

> We cannot afford to rely on sporadic efforts at control; our thinking and our energies must be directed in an organized way at the broad objective of conscious planning for more efficient economic organization.
>
> Isolated programs of planning in only a few industries will avoid primary problems of control of business cycles. No industry is a law unto itself—no industry can escape the recurring breakdowns in the economic system as a whole. Only by a concerted program of coordinated planning can we hope to cope with the complex forces which periodically undermine our standard of living and imperil our civilization.

Various interpretations have been placed upon the meaning of the expression "concerted program of coordinated planning" as used in the foregoing quotation. Businessmen are generally agreed, however, that some form of national council or general planning board would have to be set up to guide and to regulate the activities of all industries over a long-term period. The strongest advocates of schemes of this kind feel that to be successful, the administration of them would have to be placed in the hands of the federal government or at least under governmental control.

Governmental Planning. In its earlier stages, planning by the federal government closely resembled private methods of control. The characteristic feature involved a program of limitation and of restriction in order to prevent production from exceeding demand. The purpose of this was to raise selling prices to such levels that they would cover production costs and thus restore private industry to a profitable basis. These programs were launched on the theory that government intervention is justifiable when "automatic" economic adjustments break down and intelligent control is necessary to restore a working balance.

Proponents of governmental planning, however, saw the possibility of broadening the base of control to one of *maintenance* rather than *restriction* of output. This policy would, of course, be more social in character and less private in benefit to individual firms, inasmuch as the needs of the whole nation rather than the interests of single industries would be served. Nevertheless, the long-range effects of national planning of this description were estimated by certain classes of businessmen to offer such attractive possibilities for the effective operation of industry that they gave the idea their whole-hearted support and approval.

[1] WATKINS, R. J., This Depression and the Next—A Challenge to Economic Research, *The Pittsburgh Rec.*, Vol. 6, No. 4, 1932.

The objectives of this type of planning may be summarized as follows:[1]

Not general limitation of output, but increase of total production . . . not less production, but more. It is not stabilization at any given fixed level, but regularized growth. It is the full utilization of our powers of production which are continuously growing, in order that our consumption may grow correspondingly.

Various plans of this kind made provision for

1. The preparation by the government of a nation-wide statistical survey, designed to guide those who are placed in charge of coordinating production and consumption.
2. A redistribution of income and an adjustment of production so as to provide basic minimum requirements of life to all citizens.
3. Gradual elimination of marginal or high-cost producers, with a resulting improvement in average industrial efficiency.
4. Reduction of wasteful competition and of duplication of production facilities, products, and services.
5. Establishment of a more satisfactory balance between productive equipment and demand.
6. Coordination of output with market needs through the regularization of the flow of materials and of finished goods in all interrelated industries.
7. Stabilization of the price level to the extent that this is possible.
8. Maintenance of unemployment reserves and insurance to provide income to workers during periods of fluctuating output.
9. Long-range public-works schedules to be initiated during periods of industrial decline.

Another variety of governmental planning policy led to the conservation programs of federal, state, and local units. Alarmed over the prospects of rapid depletion, if not ruthless destruction of natural resources, government bodies took steps to control the use of land and to conserve the supplies of lumber and natural gas, oil, and other minerals. Thus, society sought to correct the shortcomings of business planning. The nature of this problem has been stated by Mitchell as follows:[2]

Now we are becoming dimly fearful about the loss of soil fertility through reckless methods of cultivation and erosion. The appalling wastes of natural resources that are going on seem due largely to the policy of handing over the nation's heritage to individuals to be exploited as they see fit. It appears that business planning takes and must take a relatively short period of time into account—a period that is but as a day in the life of a nation. What is rational on the basis of this short-run private view may be exceedingly unwise on the basis of long-run public interest.

[1] Long-range Planning, Report of a Subcommittee of the Committee on Unemployment and Industrial Stabilization of the National Progressive Conference, reprinted from *The New Republic*, Jan. 13, 1932.

[2] MITCHELL, W. C., "The Social Sciences and National Planning," quoted by F. MacKenzie in "Planned Society," Prentice-Hall, 1937.

