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MAKING A LIVING

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MAKING A LIVING

The Individual in Society

AN INTRODUCTION TO VOCATIONS, BUSINESS, CIVICS, AND THE PROBLEMS OF COMMUNITY LIFE

BY

LEVERETT S. LYON

PROFESSOR OF ECONOMICS, ROBERT BROOKINGS GRADUATE SCHOOL OF ECONOMICS AND GOVERNMENT

New York

THE MACMILLAN COMPANY

1927

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Set up and electrotyped. Published August, 1926.
Reprinted January, February, April, June, 1927.

PRINTED IN THE UNITED STATES OF AMERICA
BY THE CORNWALL PRESS

TO

A NUMBER OF GOOD FRIENDS AND COMRADES
IN THE SCHOOL WHERE I WAS INITIATED
INTO TEACHING AND WHERE THIS BOOK HAD
ITS BEGINNINGS

PREFACE

THE purpose of *Making a Living* is to help the individual see and understand his opportunity in modern society.

As the book is concerned with vocations, many teachers will no doubt find its chief value in vocational guidance courses. Since it treats of the work of business men, it may also serve well as an introduction to business studies and commercial courses. Because it has much to say of government, teachers of civics may see in it a useful tool. As it deals with those factors and forces from which spring many social problems, those who teach community life may find in it a text. Some will no doubt use it for a combination of purposes.

Though aware of the variety of possible uses, I have endeavored to keep the book simple in plan and definite in purpose. I have undertaken to show the importance of certain agencies in organizing the work of the world and, through a study of these agencies, to present the rôle of individuals in the social drama of occupations.

In developing the theme of the individual's place in organized society, it has seemed necessary and natural to consider five major phases of that subject. Part I sets the problem. Every child by the time school days are over — indeed long before — has asked the question, "Where and how shall I fit into the world's work?" Part I presents a way of considering that question which illuminates the more detailed study that follows. It suggests as a plan a study of the work of the active organizers of society. Part II gives a very brief

glimpse of a society that preceded ours and a sketch of the way in which that society changed into ours. It may be omitted, where time is short, without serious break in the thought. Where used, it will help greatly, not only in giving historical perspective, but in making vivid the outstanding characteristics of our own world. Part III deals with the first of the great organizing agencies of our society — private enterprise; Part IV with the second — public enterprise. Part V closes the story, stressing the value of studying one's self and of making and remaking an educational plan.

If there is one thing I have most earnestly desired to do it is to present a view of our economic and political order as a basis for knowing and interpreting the particular places that we as individuals find in the world. If there is one thing I have most earnestly desired to avoid it is to leave with the reader the feeling that American vocational life is a miscellaneous assortment of scattered jobs of greater or less desirability. To me, at least, the work is unsatisfactory unless I have run reasonably clearly, through the maze of occupations, the unifying threads of organization. The perception of these threads shows the elements of orderliness in our vocational arrangements. It suggests the strengths and the weaknesses of our fabric of work. Most important of all, it emphasizes the social significance of even the most insignificant job.

Making a Living has been subjected to teaching trial and reading by a number of high school teachers and junior high school experts during its growth. It incorporates many of their suggestions. *Vocational Readings*, a companion volume, has been prepared to provide material that may be used to amplify and emphasize any section of the text. References to appropriate sections in the *Readings* are given at the ends of chapters.

Obligations incurred during the long period of preparation are numerous. A careful effort has been made to acknowledge special sources of material, but many persons have been kind in criticism, suggestion, and comment. Among those to whom there is obligation are Anna Y. Reed, Emery Filbey, May Freedman, Ann E. Brewington, Elizabeth Barnes, Roland G. Usher, Forrest R. Black, Paul L. Whitely, L. C. Marshall, Florence Wilson, Herbert Morgan, and Lucille Lyon. Special mention should be made of the secretarial aid of Marie Butler in a large part of the work, and of the help, in Chapters XXIII to XXVI, of Joseph Kingsbury. Though he is in no sense responsible for the organization of the Part in which these Chapters fall, or for the unconventional theory of government expressed, a very considerable part of the writing of those chapters is his. Grateful acknowledgment is also made of the assistance of the Commonwealth Fund.

LEVERETT S. LYON

WASHINGTON, D. C.
March 31, 1926.

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PART I

THE SETTING

MAKING A LIVING

CHAPTER I

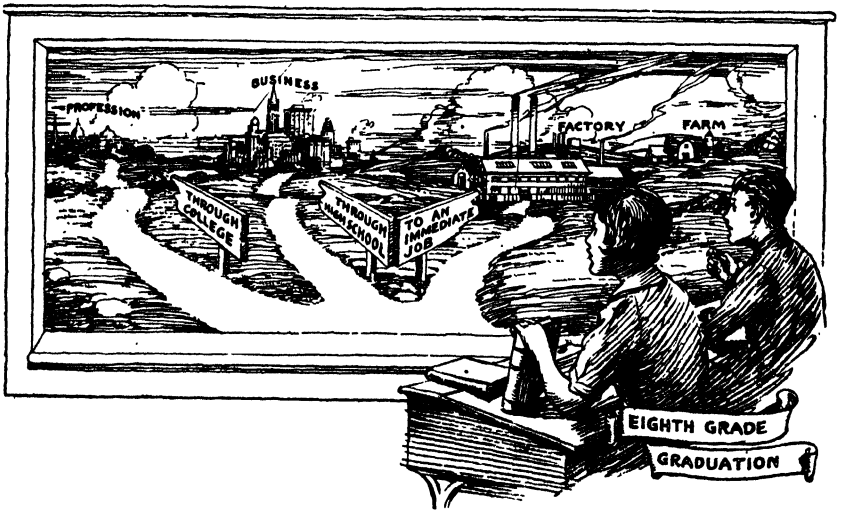
MAKING A LIFE

What It Is All About

It is the purpose of this book to help its readers know more about the world in which they live and how they may plan and work to fit themselves into it successfully and happily. Its aim is to help its readers answer such questions as these: When ought I to stop going to school? Shall I try to go through high school? Shall I try to go to college? What shall I do when I leave school? Shall I work in a factory, an office, on a farm, or where? What kinds of jobs are there in the world? How much money can I make? Will my work be of service to other people? How shall I find a job that I want? What will I do if I do not like my work? Who has not sometime asked himself such questions as these?

In studying to understand the world and in planning how best to fit ourselves into it, there are several things that we must do. First of all, we must think about the difference between making a life and just making a living. Second, we must try to see what counts in making a living. Such a study will help us to train ourselves now and later to use ourselves to the best possible advantage. It will help us to make both the living and the life we want. Then, and because our life will be related to many other lives, we must

know something about how people live and work together nowadays. A very pleasant way of learning this is through studying the group life in our own community; and, since contrast often makes understanding easier, it will be useful to see something of another community life from which our plan of living has come. Further, since our present-day group life is composed of many communities, such as the school community, the church community, and the economic



WHICH ROAD WILL YOU TAKE?
All boys and girls sometimes wonder about what lies ahead.

community, it will be useful to separate the economic community (in which we make our living) from the rest and study it alone. This will show how the world is arranged for work and how we may fit into our world as workers and citizens.

Finally, we shall try to see the different agencies that will help each one of us to fit himself into the economic community as it is organized. For this purpose we shall study about

different kinds of schools, books, courses of study, and many other agencies that can teach us and help us to fit in well.

Our first work, then, is to see what is meant by making a life. Then we shall consider what counts in making a living. From this we shall turn to a brief study of the community out of which ours grew. This will help us in looking carefully at our own world to see just what ways there are for us to become a part of it.

A Life or a Living

Most of us are well aware of the fact that there are no fairies who will give us the good things of life. We must depend upon ourselves. Of course, not quite everyone has a living to make. Some people have enough property — land, or buildings, or money — to enable them to live without working. But not very many owners of property receive enough income from it to provide a satisfactory living. To them the problem of living-making is real; it is only somewhat less pressing than it is to those who have nothing. It is therefore true that almost everyone is interested in learning *what counts* in making a living.

But even more important to everyone is the question of what kind of life he will make. For his life, even more than for making his living, a man must depend upon himself.

Making a life differs from making a living in this: A living may give food, clothes, houses, cars, and travel; but it may not give a feeling of satisfaction; instead, it may cause one to become the kind of person that he does not want to be. Making a life, on the other hand, may not give many physical enjoyments; but it may give a constant sense of being worth while and of being the kind of person one wants to be. Of course, any one of us may be able to win the

greatest prize — a satisfactory life *and* a satisfactory living. If we do this, we may count on being happy.

What makes a satisfactory life? — No one can tell for certain what makes a good and satisfactory life for another. No one can say with certainty, "Do this and you will be happy; do that and you will live to regret it." But each one of us can help himself or herself in making a good life by stopping to think carefully about what he or she *really wants*.

A life is largely a matter of choosing. A man may wish to be a cowboy, a politician, a doctor, an engineer, and a poet; but he cannot do so many things; he must choose. Choosing one, he will only be unhappy if he wishes later that he had chosen differently. A girl may want to marry and raise a family. She may also want to be a painter and an actress. Some women make themselves unhappy all their lives by doing one of these things and fretting because they cannot do the others well also. But a happy life is not made that way. Life is a matter of alternatives.

So also one may and must choose to some extent the kind of person he wants to be. If he wants to be honest, he must think twice before going into work that he believes makes men dishonest. If he wishes to be selfish, he should avoid an occupation that will call upon him to be generous, thoughtful, and considerate of others. For what is a satisfactory life for any one of us depends very much upon *what things we think are most worth while.* It is a matter of *what we think is worth working for.* The important thing to do, therefore, is to try to settle for ourselves as we go along what things are most worth while for *us.* Any sort of return that can be had from working has different values for different people. It is simply a question of individual wants, desires, or motives. We shall fit into the world better and more happily if, instead of blindly doing things just because many

others do them, we ask ourselves, what *our own* wants, desires, or motives are; for back of all our work is the fact that we have wants. But we may have a want to feel that we have done right, as well as a want for a good meal.

Thus we may say that wants and desires shape our motives and so guide us in our work. A glance at some of the most common motives may help us to understand motives and to decide what motives are strong within us.

The motive of gain. — One motive which everyone will recognize may be called the *motive of gain.* It is the desire to make money. This motive caused Henry Smith, when he was graduated from the University, to enter his uncle's shoe factory rather than the large cloth mill of his father. Henry wanted a living with plenty of money and decided that he could make more in the shoe business. Many such examples could be given. Some thoughtful persons believe that gain-seeking is much the most important motive that influences men in choosing their work. Probably it is. Some persons even say that it is the *only* significant motive. This is certainly not true. It is true, however, that nearly everyone must pay some attention to this motive. Indeed, if one has himself to support, and even more so if he has a family, he cannot and should not neglect trying to make some money. Think about the importance to you of making money. How much money? A question to ask yourself is: Do I wish to make a lot of money, no matter what kind of life I make?

The motive of service. — The desire to serve humanity is quite different from gain-seeking; yet it influences many persons in choosing a vocation. Perhaps we find this motive oftenest in those occupations that we call the professions. At least, we generally believe the wish to serve is strongest in ministers, teachers, writers, and physicians. It would

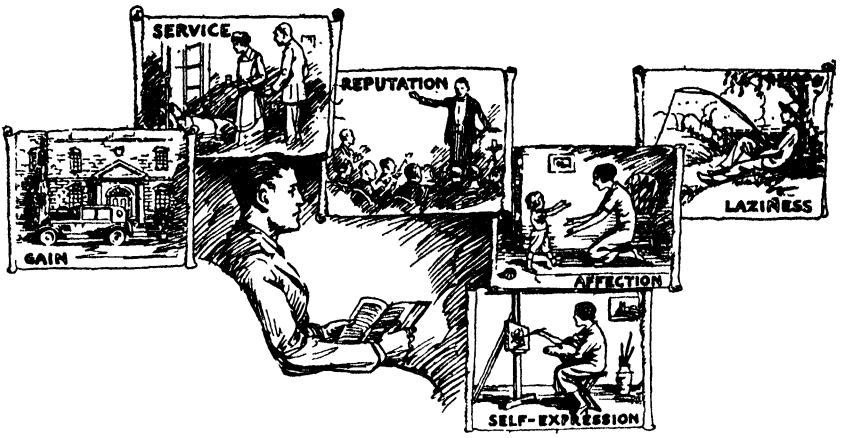
not be true, however, to say that all professional men and women are disinterested in making money. Nor would it be fair not to mention that, on the other hand, there are many farmers, manufacturers, and merchants who are sincerely proud of the fact that their work makes people's lives brighter and easier. All such persons want a living that gives something in service to other people. A man may make a living from his business, but he makes a life from running this business in a certain way.