Later Developments. In the severe depression of the 1930's, and again in the Second World War, the general sense of national emergency caused the American people to demand a more active role of leadership on the part of the federal government in dealing with the nation's economic problems. Integrated business management had failed to provide a suitable formula to cope with the problems that arose in the depression years, and it became necessary to turn to the government for help. Drawn under pressure of time and in the face of danger, the national programs that evolved, though accomplishing much, were found to be wasteful and inadequate on many counts. Words like "boondoggling" and "deficit spending" were added to the nation's vocabulary by critics of measures that the government sought to employ in its vast effort to relieve unemployment and stop deflation.

In sharp contrast, the requirements of war found the government attempting to build up an adequate industrial labor force and to control serious inflationary tendencies. War planning included plans for raw material; plans for plant facilities, tools, and man power; and plans for coordination among many different companies and agencies.

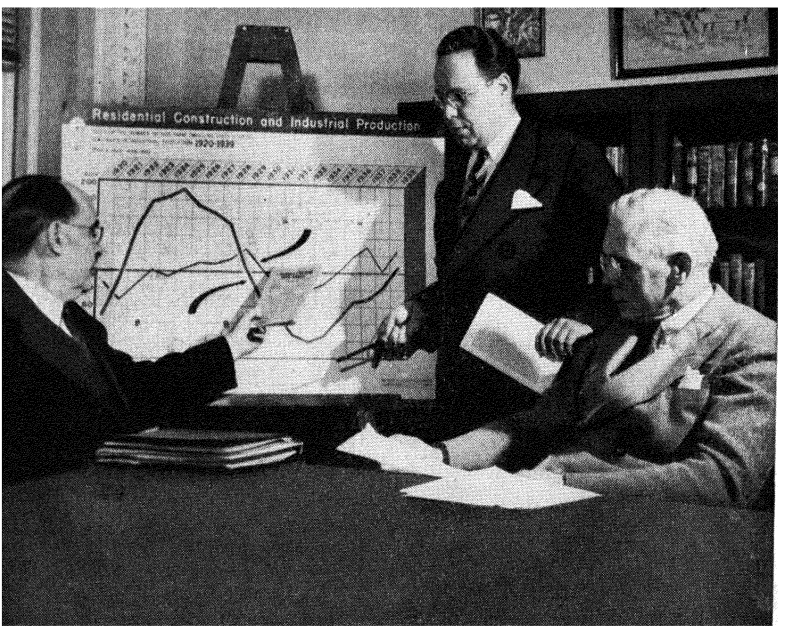
At the conclusion of the war, the nation was left with a tremendously increased production potential. The elimination of wartime controls did not mean that efforts would be made to go back to prewar levels of output and trade. Business leaders and government experts both sought to discover ways and means for transforming a large proportion of this capacity into facilities catering to a sustained, high-consumption, peacetime economy. However, there was widespread apprehension over the possibility of another depression as great as that of the 1930's or even worse.

Two clearly marked schools of thought arose.[1] One held it to be imperative not merely to have prompt liquidation of wartime controls but also the abandonment of depression-born "action programs" of the federal government, so that individual free enterprise could, through automatic processes of the market, effect the transition to full-scale peacetime business and (even with recurrent depressions) the highest practicable level of prosperity thereafter. The other school held that the economic activities of individuals and groups need more rather than less systematizing (though perhaps less direct regulation) by central government. Some of this latter group were concerned merely with "spot" remedies for particular situations that they regarded as peculiarly important or dangerous. Others centered their attention on a great over-all device that they believed would assure national economic stability.

Out of these deliberations finally emerged the Employment Act of 1946.

[1] Council of Economic Advisers, First Annual Report to the President, December, 1946.

This act clearly stated that it shall be the responsibility of the federal government to use all practicable means consistent with its needs and obligations and other considerations of national policy to coordinate and utilize all its plans, functions, and resources for the purpose of promoting and achieving maximum employment, production, and purchasing power.



The nation's highest economic board members of the first Council of Economic Advisers. From left to right, John D. Clark, Leon H. Keyserling, and Edwin G. Nourse, chairman. (*The New York Times.*)

It created a small three-man Council of Economic Advisers to the President whose function it would be to prepare an annual inventory of the nation's economic condition and to recommend policies and programs to achieve the fullest employment and production. Supplementing this body is a Congressional Joint Committee on the Economic Report, which would study the report and submit recommendations to the several committees of Congress.

In signing the act on February 20, 1946, President Truman commented:

In enacting this legislation, the Congress and the President are responding to an overwhelming demand of the people. The legislation gives expression to a deep-seated desire for a conscious and positive attack upon the ever-recurring problems

of mass unemployment and ruinous depression. . . . The Employment Act of 1946 is not the end of the road, but rather the beginning. It is a commitment by the Government to the people—a commitment to take any and all of the measures necessary for a healthy economy, one that provides opportunities for those able, willing, and seeking to work. We shall try to honor that commitment.

It is part of the broad policy of the act that in carrying out a central responsibility for promoting high production and the general welfare, the federal government should coordinate its program and activities with those of state and local governments on the one hand and of private business agencies—industry, labor, and agriculture, on the other. Likewise, it is the expressed policy of the act that the Council of Economic Advisers, which it sets up, shall be closely articulated with other agencies of the federal government operating in the economic area and its work shall be cooperatively related to theirs, coordinating rather than superseding their functions.[1] The CEA works with a staff of seven top economists. These men collect data from a large force of economists in all federal agencies and consult private research groups. Out of all this research come the end products—the periodic CEA economic reports to the President.

The purposes of this legislation and the tasks of the Council have been summarized by one of its members, in part, as follows:[2]

1. To set goals reflecting America's maximum productive capacity, based upon our resources and skills. . . . These goals will provide an affirmative impulse to national effort and a frame of reference for testing the validity of specific economic policies.

2. To gain and apply more knowledge bearing upon the kind of income flow to producers and consumers that will stimulate and sustain this maximum production and the maximum employment that goes with it. This involves the wage-price-profit policies of enterprise. It also involves the fiscal and regulatory policies of government. . . . This fitting of separate actions—both private and public—into the whole picture of economic equilibrium might be called the problem of maintaining maximum purchasing power. . . .

3. To define more clearly the respective roles of enterprise and government in maintaining maximum production, employment and purchasing power. . . . In order that government may reinforce the stabilizing efforts of enterprise, we need ever-increasing cooperation between the two and we need to weld all national economic policies into a consistent program. This calls for public statesmanship and industrial statesmanship.

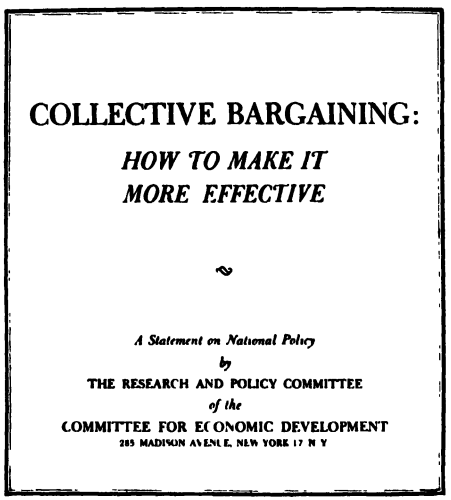
4. To cultivate an ever-growing understanding and cooperation between management and labor because their actions so largely affect the whole economy. This depends upon the leaders of both. It depends upon specific machinery for cooperation which the Government can encourage, as well as upon public good-will.

[1] *Ibid.*

[2] KEYSERLING, L. H., Must We Have Another Depression? *The New York Times Magazine*, June 8, 1947.

5. We need, above all, to achieve the popular agreements and consents without which there can be no effective action in a democracy. This is a challenge to all who help to mold public opinion or disseminate information through the written or spoken word.

Further Industrial Planning. While the federal government was initiating this new order of industrial and economic planning, business enterprises continued with plans of their own. One of the most important developments in this direction was the formation of the Committee for


COLLECTIVE BARGAINING:

HOW TO MAKE IT MORE EFFECTIVE

A Statement on National Policy

by

THE RESEARCH AND POLICY COMMITTEE

of the

COMMITTEE FOR ECONOMIC DEVELOPMENT

285 MADISON AVENUE, NEW YORK 17, N. Y.

One of the many published studies of the research and policy committee of the Committee for Economic Development.