The motive of reputation. — Many a man wishes to enter some vocation because he thinks it would give him a desirable *reputation*. A lawyer, for example, may hope to see his name in the papers in connection with important cases. He may hope to be elected to some public office that will ensure great and wide reputation in the world of politics. Public esteem is an important part of living to these people. Ask yourself the question: Do I enjoy having the respect and esteem of the people of my community?

The motive of affection. — Often a boy (or a girl) enters upon some vocation such as the clergy, the law, or medicine, or goes into the family store or manufacturing business because of *affection* for some relative who wished him to do so. The satisfaction of pleasing others is part of the living such a person desires. He could not be happy neglecting the wishes of others. Parents and other relatives sometimes exploit this motive by using it to satisfy their own desires rather than those of the younger people.

The desire for self-expression. — Self-expression is a very driving motive and often is much stronger even than the gain-motive. It frequently leads people into such work as painting, writing, and acting, even when it looks as though there is only hard work with no gain ahead. This motive is powerful in some people. Without other incentive, it leads

them to express themselves in their chosen fields even in the face of strong opposition and great handicaps. Often it amounts to genius and is all that counts in an individual's life. Do you feel that some one occupation would give you



DO SOME OF THESE MOTIVES DRAW YOU TOWARDS A VOCATION?
In some of us one motive is strong; but many of us feel the pull of many motives.

more happiness than any other, even if it meant financial sacrifice?

Lack of motive. — Sheer lack of any motive sometimes influences men to enter one occupation or another. A man who enters a vocation just because it is the easiest thing to do furnishes an example of this. Such cases are sometimes found where a son drops into the business of his father or some other relative without any thought about profits, service, reputation, or any other motive. He merely follows the line of least resistance. Of course, there is no reason why a son should not stay on his father's farm, or in his store or bank. In fact, when there is a chance to do this, there is often good reason for doing so. But in some cases there is no such reason — just laziness. Such persons enjoy

a lazy living. Many hobos personify laziness and lack of motive. Rather than commit themselves to working day after day, they wander from town to town and depend upon chance for their food and rest.

There are great differences in people's motives. — If each of us were guided by only one of the above motives, he would not need to make a choice; the motive of gain, the motive of service, or whatever motive happened to control his wants and desires would determine the vocation that would give him a living and satisfaction. Unfortunately for us, however, our problem is not so simple. In some, all the motives are strong; in others, no one motive takes a decided lead over the rest, and interest in every kind of activity is only lukewarm. Of course, these two are extreme examples, and between the two are cases of boys and girls whose desires are dominated by two or three of the above motives to such an extent that the other motives are not felt at all. Moreover, our ideas of what is worth while — our motives — change somewhat as we grow older. Therefore, this question of what our motives are is not one that can be settled once for all time. In spite of this fact, however, it is very much worth while to remember that motives do serve as yardsticks with which we can measure how well different vocations fit into our present plan of the kind of life we want.

QUESTIONS AND PROJECTS

1. Make a list of ten different kinds of work that are done in your community.
2. Find out from some older members of your family how they decided what kind of work they would do.
3. Why do some people enjoy their work more than others?
4. Do you think it is easy to decide what kind of work to do when one leaves school? Why?
5. What kinds of work seem to you more attractive than others? Why?

6. What do you think most helps a person to make a good living?

7. Are there any games that you play alone? Do you like best to play alone or with a group? With a large group or a small one? Why?

8. Do you find that other members of your class help or hinder you? Do you think you help or hinder other members of the class?

9. Name three kinds of work done by men or women working in groups. Name three kinds of work done by men or women working alone.

10. Does everyone who must earn a living need to find a place in the community life? Give examples.

11. Do you think it is easy to understand the life of the community? Why?

12. Do you know anyone who does not need to work for a living? If so, how does he or she secure a living?

13. If one knows what is important in making a living, how can he use that knowledge to help him?

14. Does a satisfactory living mean the same thing to everybody?

15. Look up the word "motive" in the dictionary and write three sentences containing the word.

16. Give two examples of work that one might do because of the gain-motive.

17. Why is it that most people must pay some attention to the gain-motive in choosing their work?

18. Give two examples of work that seems to you to be done in part at least because of the motive of service.

19. Name three things for which a boy can win a good reputation in your school. Name three things for which a girl can win a good reputation in your school.

20. Name three men in your city whose names are well and favorably known.

21. Give two examples of work that you think furnishes good chances for a man to win a good reputation. Why do you think so?

22. Why does a woman like to be known as a good housekeeper? Can you think of any other fields of work in which a woman can win a good reputation?

23. Ask your father and mother if they know of any cases of people who went into a certain kind of work because of affection for someone else.

24. Mention some kinds of play that you enjoy much more than any others. Mention some kinds of work that you think you might enjoy more than others. Do you think it sensible to say that in such play or work you find self-expression?

25. If you should decide to be a doctor, by what motives do you think you might be moved?

26. What do you think is meant by saying that a man has "mixed motives"?

27. Do people sometimes find one motive pulling them in one direction, one in another?

28. Write the best definition you can of the phrase "a living."

29. Write the best definition you can of the phrase "a life."

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part I.

CHAPTER II

MAKING A LIVING

Now that we have read about some of the matters that guide us in making a life, we may turn to see what counts in making a living. We shall look at five matters that are of importance in making a living. These are: our own abilities, our luck, our friends, what we make of opportunity, and our knowledge of the world around us.

It will take some time to talk about all of these five points, but we shall try in this chapter to see what each one means.

Our Own Abilities

When we go to work for anyone we are usually paid as much as our employer believes he must pay to get the job done. What we really do is to sell him our services. It is therefore important to have as much as possible to sell. Since we are selling our services, the whole thing is largely a matter of *what we are*. Our own qualities are put on the market for what they will bring. If we are "good stuff," "good quality," we are worth more than if we are not.

Each of us has many qualities, but they can all be grouped under two headings: our physical qualities, and our mental and moral qualities.

Our physical qualities. — "Health and a good constitution are better than all gold; and a strong body, than wealth without measure." It is difficult for most of us to realize how true this statement is, simply because we are fortunate

in having sound, active bodies and alert minds. But almost everyone at some time or other has tried to work or play when he " didn't feel like it." Have you ever played tennis when suffering from a severe headache? Or studied your lessons when bothered by shooting pains from a sprained wrist or ankle? Or practiced a music lesson while you had a bad toothache? When we think of such instances we can appreciate the worth of health, which enables us to go about our work or play without the handicap of physical pain.

Of course there are many examples of men and women who have accomplished great deeds despite physical handicaps. Among these is Robert Louis Stevenson, who wrote many of his great stories while the victim of severe nervous attacks and constant suffering; his physicians said it was courage alone that kept him alive.

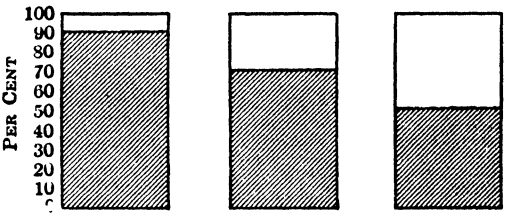
Theodore Roosevelt was a sickly child, greatly troubled with asthma and extremely nearsighted. To counteract his deficiencies, he gave much time to athletics, and in time became a good boxer, a fine rider, and a skilled marksman. By exercise and life in the open he developed a magnificent physique. It was his great physical vitality quite as much as his mental power which made him one of the great presidents.

Though few of us are invalids, all of us have problems of efficiency. In our workaday world forcefulness, accuracy, speed, endurance, and uniformly good work are demanded. It is generally conceded that our efficiency, mental and moral as well as physical, is influenced by the state of our health. The human body has been compared to a reservoir of energy.[1] This reservoir is continually being emptied by (1) all of our voluntary muscular activities; (2) the produc-

[1] Franklin Bobbitt, *The Curriculum* (Houghton Mifflin Company, Boston, 1918), p. 171.

tion of the heat necessary for our bodies; (3) involuntary muscular actions, such as breathing, circulation of the blood, and digestion; (4) the elimination and neutralization of poisons in the system; and (5) nervous activity accompanying thought, feeling, and emotional excitement. Thus our waking hours are almost entirely periods of outflow from our reservoir of energy.

Energy flows into the reservoir through nutrition, such as food, drink, and air; and while the process of refurnishing energy is continuous, it proceeds unequally and makes most progress during our sleeping hours.



Different Possible Levels in the Reservoir of One's Vitality[1]

The amount of energy in one's particular reservoir, therefore, will depend upon how well he balances incoming and outgoing energy. If, through work, play, worry, or mental excitement one uses more energy than food and rest restore, he is said to become *devitalized,* and unless he takes steps to counteract the harm done, he will become permanently inefficient.[1]

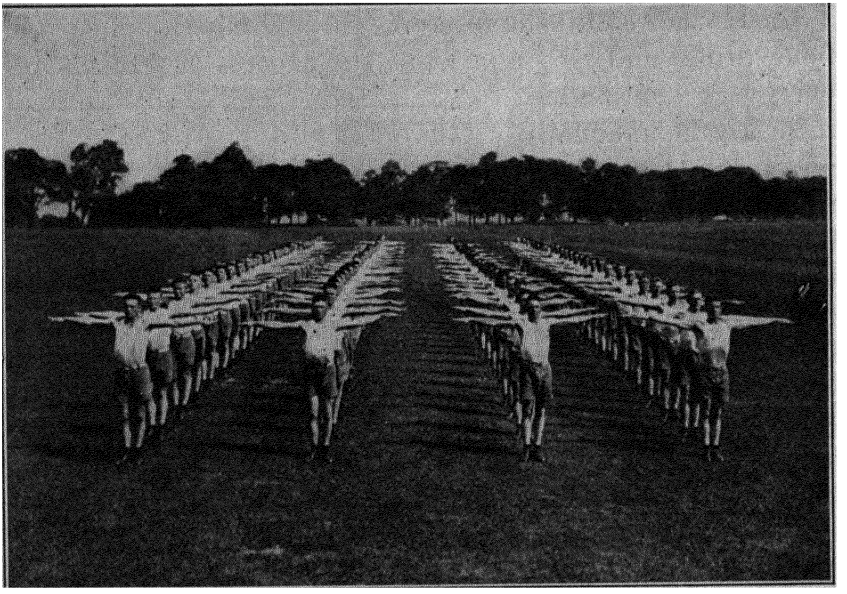
With the fully vitalized person the renewal of energy is prompt and abundant, and each new day finds the reservoir restored to its previous high level. For him work is a pleasure, and his success is therefore assured.

Does it seem that too much stress has been laid upon good health and its results, that employers are not interested in health? This is what one successful employer of many men says: Persons who are physically sound are worth building up in a business; but those in poor health are doubt-

[1] *Op. cit.*, p. 172.

ful investments. That this idea is general is proved by the increasing use of physical and mental tests for applicants for positions.

In the great war many who thought they were in perfect health were refused by the army doctors as being physically unfit to serve their country. Some of these men then took



Courtesy of U. S. Military Academy

CADETS AT WEST POINT MILITARY ACADEMY

They are engaged in outdoor calisthenic drill on the plain in front of the barracks. Uncle Sam believes in exercise.

the training and treatment necessary to make them fit for the army. In almost every case they increased in weight and grew straighter and stronger in the activities of camp life.

One of the great lessons the war taught Americans was the need for developing our bodies. The same agencies that revealed this need showed many of the causes for poor physical condition. The most common causes of physical unfitness

were shown to be improper housing (lack of fresh, pure air), poor food, uncleanliness of person and surroundings, improper use of alcohol and drugs, too long hours of work under bad conditions, lack of exercise, and loss of sleep.

It is true that some of these conditions are beyond our control. For instance, the individual workman cannot control the working conditions of the factory; but he can use some choice in selecting employment, and he can try carefully to build up the vitality torn down by his day of labor. Fortunately also our government is more and more requiring that factories, mines, and other places of work shall be made more healthful and safe than in the past.



Photo by International News Reel

JACK SCOTT, PITCHER

An athlete in action shows what skill can be developed by practice.

Some rules for health.—A few health suggestions may be worth while. It should not be hard for us to remember that exercise, fresh air, good food, and good hours are necessary

to *keep good health* and even more necessary to *improve poor health.* A National Health Association gives these rules of hygiene.

RULES OF THE GAME

AMERICAN CHILD HEALTH ASSOCIATION

1. A full bath oftener than once a week.
2. Brushing the teeth at least twice every day.
3. Sleeping long hours with windows open.
4. Drinking as much milk as possible, but no coffee or tea.
5. Eating some vegetable every day.
6. Drinking at least four glasses of water a day.
7. Playing out of doors part of every day.
8. A bowel movement every morning.

More specific advice for each person should come from a reliable source, such as the school gymnasium teacher, the school nurse (if there is one), or the family physician.

Mental and moral qualities. — We all know that some persons are more capable than others. Some are brighter and quicker than others, can think straighter, and can see more clearly everything of importance when considering a question. Just as some are possessed of forcefulness, accuracy, endurance, and speed in any physical task, so some people show all these desirable qualities when confronted by a piece of mental work.

Natural ability may be trained. — It is encouraging to know, however, that other factors than our natural endowment determine in part what our mental powers shall be. It is true that we are born each with tendencies toward certain ways of thinking and behaving, which later, in part, decide our mental powers. These tendencies are the bases of our intellect and character. If it were impossible to influence this original nature, human beings would of necessity be fatalists; for they would know that no matter how hard they tried, they

could not improve themselves. Fortunately man has learned that he can do a great deal to develop his natural ability. He knows that often people with poor natural equipment surpass others in accomplishment because of training.



Boy Scouts — Making a Fire
Boy scout training is healthgiving work and play.

Learning how to study. — Our school study is one of the best examples we can find of a demand to use our natural abilities. Psychologists (students of the mind) have come to the conclusion that our methods of study make a great difference in the results we attain. They say there is as much to be gained in learning how to use our minds for studying as there is in learning how to use our hands, arms, legs, and bodies in pitching a base ball, operating a typewriter, sewing a seam, playing the piano, writing, pole vaulting, swimming, or boxing.



Boy Scouts — First Aid

It is worth while to learn to study well, for two reasons: First, if we learn to study well, we shall form a habit of using

our mental equipment in a way that will help us in any kind of mental work we do after we leave school; second, studying is the chief work for all of us just now. It is well to notice that *learning how to study*, or how to use our minds, does not mean studying harder or longer. It almost always means working less hard and for a shorter time. It simply means *knowing how*.

We have all seen a person who does not know how try to swim. He struggles and flounders, kicks up a great deal of water, makes almost no progress, and finally either goes down gurgling or comes out of the water gasping. Compare these results with those of the swimmer who knows how. With long, easy strokes he goes through the water and with very little effort. The difference is in the way it is done.

The performance of a well trained mind is like the work of a practiced swimmer. And so, it is a question of how we use our minds.

Here are some suggestions for "good form" in doing school work:

1. *Keep yourself in good physical condition.* — Do not hesitate to consult your medical adviser for suggestions. *Be careful of your eating.* Eat at regular times. Eat slowly. Eat with friends whenever you can. Make your mealtime a recreation period. Avoid heavy meals at noon, and never begin study immediately after eating. *Get sufficient sleep at all costs.* If you have difficulty in going to sleep, do something to take your mind off your work and to let you relax before retiring. A little light reading, a warm bath, a walk, a conversation, a letter to family or friends, often helps. If you are much bothered by sleeplessness, consult your medical adviser. Manage to get some *regular exercise and recreation.* Remember that a little exercise *regularly* is infinitely more valuable than occasional "exercise sprees."

2. *Study in a quiet room whenever possible.* — It should be relatively free from visual distractions as well as noises.

3. *See that your place of study is properly lighted, heated, and ventilated.* — The light should, above everything else, not shine directly into your eyes or be visible " out of the corner of your eye." Also avoid a glaring reflection from the pages of your book. The temperature is ordinarily to be kept between sixty-five and sixty-eight degrees. Ventilation should be good, but of course without draft.

4. *Arrange your chair and your work to avoid strain and fatigue.* — Shift your position from time to time. Be comfortable, but avoid being too comfortable. It is almost impossible to study strenuously when one is settled back in a large easy chair or is reclining on a couch.

5. *Feel intensely the urge to do the task before you.* — Make clear to yourself the relation of the present task to your larger goals and ambitions. Think how success or failure in this particular case will affect your future, your attitude toward yourself, and the feelings of those interested in you. There are hundreds of motives for study. Bring them strongly into play.

6. *Make your task definite.* — Decide just what is to be done and just when it is to be done. Break the whole job up if it is discouragingly large. See exactly what is involved in the first part and do that. Concentrate on the definite piece of work before you.

7. *Begin work!* — Get started at all costs. Turn your attention away from the imagined difficulties and the other things that you would rather be doing. Keep clearly before you this one job. Forget everything else. Once you get well started, interest will develop in the subject-matter itself and you will no longer need to hold yourself to the work

by sheer force. If you have difficulty in getting down to work, a further rule will help.

8. *Get set for study.* — Sit down in a favorable place for studying; open your books; take your pencil and paper. In a word, go through the motions.

9. *Concentrate.* — Check every tendency to daydream. Mind-wandering is the greatest enemy to study. One hour



DAYDREAMING — LACK OF CONCENTRATION

Can you keep your mind from playing when you wish to work ?

of concentrated study is worth many with frequent lapses. Work intensely while you work. Guard vigilantly against mind-wandering, and pull yourself back sharply on every occasion. Working under favorable conditions and developing an interest in your studies are the surest ways of securing

concentrated work. Mind-wandering is very frequently due to inadequate understanding of words or to a deficient background in the subject studied. Where this is the trouble, it *always* pays to go back and provide the necessary foundation at whatever pains.[1]

Moral qualities. — In all of the above, we have said very little about moral qualities. That is not because they are unimportant, but because they are so entwined with mental qualities that they cannot well be separated. Courage, fairness, honesty, courtesy, and stick-to-itiveness are all partly mental and partly moral. We are not likely to possess these qualities unless our thinking is clear enough to see how important they are to ourselves and to the welfare of the world at large. Nor are we likely to have them in very large measure unless we have the will-power (sometimes we call it the moral courage) to use them even when it is uncomfortable to us. Of course, in the world of affairs honesty and truthfulness are taken for granted. No one can hope to get very far without them. It was more than a hundred years ago that Benjamin Franklin declared "Honesty is the best policy"; this statement seems to become more and more true as time goes on.

Relation of health to mentality and morals. — In closing our discussion of our own qualities, it may be well to show the relationship between our physical fitness and our mental and moral capabilities. Psychologists tell us that a momentary state of consciousness (out of which mental and moral actions grow) consists of two parts: the *main* idea to which attention is being given for the moment and which occupies the center of consciousness; and the *marginal* ideas and sensations of which we are aware but to which we are not

[1] Adapted by permission from Arthur W. Kornhauser, *How to Study* (University of Chicago Press, 1924), pp. 6–10.

giving attention. In the case of a man of full vitality, when the idea of a harmful act arises, even though prompted by great inclination toward the deed, the *marginal ideas* of the results arise at the same time. He sees the undesirability of the idea and dismisses it without effort. In the same way, when a question calls for clear judgment he sees the effects of a certain act far beyond the immediate results, and he shapes his conduct accordingly. With the man of low reserves, the same idea may arise with equal clearness and no greater desire; but the same wealth of marginal ideas as to the consequences does not arise to restrain him or to aid his thinking. Thus the difference in the response of two people to an idea may be due simply to a difference in the level of their physical vitality and not to any difference in mental and moral equipment.

Luck and Accident

Luck and accident play a part in the success or failure of every man and woman. No matter how capable a person may be, how much he may be aided by his friends, or what he may do to take advantage of opportunity, chance is also at work. A great many successful men looking back over their lives can see this clearly and can point out the important events in their lives that turned on circumstances they could not control. General U. S. Grant became a national hero through what might be called the "accident" of the outbreak of the Civil War in 1861. One biographer said of him:

> Had he [Grant] died before the summer of 1861, being nearly forty years of age, he would have filled an obscure grave, and those to whom he was dearest could not have esteemed his life successful, even in its humble scope. He had not yet found his opportunity; he had not yet found himself.[1]

[1] Walter Allen, *Ulysses S. Grant* (Houghton Mifflin Company, Boston), p. 40.

Theodore Roosevelt, although he earlier occupied an important place in public life, became President through the assassination of President McKinley. By chance Woodrow Wilson was President of the United States when European politics brought on the Great War. Later, circumstances which few even dreamed of, brought the United States into the war and made our President the most prominent figure in the world. President Coolidge first entered the White House as a result of the sudden death of President Harding.

Probably there is not one of us who cannot think of accidents or " breaks of luck " which gave him opportunity or placed him in better or worse position without regard to his own intentions or actions.

Being ready for luck. — Since no one can possibly tell what sort of luck he will meet, or what fortunate or unfortunate accident may affect his chances of making a living, there is only one rule he can follow with respect to it. This rule is, " *Be ready for luck.*" This means that one should be as well prepared as he possibly can be for circumstances that may give him good opportunity. The accident of the Great War alone did not make Woodrow Wilson a great President. All his life he had been a student of history, public affairs, and law. When accident gave him an unusual chance, he was ready for that chance. The same thing may be said of Theodore Roosevelt and probably of every other person who has succeeded partly as the result of an accident.

But we do not need to go to the White House to find examples of men who have been ready for luck. John Russell, who left high school at the end of his second year, obtained a position as clerk in the trust department of a Detroit bank. He knew that he might stay in this position for a great many years unless he prepared himself for other opportunities which chance might open. He found that

the bank had a school which he could attend, but he discovered that this school, while it made him a better penman and therefore a better clerk, did not prepare him for any other position. He talked the matter over with the head of his department, who told him that the work of a trust company required a good knowledge of certain branches of law. Accordingly, John registered in an evening law school. He began rapidly to learn many things about the work of the trust company. The head of the department, knowing that he was studying, began to consider him a man who would some day be ready for promotion. Pure luck gave him his chance. A man who had been with the company for years and who was considered permanent left to take a position with another company. John was the only clerk in any way prepared for the job and so was given the place. His " lucky " advancement into this position made further promotion much easier.

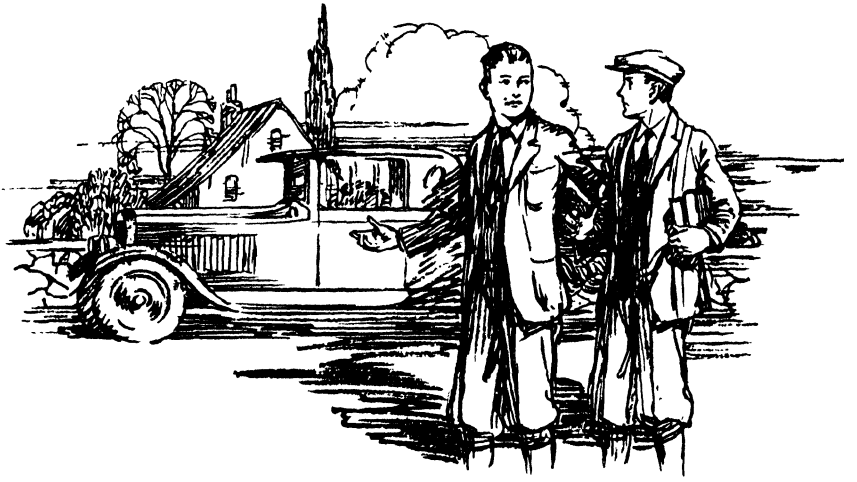
One cannot always guess in just what direction luck will lie. Sometimes, therefore, the only thing that we can do to be ready for luck is to try to make ourselves as open-minded and generally informed as we can. This makes us versatile—makes us able to do different kinds of work. As a result, a " break of luck " may open for us from any one of many directions.

Friends and Friendliness

Probably few of us realize how much friends count in making a living. In the success of some they have been the all-important influence, and there is hardly a person who has not found some advantage to himself through friends.

We all know that there are two kinds of friends, good ones and bad ones. The former are those from whose association good results come. On the other hand, no doubt we can all

think of one or more friends who continually get us into trouble. For instance, there is the boy who tries to persuade us to drive the family car when we have been forbidden to do it, or the girl who insists on going to a " movie " at a time when we have promised to be at home. If we are accommodating and yield, we are later ashamed of our disobedience. This suggests the first importance of friends: the fact that we are influenced by them and are likely to become like



FRIEND OR ENEMY ?

them. There is an old saying, " Show me your company, show me yourself," and it is a wise one. The choice of good friends will mean that we shall grow and improve; bad friends will do us harm.