Economic Development (CED). This organization was founded in 1942 by a small group of businessmen who were convinced that cooperative effort could aid in making more and better jobs and in smoothing the pattern of the business cycle, so as to avoid disastrous booms and busts. There were 17 original trustees when this organization was first incorporated, and they elected Paul G. Hoffman, president of the Studebaker Corporation, as chairman. These men chose two lines of approach to the objective of building and stabilizing postwar job opportunities. One was to urge and to help the businessmen throughout America to begin planning boldly and immediately for high-level employment after the cessation of hostilities. The second line of approach involved setting up a method of economic research that would aid policy making during and after reconversion.

Between 1942 and 1945, committees were organized in nearly 3,000 communities in the United States. These included nearly every town with

a population of 10,000 or over and many smaller ones. More than 70,000 businessmen served as volunteer members of these committees. The men of these committees helped to draw plans for postwar employment, after a thorough study of products, markets, and resources. When the plans of the individual companies in a community were put together by CED, they spelled out its anticipated employment level. Supplementing these activities, CED established a research and policy committee of businessmen to work regularly and continuously with a research advisory board and a research staff of economists and social scientists. Representatives of labor, government, management, and others were frequently invited to sit in on discussion meetings relating to economic policy and to contribute constructive suggestions and criticisms.

The CED holds that whether we shall in America maintain our present-day position or improve it in days to come will depend upon the intelligence with which leaders in business, labor, and government think and act in meeting the economic problems that confront the nation. It recognizes that the world at large is still faced with the problem of developing a sound body of economic policies which will contribute toward the maintenance of productive employment in a free economy. To accomplish this, measures must be sought that will protect and enhance the natural dynamism of the economy and minimize its tendency toward prosperity peaks and depression valleys. CED's research program is directed toward this goal.[1]

The Future. It is perhaps too early to predict the ultimate outcome of these public and private attempts at economic and industrial planning. Most of these measures have been brought forward within comparatively recent years. They have been designed as intended improvements upon the haphazard, unplanned competitive conditions that preceded them. They express a general desire for a greater degree of correlation of the many processes in the modern economic system. A recognition of the risks, wastes, and attendant losses in private business resulting from unplanned operations led to the development of systems of planning and control by individual firms. The realization that far-reaching business and social ills follow in the wake of uncoordinated private activities has given rise to the idea of economic planning on a broader scale. Industry of the future will probably develop an increasing need for intelligent nation-wide planning and social control if overproduction, unemployment, and other cyclical evils are to be reduced.

As in the past, however, future plans and methods will probably be hampered by a firmly rooted public distrust of anything that suggests monopoly. A long step toward gaining public approval would be the

[1] Based upon CED's statement of principles in "Freedom Has Its Price," pamphlet prepared by the Committee for Economic Development.

removal or prevention of the evils that, in the past, resulted from business combinations. The antitrust laws require complete revision, as does also the present machinery of government regulation. New regulatory methods are required that would permit businessmen to organize and to control output and prices to the greatest advantage of all concerned. This should protect the public against abuses in price, service, quality, and methods and also protect the small businessman against his more powerful rivals. The ideal plan, then, requires a balance that will permit efficient production with least waste, on the one hand, and adequate protection of the public, on the other.

No long-range planning can ignore the need for conservation and full development of the resources of the country and the prevention of waste, not only of materials, but of human effort.

Questions and Problems

1. Why are haphazard methods of relating output to market needs more dangerous today than they were a century ago? Why is the task of achieving stabilization so difficult?

2. "Our industrial economy is commonly said to be unplanned as a whole. And yet the American businessman, within the scope of his own firm, has been described as the world's most systematic and inveterate planner." Describe techniques or elements of planning commonly found among American business concerns.

3. Summarize some of the earlier attempts at industrial planning. What defects and limitations have been found in all these plans?

4. "The American industrial pattern is neither one of unrestrained competition among small establishments nor of comprehensive economic planning by large integrated units." Do you agree or disagree? Present cases to justify your position.

5. In what respects were initial attempts in economic planning by the federal government similar to private methods of control? How was this program illustrated in federal experiments in agricultural planning?

6. What broadening in the base of control has been suggested by proponents of government economic planning? Cite specific features that would be included in a plan of "maintenance of output."

7. In what ways have government planning policies been linked with the conservation program?

8. Does the appointment of a board of economic advisers to the President of the United States constitute a further step toward national economic planning? Explain.

9. How does the work of the Committee for Economic Development fit into a program of industrial planning? Briefly summarize the purposes and goals of the CED.