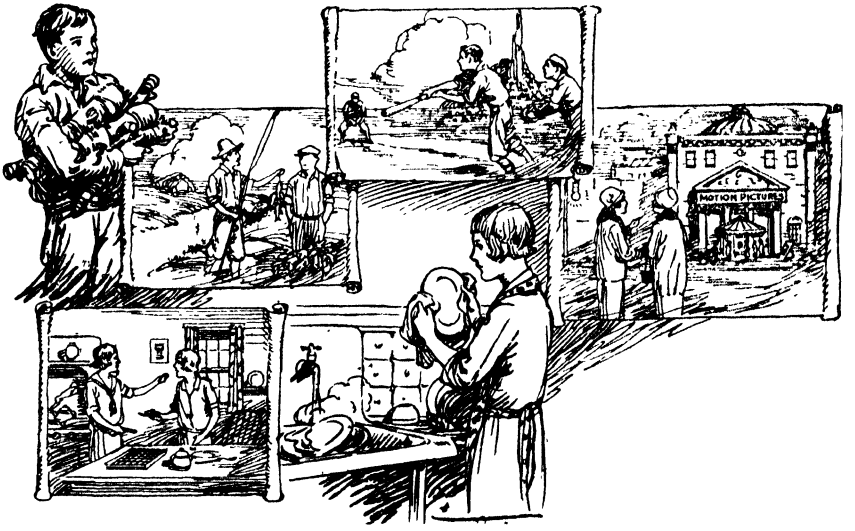
Friends and luck sometimes go together. — One of the best kinds of luck that one can have is opportunity to make good friends. This is true not only because we profit by knowing such people, but because friends can often offer us opportunities or suggest us to others for opportunities that would never have come to us in any other way. This

does not mean that one should expect his friends to favor him for work or to recommend him for a position if he is not qualified. But if he is prepared, he may be quite sure that good friends will be ready to help him. A man is generally very glad to recommend his friend for a place when he knows that the friend will do the work in a way that will bring credit to both of them.

Being friendly. — Some persons, thinking that friends will be of advantage to them, try to curry favor by a pretended friendship which is purely self-seeking. This is not the kind of friendliness that produces many worth-while friends. Real friendliness — the kind that makes a boy or girl or man or woman genuinely liked and admired — comes from a spirit that sees the good qualities in everybody. Such a spirit recognizes real worth in people, whether they are rich or poor or in positions of importance or insignificance. Honest friendliness of this kind not only will assure one of sincere friends, but is a trait that will be helpful in making a living. Such friendliness will enable one to get along with people, and as a result they will enjoy working for him or having him work for them.

Making friends. — It is probably foolish to try to advise anyone how to make friends. Most of our friends are those to whom we feel spontaneously drawn. We make friends both at work and at play; perhaps more at play. This is one of the great advantages of play. In play we learn how to coöperate pleasantly. Few abilities are more useful. One of the officials of the American Telephone and Telegraph Company, in discussing the things to consider in hiring boys or men who have just left school, says: "It is particularly important to find out if the student was able to get on comfortably with others, to find out if he participated in the social life and game activities of the school."

It is worth noticing, however, that we may have some friends with whom we play at things that make us grow in useful knowledge as well as in vigorous and genial traits. A certain boy, for example, who is very fond of baseball, swimming, and other boys' sports, has two friends with whom he seldom talks anything but cameras. The three boys are great friends, and their interest in photography has not only made them friends but has developed an interest that has



FAMILIAR FORMS OF WORK AND RECREATION

Do you find it hard to divide your time wisely between work and play?

taken them into studies of lenses, light, chemistry, and the outdoors. Another boy who has very many friends is just now finding his greatest enjoyment in a debating club. In this group the friendship is not less real because it arises from a common interest in somewhat serious subjects.

One of the hardest things for some boys and girls to learn is how much time should be given to playing with their

friends. No one would want to discourage such activity, but there are some people who never seem able to do anything else. They cannot stop playing in time to do their school work or any other tasks. In nearly every town or city are to be found men who have never gone very far in making a living because they could not take time enough from play. It seems as though such men never grow up. They never grow old enough to realize that there are times when other things are as important as going to ball games, playing pool, playing cards, and going fishing. In the same way, there are many girls who never mature enough to realize that other things may sometimes be more important than playing bridge, making fudge, belonging to clubs, and going to the "movies."

What We Make of Opportunity

Nothing counts more in making a living than what we do with our opportunities. In part this includes the points we have already covered, for making the most of our opportunities includes developing our health, training our abilities, developing our attitude and atmosphere of friendliness, and being ready for luck.

Every situation in which we find ourselves is an opportunity for improvement or neglect. School, for example, is an opportunity that we can make worth a great deal or very little. Many students have the view that they are succeeding best when they can pass courses by learning as little as possible. They forget that in doing this they are getting as little for their time and money as they can. When one is employed, he may also make much or little of his opportunity. Industry, interest in one's work, and taking advantage of chances to learn are examples of making something of opportunity.

Improving by learning. — There is no one way in which one can take more advantage of opportunity than by learning. What this means in school is suggested above. In any position in which one is employed outside of school or after leaving it, this means one of three things:

1. It may mean learning how to do his particular tasks better.
2. It may mean learning how his tasks fit into the work of others who are employed in the same factory, office, or other establishment.
3. It may mean learning how the institution in which one is working is related to other institutions with which it coöperates.

Making the most of opportunity always means learning how to fit into the world around one, of which each one of us is a small part.

Opportunity is limited by knowledge. — What we can make of opportunity is always limited by our knowledge when opportunity is at hand. But as one humorist says, "Whenever opportunity has knocked at my door, I've been in the back of the house." We are in the back of the house when we do not understand circumstances around us well enough to know when opportunities exist or how to take advantage of those that we recognize. This leads us to the final factor that we listed at the beginning of this chapter among those things that count in making a living.

Knowledge of the World around Us

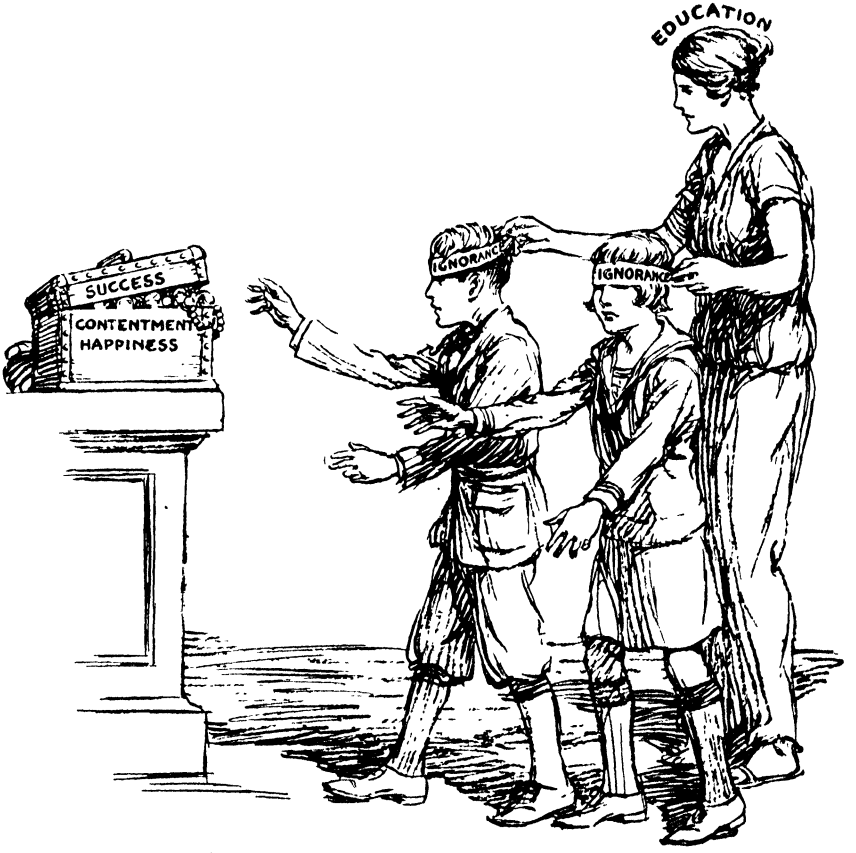
In this chapter we have been studying the things that count in finding a satisfactory place in the economic community — the things that count in making a living. We have seen that our success will be influenced by the kind of living we want, our own abilities, our luck, our friends, and

what we make of opportunity. For what we make of opportunity consists in fitting into the world around us. And we, ourselves, must do the fitting. We cannot do this successfully without an understanding of ourselves and of the world.

We may get helpful knowledge of our surroundings from several sources. We may get it from the members of our own family. The way in which children whose father is in the real-estate business learn something of the business world will illustrate. Every day they hear him talk about the price of real estate in the neighborhood. They hear him discuss contracts, notes, mortgages, options, insurance policies, and other matters related to his business activities. The children become almost as familiar with these things as their father. So, too, a boy raised on a farm learns a great deal about farming; a boy whose father is a machinist learns something of mechanics, and a girl who helps her mother with the housework becomes skillful from her experience.

We also learn something of the world from our friends and acquaintances. We talk with older boys and girls of their experiences, their reading, their work, and their views of what is good and bad, wise and foolish. Our own reading of books, magazines, and newspapers likewise gives us much information about the world. All of this greatly improves our knowledge of opportunities.

School offers our best chance of knowledge. — Of all the agencies that give us knowledge of the world around us, good schools are the best. Experience, reading, and conversation give us snatches of information, but we can never be sure that we have a well rounded view if we depend upon such sources alone. There are some matters about which it is hard to learn much except in school. In no other way can we study so readily how we work together to make a living, what our government does, the agencies that make



IGNORANCE IS A FORM OF BLINDNESS

Lack of knowledge of the world around us causes us to miss many opportunities. Many people walk through the world blindfolded. How can we remove the blindfold?

and administer laws, the ways in which large businesses are run, and why we all think and act as we do.

Of course there are some studies in school that do not try to add much to our knowledge of surroundings. Such courses have many uses, but we should do our best in choosing our work to see that *some* of our courses are those planned to give as thorough an understanding as possible of the world in which we must find a place.

This book is an introduction to the world in which we live. Other books will carry us further.

QUESTIONS AND PROJECTS[1]

1. Describe one job at which you worked for pay.
2. Suppose a storekeeper wishes you to work Saturday afternoons and offers you $1.50. Why might he pay you $1.50 when he could get somebody else for $1.25?
3. If you look for a job, what have you to sell?
4. Ask the physical-training teacher for a set of rules of hygiene which you can report to the class.
5. Do you know any people who are unusually capable? In what ways do they show their ability?
6. "Training may not give a man a better brain, but it can make a brain work better." Explain what this means.
7. Ask the director of physical training in your school what is meant by "good form" in running, jumping, or some other exercise. Report to the class.
8. Explain what makes for good from and for bad form in study.
9. Discuss each of the rules of study and show how each one might be applied to some of your own work.
10. What are some of the qualities besides health and a good mind that count in making a living?
11. Can you tell of an instance in which luck or accident was of great help or hindrance to you?
12. List some ways in which you think a person can "get ready for luck."

[1] If the course is being carried on for a year, or if time permits, the community survey project from Lyon and Butler, *Vocational Readings*, should be introduced at this point.

13. Where do you make your friends — in your neighborhood, at school, or where?

14. Are there any stores in which you like to buy things because you feel that the people there are friendly?

15. Give one or two illustrations of ways in which "being friendly" might help one in making a satisfactory living.

16. Does friendly play teach one how to coöperate? Explain.

17. Write as good a definition of "opportunity" as you can.

18. Write a good statement of what is included in "making the most of opportunity."

19. Write out carefully a statement of what is meant by the saying, "Opportunity is limited by knowledge."

20. Is it true that our opportunities lie in our surroundings? Explain.

21. Is it true that we ourselves must do most of the work of fitting into our surroundings? Explain.

22. Make a list of the kinds of things you have learned that might be useful in living or working with other people; for example:

a. The ways in which work is done
b. The ways in which business agreements are made
c. What is considered right and wrong

23. Make a list of the ways in which you have learned what is useful in living or working with other people (see question 22).

24. What reasons can you give why school is a particularly good place to gain knowledge of the world around us?

25. "Schools can furnish us a knowledge of some things hard to learn anywhere else." Illustrate and show why.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part I.

CHAPTER III

THE ECONOMIC COMMUNITY

The Many Kinds of Communities

Have you ever felt in noticing people at work and play in your community that there were many ways in which the actions of one person are related to those of another? Have you ever felt that people are dependent upon one another? It is not strange if you have felt this, for the fact is that we are all members of an organized community; indeed, we live in and are members of many communities at the same time.

Mr. John Ross, a lawyer in Bristol, goes to the church attended by Malcolm White, a physician. Both are interested in their church's work; they discuss and plan it together. They belong to the same church community. Both also are enthusiastic members of the same golf club and feel that in this sport they are part of the same "set." But White knows nothing about law, and Ross knows nothing about medicine. Neither is interested in the other's work. Thus in the field in which each is most interested they have almost nothing in common. But John Ross belongs to the State Association of Lawyers and a City Law Club. With the other men whom he knows in these groups, he is part of a legal community. So, too, Malcolm White is part of a community of medical men and medical interests in which Ross has no part. The interest of this group is the advancement of the science and practice of medicine.

Connecting people living in one city, town, or neighbor-

hood, there are a great many kinds of relationships, each of which may be the basis for a community. A *neighborhood* is merely a locality where a number of people live near one another. A *community* may be thought of as a group of people related and united by common interests. A community consists of the people who act together in some concern of life. They may be living near one another, or they may not. In any neighborhood we are always sure to find church communities, school communities, sports communities, political communities, and many others. The people of one neighborhood are likely all to be interested in good streets; but those without children may take very little interest in the schools. Some may even be opposed to others in such matters as religion and politics.

A City in Which Live
John Ross, Malcolm White,
A, B, C, X, Y, Z and Many
Thousand More

One Protestant Church Community: Ross, A, B, C, and three thousand others.
One Roman Catholic Community: X, Y, Z, and two thousand other people.
The Morehill Golf Club: Ross, White, X, Z, and others; but A, B, C, and Y are not members. They do not like golf.
The Republican Party: Ross, A, B, X, and some others.
The Democratic Party: White, C, Y, Z, and some others.
The Fifth Ward Parents Association: Mr. and Mrs. Ross, White, A, C, Y, and some others.
The Economic Community: Ross, White, A, B, C, X, Y, Z, and all the others.

The economic community. —There is one thing that everyone of every neighborhood is interested in: that is, in making a living. Not only is everyone interested in it, but everyone who is working at all (excepting a comparatively small number of persons who are doing volunteer philanthropic work) is working "to make a living." And, most striking of all, these many persons working for a living are, whether they know it or not, "acting together." As we go on with our study, we shall see more and more clearly how this working together takes place, but we can see enough of it now to make it real to us.

Take as an example a man building a fence of posts and wire. Who builds the fence? We see the man with the hammer at work. But who put the hammer in his hand? The wood in the hammer handle came from a forest in Wisconsin, Maine, Washington, or Louisiana. It was cut by men with axes or saws, hauled to a river by men with teams or tractors, and floated to a sawmill, where it was sawed into planks, boards, and other shapes. Some of these were sent, by a freight train, to a tool factory where the wood was shaped for a hammer handle. In the meantime another long line of specialized workers had been busy getting ready the steel head for the hammer. Miners had brought out the iron ore, boats or trains had carried it to smelters, and men operating huge converters had turned the iron into steel. Then it travelled to the tool factory, where other men had forged it into the proper shape for a hammer head. Finally the handle and head were joined, and the hammer was made. But it was not yet available for building a fence perhaps a hundred or a thousand miles away. Another journey by rail was begun, to a merchant in some town. Here the hammer was carted to a store; unpacked, and sold to the man whom we see building the fence. Who really builds the fence?

And just as long a story could be told about the staples themselves, and the posts, and the wire. We could name as many people who worked at making them as worked at making the hammer. And we have not said a word about those who built the railroads and the steamboats, or the factories, or the store, or the wagon, or the tractors or the trucks. Nor have we mentioned the lawyers who helped the many business men make their bargains and agreements, or the lawmakers who made regulations concerning hours of work, protection for machinery in the factory, and many other matters. There were others, too — doctors and dentists, who kept the men well for their work ; teachers, who taught them ; and many, many more. Who actually builds the fence?

All those who help build the fence are working " to make a living." They all coöperate. They all " act together " in a very important concern of life. Shall we say they are all part of the make-a-living community?

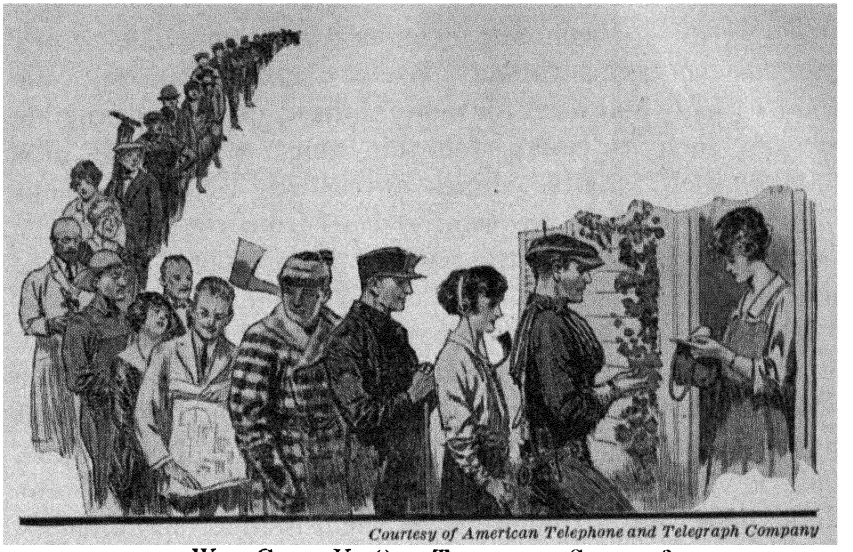
If we take a different illustration, we find that the " acting together," the coöperation of workers, reaches far beyond our own country. For example, a housewife says " Well, I must get dinner! " Must *she* get dinner, or is the task nearly done? She spreads a cloth made by clever hands in Ireland, sets the table with china manufactured by skilled workers in France, puts on olives grown in the vineyards of Italy or Spain, and fruit from Florida and South America. In a pan made in a St. Louis factory, she fries a whitefish brought to her with great care from Lake Superior. She prepares potatoes grown in Idaho. She plans also to use peas raised and canned in Wisconsin, bread of wheat from Minnesota farms, and a salad of fruit from California. The meal may be finished with a pudding well flavored with dates from Arabia and with coffee brought from Brazil's plantations. Who prepares the dinner?

All of these people, then, who help build the fence or prepare the meal (or make our house or our clothes or our shoes or our automobiles or almost anything else we have) are working hand in hand with the others. They are often unaware of it. They only know they are working to make a living. But these people are all part of one great system. They are all "acting together," and in so doing they are one great community reaching beyond the bounds of any neighborhood or town or city or state or country. They constitute a great world-wide community. The name by which we might well call it is *the economic community;* for *economic* is a word that describes those things that have to do with making a living. Other names are often applied to the economic community; sometimes it is called economic society; sometimes merely society. One man has called it "The Great Society."

Our interest centers in the economic community. — Now of the many different kinds of acting together which we might study — acting together in sports, in religion, or in other ways — we shall give the center of our attention in this book to the way in which people work together in the great economic community; the way in which they act together in making a living. From now on, therefore, we will devote ourselves to the study of the economic community.

Why There Must Be an Economic Community

A number of years ago a song that expressed a great human truth became popular. The chief words of the song were, "I want what I want when I want it." Human wants! The fact that you and I and others want things and want them at certain times and places tells half the story of why



WHO GIVES US OUR TELEPHONE SERVICE?
If we paid them individually for their service, a long line of specialized workers would call at our doors each month.

IF THE SUBSCRIBER PAID DIRECT

Suppose that every Monday morning all the people who have a hand in furnishing your telephone service came to your door for your share of their pay. From the telephone company itself would come operators, supervisors, chief operators, wire chiefs, linemen, repairmen, inspectors, installers, cable splicers, test-boardmen, draftsmen, engineers, scientists, executives, bookkeepers, commercial representatives, stenographers, clerks, conduit men and many others, who daily serve your telephone requirements, unseen by you.

There would be tax collectors to take your share of national, state and municipal taxes, amounting to over forty million dollars. There would be men and women coming for a fair return on their money invested in telephone stocks and bonds — money which has made the service possible.

Then there are the people who produce the raw materials, the supplies and manufactured articles required for telephone service. They would include hundreds of thousands of workers in mines, smelters, steel mills, lumber camps, farms, wire mills, foundries, machine shops, rubber works, paint factories, cotton, silk, and paper mills, rope works, glass works, tool works, and scores of other industries.

there exists an economic community in which we work together to make things. We are great wanters. We want strongly and want for many things. We want tangible articles, such as books, fountain pens, steaks, and hats (*wealth*, such tangible things are called). And we want things done for us; we want *services* from the doctor, the dentist, the bootblack, the barber, the preacher, the actor, and the singer.

Moreover, our wants seem to grow toward new things very rapidly as we satisfy old wants. If we think back to the time when we were children, it will seem as though we wanted only a few things. We wanted food to eat, clothes to wear, and some playthings. Now that we are older, we still want all of these things; but we want them in much more elaborate and expensive forms. If we are grown up, we may want a dress suit or a party gown. We care more about a variety of food and how it is served. Nor do we any longer find unending fun in a ball, a doll, a kite, a tea set, or a drum. We want to play with golf clubs and automobiles, and we want trips to Europe. And new things for us to want are being made every day.

How our wants make work necessary. — Our want for food is a good illustration of the need for work. There are few places in the world where food of any kind is furnished without work. In some tropical countries coconuts, bananas, and other forms of food grow in such abundance that people willing to live on them alone need not work. In northern countries, too, nuts, berries, and some kinds of fruit can be found during part of the year. But the supply of these articles of food is so small that we know we cannot depend upon it for a living. Our want for water is another good example. If one is at a spring or by a clean river or lake he may satisfy his thirst with very little effort, but most of

us " get a drink " from a faucet to which the water has been brought by a great deal of work in laying pipes, building pumps, and establishing intakes or cribs. Even free light is given only part of the time that we want light, and it cannot be had in large buildings without a great deal of work in constructing windows and skylights. Take it altogether, nature furnishes us freely with only a few of the things we want, and these only part of the time and, at most, only at certain places. If we want a great variety and a large supply of the goods that gratify wants, or want them in more than a few special places, we must work. We must work to make the things we want.

There are, then, two reasons why we find it necessary to work. The first is the fact that we have wants; the second is the fact that there is not a free supply of the things that gratify wants. We work to create or make want-gratifying goods. Acting together, in making want-gratifying goods, we are the *economic community.*

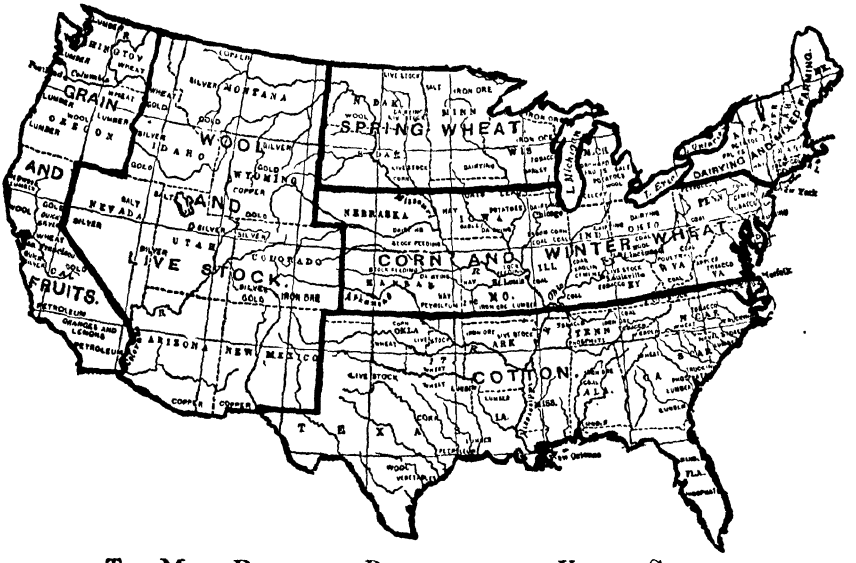
Requirements for a Successful Economic Community

Any economic community striving to gratify its wants has four requirements. These are:

1. A supply of resources to work with. This includes —
   a. Natural resources
   b. Labor power
   c. Capital
2. Good organization or planning of its work
3. Good methods of work in using its resources
4. Good methods for fitting each new generation into the economic community

We may now discuss each of these.