10. Planning has not been the exclusive province of government. Show that associations of businessmen, especially trade associations, have taken steps toward planned production in their fields. In this connection, describe the work of the Steel Institute, the American Meat Institute, the Association of American Railroads, and, historically, the "Gary dinners." Show that the steps taken by some of these organizations are, at times, opposed by the Federal Trade Commission or by the United States Attorney General.

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VISUAL AIDS FOR CLASSROOM USE

The following list of visual materials may be used to supplement some of the material in this text. It is suggested that each film and filmstrip be previewed before use as some may be too advanced or elementary for your course.

These materials may be obtained from the producer or distributor listed with each title. (The addresses of these producers and distributors are given at the end of this listing.) In many cases they may be obtained from your local film library or local film distributor; also, many universities have large film libraries from which they may be borrowed.

The running time (min), whether the film is sound (sd) or silent (si), and whether it is a motion picture (MP) or filmstrip (FS) are given with each title. All those not listed as color (C) are black and white. All the motion pictures are 16 mm; filmstrips are 35 mm.

In some cases the title adequately describes the material in the film; in other cases a brief description is given with the title.

PART I—BUSINESS ORGANIZATION

Work of the Stock Exchange (Coronet 15 min sd C MP). Shows how land, labor, management, and money work together; traces growth of small business and part played by stock exchange in economic structure.

Money at Work (MTPS 17 min sd MP). Shows why the New York Stock Exchange exists and how it plays its part as a national market place for the securities of business and industry.

Three to Be Served (MTPS 27 min sd MP). Describes how American economy serves customers, workers, and investors.

The Story of Charles Goodyear (TFC 11 min sd MP). A dramatization of Charles Goodyear's struggle to make India rubber usable for commercial purposes shows relation of inventions to world progress.

PART II—MANAGERIAL CONTROL

The Duties of a Secretary (BEVA 30 min sd MP). Shows the details of office routine and demonstrates many of the duties of a secretary.

The Gallup Poll (TFC 10 min sd MP). Discusses the poll, its objects and benefits; shows the office and field forces in operation.

Good Form in Business (Association 15 min si MP). Shows old and modern uses of business forms.

PART III—INDUSTRIAL MANAGEMENT

Aluminum Fabricating Processes (USBM 30 min si MP). Illustrates working and shaping of aluminum into various forms; uses of some completed aluminum products.

Lead Milling, Smelting, and Refining (USBM 34 min sd MP). Depicts the steps and processes for converting the mined lead ore into useful and marketable products.

Nickel Milling and Smelting (USBM 17 min sd MP). Describes crushing, sizing, flotation, recovery of metal, dewatering tailings, and treatment of concentrates.

The Dairy Industry (VGF 11 min sd MP). Pictures rural and urban opportunities in this field—the work of herdsmen, dairy plant operators, and technicians.

The Ford Rouge Plant (Ford 20 min sd MP). Gives a human, impressionistic description of modern industry in the form of a conducted tour through the River Rouge plant at Dearborn, Mich.

Progress through Engineering (GM 18 min sd MP). Shows the relationship of modern civilization to the engineering profession; dramatizes how widespread the profession of engineering really is and how it touches many fields.

Fabricating the Western Pines (Western Pine 30 min sd MP). Portrays logging methods; sawmill operations; fabrication of sash, doors, frames, etc.; and installation.

Borax from Desert to Farm (Am Potash 25 min sd C MP). Shows scenes in California desert where borax is found and produced; importance of product.

The following films deal with economic and social life in various parts of the United States, each film portraying aspects of the land, people, natural resources, and industries of the area designated.

The Northeastern States (EBF 10 min sd MP).
The Northwestern States (EBF 10 min sd MP).
The Southeastern States (EBF 10 min sd MP).
The Southwestern States (EBF 10 min sd MP).
The Far Western States (EBF 10 min sd MP).
The Middle States (EBF 10 min sd MP).

PART IV—LABOR RELATIONS

Your Stake in Collective Bargaining (PAC si FS).

Millions of Us (Brandon 20 min sd MP). The story of the unemployed during the last economic crisis; studies the purpose of strikers.

Fifty-two Pay Checks Each Year (Burton Holmes 15 min sd MP). Describes the plan of employee-employer relations in a modern plant where all workers are guaranteed a job.

PART V—MARKETING METHODS

Round Trip: The U.S.A. in World Trade (Twentieth Century Fund 20 min sd MP). Portrays America's stake in world trade—how it contributes to higher standards of living and to peaceful relations with other countries.

Foreign Trade: It's Good Business (PAC si FS).

Foreign Trade (Film Publishers si FS).

Development of Transportation (EBF 10 min sd MP). Deals with the effect of rapid transportation on our social and economic life.

Main Line—U. S. A. (AAR 22 min sd C MP). Fast-moving story of the important services performed by the railroads.

Railroad Transportation (AMNH 30 min si MP). Shows early methods, first steam locomotive, discovery of electricity, and types of electric locomotives.

Pipelines (Association 40 min sd C MP). Describes construction and operation of a pipeline system.

Co-ops are Comin' (Cooperative League 35 min si MP). Shows the operation of the various consumer cooperatives in the Middle West and South.

Cooperative Movement in Wisconsin (Wisconsin 28 min si MP). Describes growth of the cooperative movement in Wisconsin—producer and consumer cooperatives at work.

The Airplane Changes Our World Map (EBF 11 min sd MP). Points out problem of map projection distortion; early maps and globes.

Roads South (Association 20 min sd MP). Describes the development of transportation in Central and South America.

Chicago's Great Fruit Market (Fruit Auction Sales 15 min si MP).

PART VI—PRICING PROBLEMS

Prices Unlimited (United 11 min sd MP). Pictures what would happen to prices if we did not have rationing during wartime.

PART VII—FINANCING METHODS

Bretton Woods Plan (Brandon 8 min sd MP). Discusses the plan in a round-table talk.

Sign of Dependable Credit (Castle 20 min sd MP). Shows how the cooperative credit system meets the farmers' needs.

Behind Banks and Business (Federal Reserve Bank sd MP).

Your Money and Mine (RCA 30 min sd MP). Shows the public the services of a bank—what it can do for them.

PART VIII—PROBLEMS IN TAXATION AND INSURANCE

Yours Truly, Ed Graham (Inst. of Life Insurance 23 min sd MP). Explains life insurance and how it can be made to fit the different needs of many people.

SOURCES OF MATERIALS LISTED ABOVE

AMNH—American Museum of Natural History, Central Park West at 79th St., New York 24.

American Potash Institute, 1155 Sixteenth St. N.W., Washington 6, D. C.

AAR—Association of American Railroads, Transportation Building, Washington 6, D. C.

Association Films, YMCA Motion Picture Bureau, 347 Madison Ave., New York 17.

Brandon Films, Inc., 1600 Broadway, New York 19.

Burton Holmes Films, Inc., 7510 N. Ashland Ave., Chicago 26.

BEVA—Business Education Visual Aids, 104 W. 61st St., New York 23.

Castle Films, 445 Park Ave., New York 22.

Cooperative League, 23 W. 55th St., New York 19.

Coronet Instructional Films, 65 E. South Water St., Chicago 1.

EBF—Encyclopaedia Britannica Films, 20 N. Wacker Dr., Chicago 6.

Federal Reserve Bank, Minneapolis, Minn.

Film Publishers, Inc., 12 E. 44th St., New York 17.

Ford Motor Co., Film Library, 3000 Schaefer Rd., Dearborn, Mich.

Fruit Auction Sales Co., Chicago, Ill.

GM—General Motors Corp., Broadway at 57th St., New York 19.

Institute of Life Insurance, 60 E. 42d St., New York 17.
MTPS—Modern Talking Picture Service, 9 Rockefeller Plaza, New York 20.
PAC—Public Affairs Committee, 22 E. 38th St., New York 16.
RCA—Radio Corp. of America, Victor Division, Education Department, Camden, N. J.
TFC—Teaching Film Custodians, 25 W. 43d St., New York 18.
Twentieth Century Fund, 330 W. 42d St., New York 18.
USBM—U.S. Bureau of Mines Experiment Station, 4800 Forbes St., Pittsburgh 13, Pa.
United World Films, Inc., 445 Park Ave., New York 22.
VGF—Vocational Guidance Films, 2708 Beaver Ave., Des Moines 10, Iowa.
Western Pine Association, Yeon Building, Portland 4, Ore.
Wisconsin, University of, Bureau of Visual Instruction, Madison 6, Wis.

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