The resources of the economic community. — Any boy after seeing a group of men work together building a boat could tell us on what their success would depend. He would say: "They will build a good boat if they have good materials and good tools and if they work well." Likewise, any girl knows that preparing a good meal requires materials, utensils, and some work. Now our economic community, as



THE MAIN PRODUCING REGIONS OF THE UNITED STATES
The map shows the location of some of the raw materials we use.

we have seen, is just a group of people working together to make boats, mashed potatoes, footballs, automobiles, and a thousand other products. Thus it follows that exactly the same things that count for the boat-builder and the housewife count for our economic society.

First of all, to make the goods that gratify our wants we must have *resources* to work with. These are often called the *factors*, *agents*, or *materials of production*. They are:

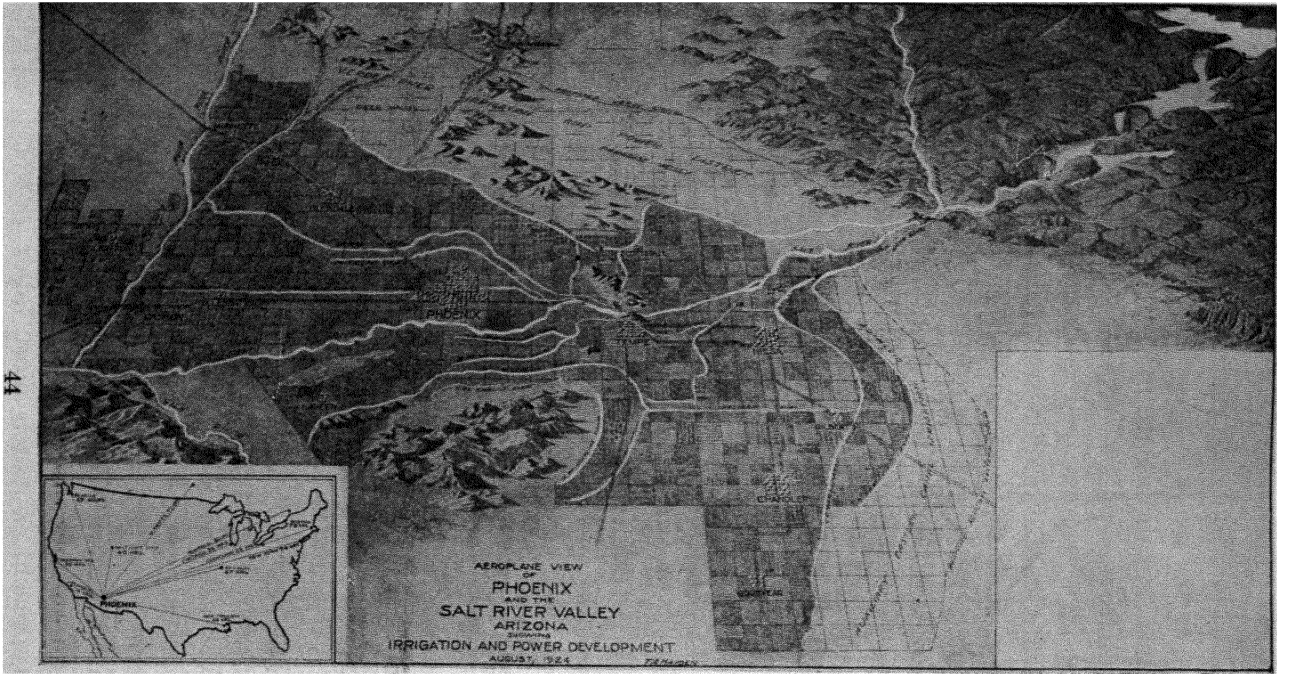
natural *resources*, labor power, and capital. Let us notice what these terms mean.

Our natural resources are many. — Natural resources are the things nature supplies. One would need to travel a long way to see all of the natural resources that are used in the goods which the economic community makes. Fertile land is one important natural resource. Minnesota helps to supply wheat flour, and many states furnish grains from which meal is made. These products come from the soil. Soil furnishes us other things, too, than those we eat. For example, the soil of a dozen southern states and of parts of Egypt yields most of the cotton used in making our clothing. The sheep that furnish most of our wool feed on the plains of our western states and of Australia.

Nor is the fertile land of the world the only important natural resource. Oceans, lakes, and streams, iron ore, stone, coal, petroleum, rainfall, and temperature are some of the important materials that nature furnishes. We must notice, too, that such things as the force of gravity, electrical energy, and the expansion of water at the temperature where it turns to steam are all very, very valuable materials that society has been able to use more and more as it has learned how to harness them.

Labor power is a valuable resource. — Of course labor power is very useful in society's living-making. We may think of this as meaning our ability to work. Whatever muscular strength or mental energy any of us has is part of the labor power which society may use. Here again, we must not limit our thinking to our own country, for there are millions of men in other countries whose strength and intelligence help us.

We cannot well measure our labor power merely by counting up the number of persons in the world, because some persons represent so much more labor power than others.



Courtesy of United States Reclamation Service

AN IRRIGATION PROJECT

This picture shows how an extensive area of land may be made useful by harnessing the natural flow of water. Water power is also converted into electric power and light.

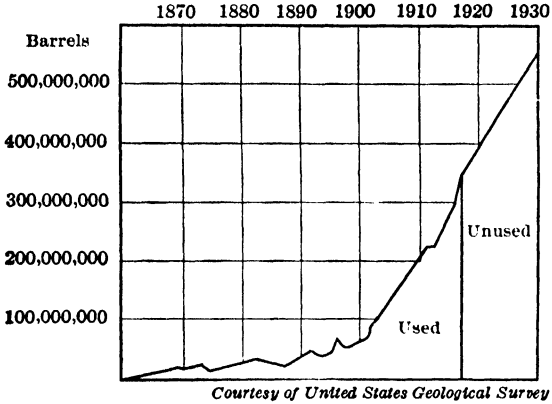
Among the things that determine how much use a person can be to society are all those qualities that we found to count in making a living (see Chapter II). Important are his health, his physical strength, his quickness to learn, and his perseverance.

Capital is a very important resource. — How helpless one is who tries to work without tools. *Capital* is the name which students of economic society use in speaking of society's tools and equipment — of those things that have been made and are used to help us make other things. Our factories and the machines in them are good examples of capital, but of course railroads, buildings, paved streets, steamships, and telegraph lines are also examples. It is hard to realize the great use of capital to society. Think of the difficulty of crossing the ocean without a ship (a ship is capital), or of crossing the country on foot (trains are capital). Or think of the difficulty of cutting down a tree without an axe or a saw (axes and saws are capital), or of cultivating fields without a plow or a hoe (plows and hoes are capital), or of hauling a heavy load without a paved road (paved roads are capital). Society uses capital in almost all its efforts to make economic goods.

There is a limit to our resources. — Although society now has more kinds of resources than the world has ever known before, the supply of these resources is limited. Probably everyone has heard people speak of the fact that the supply of coal, timber, or petroleum may be exhausted. It is said by experts that the supply of natural petroleum from which gasoline is made may not last more than twenty-five years if we continue to use it at the present rate. Whenever one buys lumber for building a house or even purchases a few boards, he realizes from the high price that timber is becoming more scarce than it once was.

New factories, roads, machines, and other kinds of capital require labor power and materials, and since the supply of labor power and natural resources is restricted, there is a limit to the number of factories, roads, and machines built.

Organization and organizers of the economic community. — When anyone works, making use of capital equipment, natural resources, and labor power, he will get good results only if these are combined or organized well. To understand organization, one must have in mind two ideas: (1) the parts and (2) the way the parts are put together. Suppose we illustrate from our own school. Anyone can see that the way in which teachers, students, building, and rooms are related to each other in use makes a difference. Suppose, for example, that a teacher instructing in English, another in French, and another in German were all assigned to teach in one room at the same time. It would be a bad combination of teachers and rooms. It would also be a bad combination of workers and tools to put five students at work at one desk or with one book or with one piece of chalk.



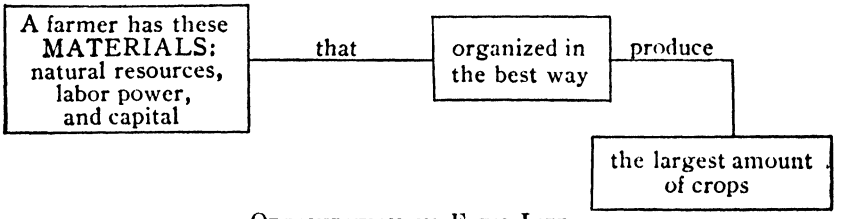
Courtesy of United States Geological Survey

How Long Will Our Petroleum Last?

This chart shows the limit of one of our natural resources — our unmined reserve of petroleum.

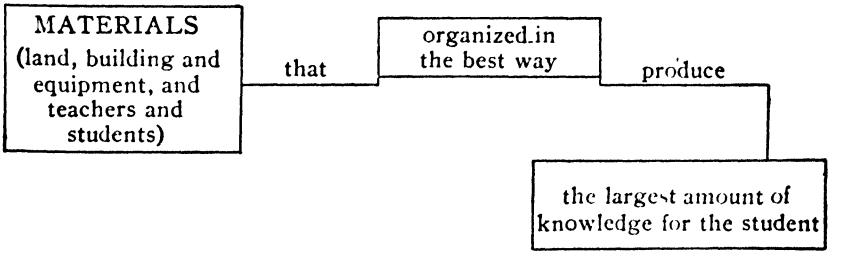
The manager of a shoe factory plans an organization for making shoes. He has to decide how many men can work best at one machine, how many machines shall be placed

in one room, how the different buildings of the plant shall be placed in relation to each other, and many other questions of organization. The farmer's case is no different.



ORGANIZATION IN FARM LIFE

Society, like school, factory, and farm, needs to organize. — The factors of production or resources of society may be thought of like those of the school, the factory, or the farm. If society is to produce a large amount of the goods that gratify wants, society's materials must be well organized. They must be well related to each other in the process of making things. It makes a difference, for instance, whether there are too many men farming and not enough in factories, banks, and schools; or whether there are



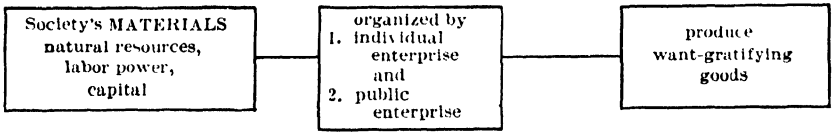
ORGANIZATION IN SCHOOL LIFE

too many men in banks and schools and not enough in stores or on farms.

The chief ways of organizing in our economic society. — There are several ways in which the work of organizing is carried on. Some of it is done by our families, and a little by

clubs and religious organizations. But there are two chief ways that are of importance far beyond the others. What are these two ways of getting our organization work done?

1. We permit people who care to do so to try it. This means that if a man or a woman thinks there should be a new storekeeper, banker, doctor, or dentist, he or she may become one. If one wants to operate a factory, farm, lawyer's



ORGANIZATION IN BUSINESS LIFE

office, or lumberyard he may organize (put together) the natural resources, labor, and capital necessary. This method of permitting people freely to organize economic activity is called *organization by individual enterprise.*

2. There are some people who argue that it would be a good thing in this country if we did away with the practice of permitting business and professional men and women to act as organizers. These people believe that we should get more of the things we want if we used governments to do all the work of organization. If we did this, our governments would need to decide what goods should be made, how many people should work at making cloth, how many at making hats. It would need to decide how many physicians there should be, how many teachers, how many lawyers, how many actors, and how many of every other kind of professional man and woman. Government would also have to decide what tools and equipment and how much natural resources each of these men and women should have for the work.

Most people in our country think that it would not be best to work through government in doing *all* this work of

organizing. But we have given the government a great deal of this work to do. The national government does organize our army, navy, and postal system. Local governments organize our schools, police, and fire departments. Such organization is called *organization by public enterprise.*

We may summarize the matter in this way:

1. *Individual enterprisers* do the larger part of our organizing —
   a. By going into business. Examples are storekeepers, bankers, and farmers.
   b. By going into the professions. Examples are doctors, dentists, and lawyers.
2. *Public enterprise working through government* — national, state, and local — does a considerable part of the work of organizing. Examples are the public schools and the post office.

The work of organizers is important to us in finding our places. — The work of organizers is of great importance to all of us in finding our places in the world's work. This is true because most of us, when we begin work, are likely to work for one of them. And organizers make jobs. Suppose, for example, a man plans to organize a store. He rents a building and puts shelves and counters and goods in it. He decides that he needs two men to sell groceries, one man to sell shoes and five women to sell drygoods and notions. Besides these salespeople, he decides to hire a bookkeeper, a janitor, and a delivery boy. One can see that in doing this he decides just what jobs people may secure in his place of business. Thus it is that *he makes jobs.*

The same thing is true when public enterprise working through a government organizes a school, a navy, or a police department. Jobs are then made by the government.

The work of the organizer is important for us also because we may wish to be organizers ourselves. We may wish to go into business or into a profession, or we may wish to secure a political office and thus become part of the government.

There are two chief ways in which one can fit into the work of the world: (1) *working for an organizer* and (2) *being an organizer.*

Good methods of work. — In Chapter II, where we read about how to study, we saw how useful it is to have good methods of work. If a group of people, if society, has learned how to use good methods of work, it will make many more things that gratify wants than if poor methods are used.

To train himself in the right way, it is important for one to know the methods used in the kind of work for which he is fitting himself. Improvements in methods come continually as mankind gains more knowledge. In Chapter V we shall see something of the methods which have in a general, but very real, way come into almost all kinds of work in our modern economic community.

Good methods of education are needed. — Any economic community that wishes to carry on from one generation to another its work of making goods must have methods for teaching young people how to fit themselves into the work of the community. If children never learned to do the work done by their fathers, we could not long continue to make goods.

Each of us who wants to make a living will want to know about schools and other devices that will help him learn how the work of the economic community is done. The more he can learn about these aids, the more he can use them. The more he can use them, the more likely he is to find a good place for himself in the world's work. Before we shall have completed our study, we shall have a chance to learn some-

thing about the different kinds of schools (see Chapter XXVIII) which can assist us in making a living. We shall also learn the ways in which to use these schools to get the best results.

A summary. — As this chapter has touched a number of matters, let us summarize:

I. The economic community is one of many communities in which we live.

II. We need an economic community to provide want-gratifying goods.

III. Any economic community needs —

A. A supply of social resources
  1. Natural resources
  2. Labor power
  3. Capital

B. Organizers: We use —
  1. Individual enterprisers
    a. Business men and women
    b. Professional men and women
  2. Public enterprise — working in a group, through government

C. Good methods of work

D. Good methods of education for work[1]

QUESTIONS AND PROJECTS

1. Do you know a number of persons in your home neighborhood whom you never see at school? Do you know a number of people at school whom you never see in your home neighborhood? Explain what you think it means to speak of your "school community"; your "home community."

2. What are some of the things in which the people of your neighborhood (your home community) are all interested? Are good streets one example?

[1] If a teacher believes it desirable to save time, it is possible to go directly to Part III without loss of continuity.

3. What are some of the things in which the people of your school are very much interested that are not of great interest to the people living in your neighborhood?

4. Give an example of something in which your family and a family living in another part of the town have more common interest than you and your next-door neighbor.

5. Give an example of something in which you and someone living in another city have more common interest than you and your next-door neighbor.

6. Make a list of all the different communities to which your father belongs. Check those to which you think your next-door neighbor belongs.

7. Write a careful definition of a neighborhood; of a community; of the economic community.

8. Who belongs to the economic community?

9. Give two illustrations, other than those given in the book, of the coöperation of workers in making some article in your house or school.

10. A man says: "I work to make a living. I am not interested in others." Can you name any kind of work in which one does not coöperate with others?

11. A man says: "All the workers of the world coöperate in producing almost everything." Do you think this is true? Do you think it is partly true? Explain.

12. "Working in our world is fitting into the economic community." Discuss the truth of this statement.

13. If to find a place in the world one must fit into the economic community, what had we better study?

14. Make a list of ten things you want.

15. Make a list of five things you did not want when you were eight years old.

16. Can you explain why we want certain things that were not wanted years ago?

17. Do any of our wants come from habit? Why do boys want neckties? Why do girls want rings?

18. Make a list of five things most grown people want nowadays but that were not wanted by the Indians.

19. Make a list of as many things as you can that people can secure without work being done.

20. "There are two reasons why work must be done." What are they?

21. Write a definition of social resources; of natural resources; of labor power; of capital.

22. Give three examples of natural resources not mentioned in the text.

23. What are the most important natural resources in the neighborhood of your own town or city?

24. Have you any labor power? Give five different examples of the ways in which labor power is used in your town or city.

25. Give five examples of capital other than those mentioned in the book.

26. Explain, as to one who did not know anything about it, why we must have organizers.

27. Who are the organizers in your school? Who organizes the work of your home?

28. Give five illustrations of what would seem to you poor organization in a school. Give five illustrations of what would seem to you good organization in a school.

29. Taking as an illustration some store or factory in your own town or city, set down the things which the organizer has to do in running the business.

30. Is there any task of organization in a doctor's office? Illustrate.

31. Give as many examples as you can of activities that are organized by government. What things that we want are produced in each case?

32. Why is it worth our while to study carefully the tasks of organizers?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part I.

PART II

AN OLDER ECONOMIC COMMUNITY AND THE CHANGE TO OURS

CHAPTER IV

MAKING A LIVING IN MEDIEVAL DAYS

It is surprising how much one can learn about a thing by looking at something else. A man who measures six feet three would not look tall if we had never seen any shorter men. Black looks dark because we compare it with white. We think things are large, small, beautiful, ugly, difficult, or easy as they compare with other things. In like manner we can learn much about *our* economic community *by looking at others*. In fact it would be helpful to go far back, even to the time when people began, and study how they gradually acquired knowledge and materials. But such a study would take too long; and so we shall have to be satisfied with a very brief glance at one economic community.

What example shall we take? We might study the economic community of the Indians, of the farmers in Colonial days, or of the Greeks or Romans. But because their life was in some ways so different from ours, and because our methods have been so much an outgrowth of theirs, let us use as our example the living together of the people of England seven hundred or eight hundred years ago. A few brief snapshots of making a living in government, farming, manufacturing, trading, and the professions are all that our time affords. We must realize that such pictures as we see are only fragments and do not show by any means all the relations between the different kinds of work. Yet they will be helpful. Then, very briefly, we shall notice some of the great changes since that time.

English Government in the Middle Ages

We shall say very little about government as a way of making a living in the Middle Ages. The government was in the hands of those people who were born into it — kings, dukes, counts, barons, and knights. Persons in each of these classes usually had power over certain land and certain groups of people and were responsible to the nobles above them. The authority of these noblemen was different in different instances and varied greatly from time to time. England during the Middle Ages was in what is called a feudal state. Of feudalism it has been said, " If we seek the quality in the feudal state which distinguishes it most essentially from the modern state, we shall find it in the fact that the bonds which held society together were the personal and private relations of men to one another, rather than the obedience of men to public law and government." [1]

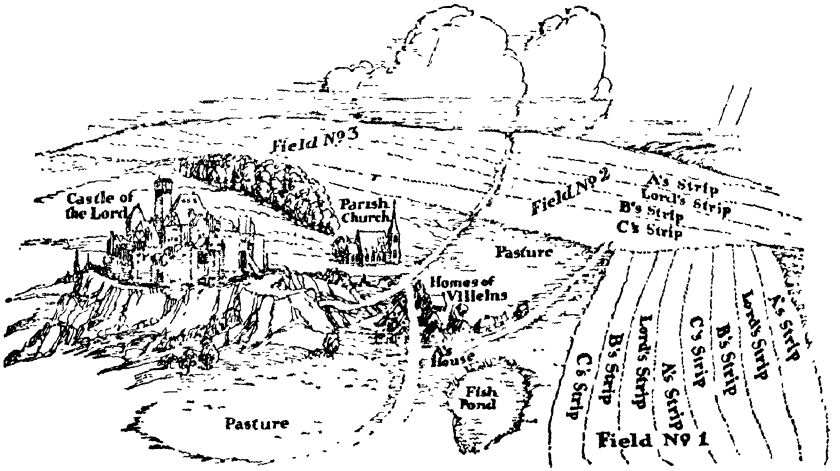
Men did not think much in terms of central government in those days. They considered merely their relations with the few people to whom they felt they owed allegiance. The king and the higher nobles had other nobles below them. The latter were not servants, but the sworn helpers of their lords in times of trouble. These vassals, as they were called, of any particular noble rendered service and homage to that noble, but felt no duty to any other or even to the king. Consequently the central government (represented by the king) was not strong. The king had to depend upon the loyalty of his nobles for funds and for an army. And since each lord, as a rule, was much more interested in his own affairs than in those of the king, it very often happened that even if he owed a duty to the king, it was neglected and forgotten.

[1] Thatcher and McNeal, *Europe in the Middle Ages* (Charles Scribner's Sons, New York), p. 116.

In this state of affairs, there were no government jobs for ordinary people. No one looked forward to making a living as part of the government unless he was born of noble blood. For this reason medieval government is not of great importance in our study. You will learn much more of it in your study of history.

Medieval English Farming

The most important work in medieval England was agriculture. Very different from ours were the methods used.



General View of a Medieval Manor and Village

In this sketch you will notice the castle of the lord, the church, the common fish pond, pasture and woodland, and the homes and land strips of the villeins.

Much land was uncultivated. The land that was used was in large tracts called manors or vills. There were nine or ten thousand of these in England, some as small as forty acres, some as large as ten thousand acres. On these manors the land was divided into several fields — three, usually — on which such crops as wheat and barley were grown.

Of the people on the vill, the one regarded as of most importance was the lord of the manor. He was a noble who held the land under a more important noble or under the king himself. He was a fighting man rather than a worker. He owed military aid to the one from whom he held the land. It



Courtesy of the Metropolitan Museum of Art

PLOWING [1]



Courtesy of the Metropolitan Museum of Art

SOWING GRAIN

was his duty to protect those on the vill. On a manor there were often a miller, a smith, and a priest, but the large class of workers was that known as the villeins. Each of these had a right to certain strips of land into which the fields were

[1] These scenes illustrating Early English agriculture have been taken from an Early English calendar, which shows the typical occupation of each season.



Courtesy of the Metropolitan Museum of Art

REAPING



Courtesy of the Metropolitan Museum of Art

HARVESTING



Courtesy of the Metropolitan Museum of Art

THRESHING

divided and to the produce grown on this land, after giving a part of it to the lord.

The work was done with homemade hand tools or by clumsy implements drawn by small horses or oxen.

The people on the manor traded very little with the outside world. Their food was simple. Their habits of living were unsanitary. They lived on what they made. The manor was almost a little self-sufficing world of its own.

Historians tell us there was little planning of work on the manor. The people were satisfied to do things as they had done them in the past. What was customary was right. We may say that custom was the organizer of work on the manor.

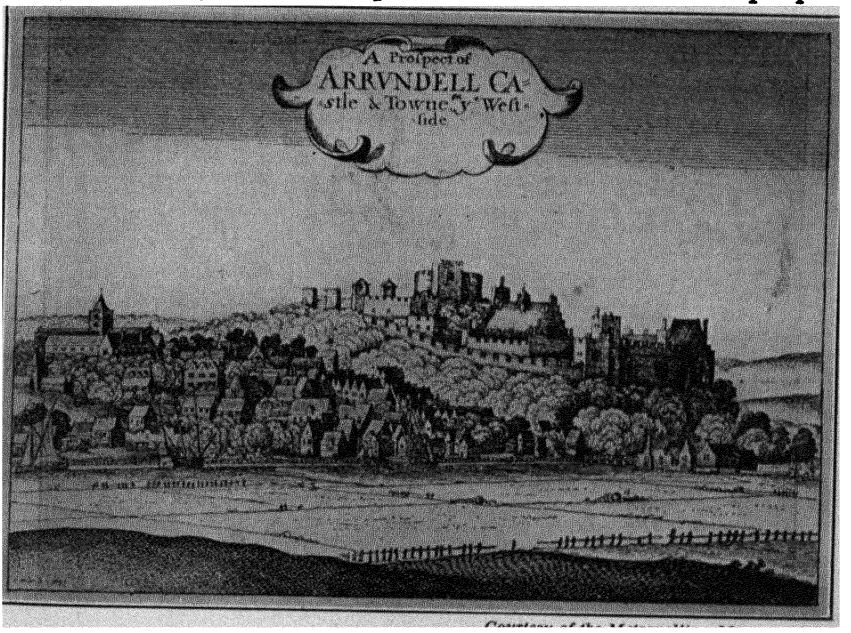
Fitting into making a living. — Education on the manor was simple. A lord's son might be sent to live for some years with a famous knight to receive training in the use of arms and the habits of a gentleman, but the simple tasks of the villeins' sons and daughters were learned by working with their parents. Thus also these boys and girls learned their rights and duties and their place in the world. Unless they wished to enter the church, they did not think of finding a job. Their place was fixed.

Manufacturing in Medieval England

Such manufacturing as was carried on in England in the Middle Ages took place in the towns. The towns of that time were very small compared with our modern cities. Five thousand people would have made a very large town. In these towns the streets were usually narrow and seldom paved. Garbage and refuse of all kinds were thrown into them. Houses were usually of wood. They were small, dirty, and dark, and we should have thought them poor places in which to work or to live. If the house was the

house of a craftsman, a booth in front was often used to display and sell the wares made by the owner.

Many of the people who lived in the town depended on agriculture as well as manufacturing. At some times of the year nearly all the shops were deserted and the people



Courtesy of the Metropolitan Museum of Art

AN ENGLISH TOWN AND ARRUNDELL CASTLE BUILT IN 1066
This is a copy of an engraving made in 1644.

worked on the land near the town to make sure that they would have a supply of food.

The methods of the workers different from ours. — Manufacturing goods in a medieval town was done so differently from the way in which it is done nowadays that we should hardly think of it as manufacturing at all. It was more like the work we see in a shoe-repairing shop or a tailor shop or in our own kitchens than like anything else to which we

can compare it. The workers had none of the great machinery so common in factories now. Instead of electricity and steam, hand power was used. Tools, sometimes made by the workers themselves, were few and simple. A worker did not specialize on some one part of the task; but in making a



Courtesy of the Metropolitan Museum of Art

GOLDSMITH'S SHOP [1]

pair of shoes, a hat, or a suit of clothes, he knew how to do every part of the work himself.

Customers came right to the doors of the workers' shops to buy their goods. Indeed for many articles, such as shoes and clothes, jewelry or swords, the craftsman did not always undertake to make the goods until they had been ordered

[1] This is the first of four scenes of medieval gild shops. These pictures show gildsmen and helpers at work. Is there any way of telling from the work each is doing who is the master craftsman, who are the journeymen, and who are apprentices?

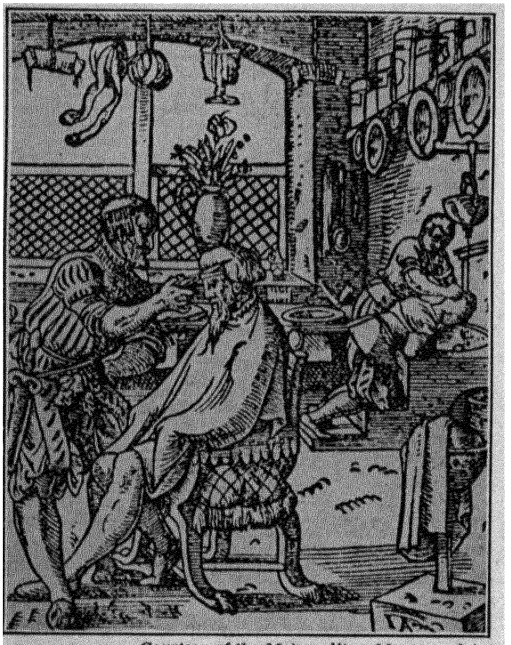
by the buyer. Then they were made as he directed — made to order, as we say.

The workers were organized into gilds. — One of the most interesting things about medieval manufacturing is the fact that the makers of each kind of goods belonged to a group called a gild. In one town, for example, there were gilds of barbers, bottlers, millers, clothiers, spinners, blacksmiths, pin-makers, painters, tanners, fishmongers, saddlers, bookbinders, and potters, and more than a dozen others. The gildsmen, as the members of a gild were called, worked together in planning rules for their trades. Each one carried on his own business for himself, but he met with his brother gildsmen and planned "rules of the game" that all must follow. The gilds were thus very important in organizing the work of manufacturing in medieval England. The government of the town also had something to say about the kind of work done by the gildsmen; and of course each master craftsman was important in his own shop in planning and organizing work. Custom, too, was important, though not as important as on the manor, in determining how things should be done.



Courtesy of the Metropolitan Museum of Art
SHOEMAKER'S SHOP

How boys were trained for manufacturing. — In each gild shop one might expect to find the master craftsman and, working under him, perhaps one or more apprentices. An apprentice was a learner who, at the age of twelve or fourteen, went to work for a craftsman who had agreed to keep him and teach him to become a skilled workman. After six or seven years of training, he became a journeyman and might work for wages. After a year or two of this, he might expect to become a master craftsman and a full member of the gild. In a medieval town there were few things that one could hope for in the way of success any greater than being a master craftsman.



Courtesy of the Metropolitan Museum of Art
THE BARBER

SELLING GOODS IN MEDIEVAL ENGLAND

As we might guess from reading of farming and manufacturing in medieval England, there was far less buying and selling of goods then than now. There was some trading, however, that furnished an opportunity for making a living to a number of people.

We have seen just above how buying and selling took place at the shop or booth of a craftsman. In many towns

there were also markets at which craftsmen might sell their goods and to which farm products from the near-by countryside were brought. Peddlers and merchants, also, were to be met with, traveling about the country, stopping especially at the manors, and offering for sale many useful and interesting little articles, such as musical instruments, caps, toys, and purses, which they carried in packs on their backs or sometimes on a horse or a mule. The most exciting trading places were the fairs. These were held somewhat as our county fairs are now, perhaps only once a year and in certain cities. To these, however, came traveling merchants bringing spices, silks, dyes, furs, jewels, leather, and manufactured articles from abroad. They were places of great excitement and interest. Peddlers and merchants gathered here to buy goods to resell on their travels about the country. Of course disputes sometimes arose about prices and agreements, and to settle these a " law of business " grew up. The courts were very simple — usually just a merchant or two whom all trusted. But the laws of business that began in this simple way were the beginnings of our business law of to-day.



Courtesy of the Metropolitan Museum of Art

THE WAGON MAKER

Trading was difficult and leagues were formed. — Trading was, indeed, difficult in medieval England. Excepting the peddlers, the men who worked in it usually joined together in leagues or bands for mutual protection and help. Roads were bad; robbers were many, and the trader found it necessary to depend almost wholly on himself. He had

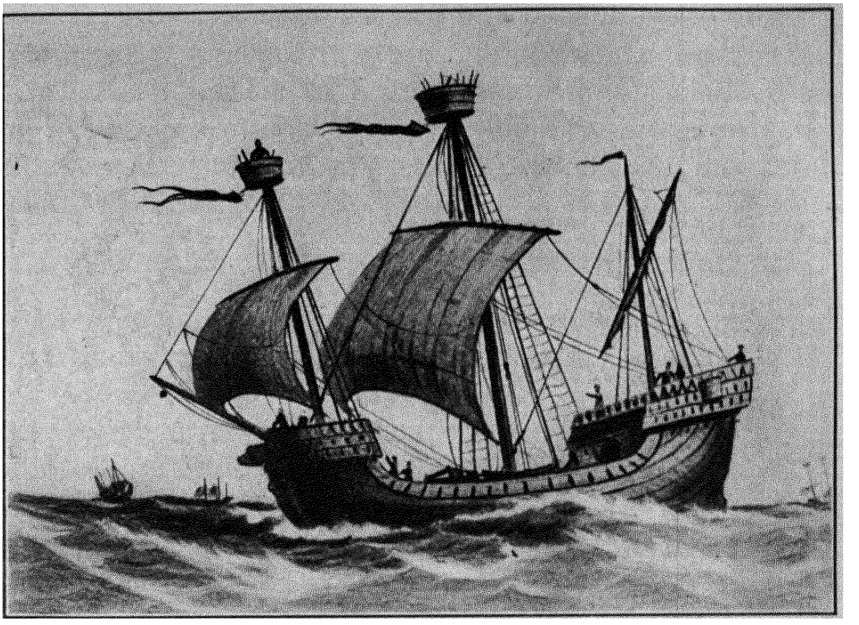


Courtesy of National Association of Master Bakers

INVESTITURE OF THE LIVERY OF A MASTER BAKER

By such a ceremony a young man, after he had served as apprentice and journeyman, was made a master member of the gild.

to furnish the money to buy his goods, carry them himself, find the best places to sell, and protect himself, with the aid of friends, from the many dangers of the road. The chart on the next page shows us some of the tasks performed by the medieval merchant and shows us how specialized agencies have now come into existence to take over most of these duties.



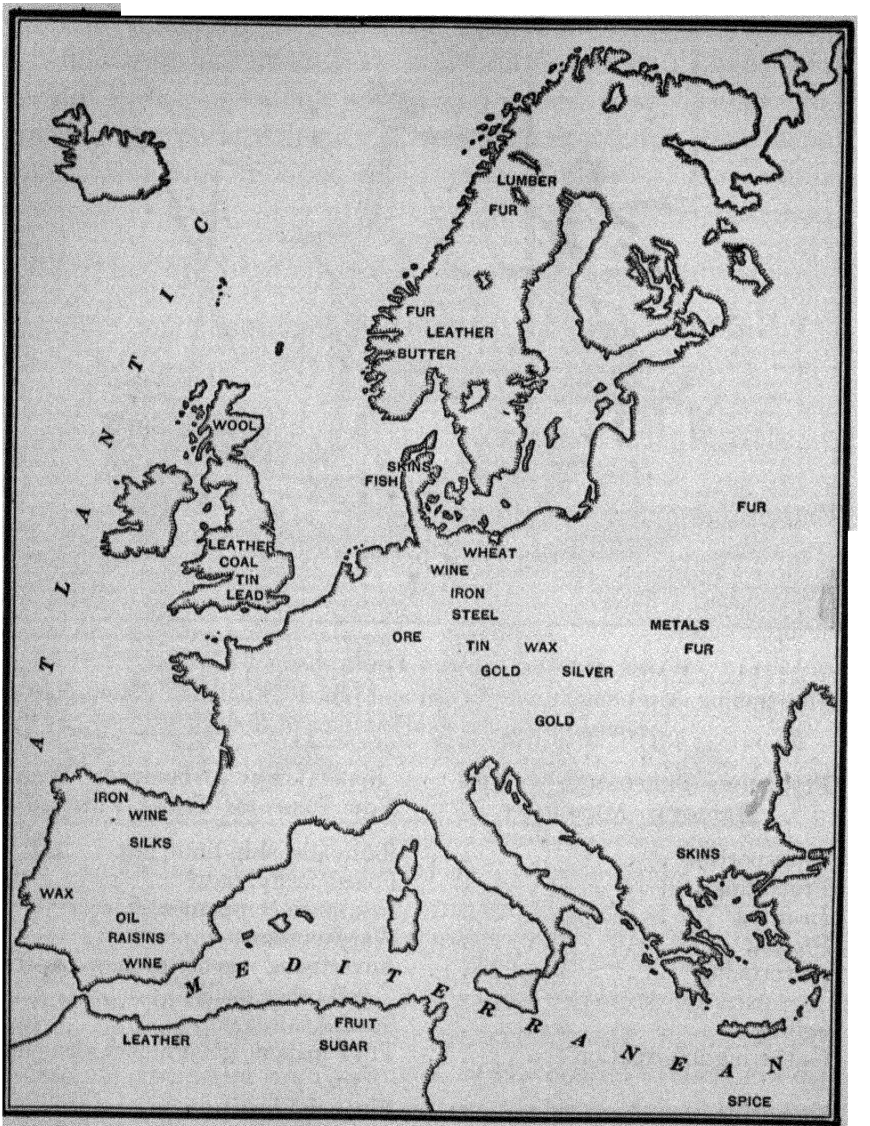
Courtesy of the Philadelphia Commercial Museum

HANSEATIC SHIP OF THE FOURTEENTH CENTURY

This trading ship brought amber, tar, and furs to England. How does it compare with our merchantman of to-day?

FUNCTIONS PERFORMED BY THE MEDIEVAL MERCHANT	SPECIALIZED MIDDLEMEN WHO NOW PERFORM THESE FUNCTIONS
Transporting	Railroads, ship lines, etc.
Protecting	Police, army, navy
Insuring	Insurance companies, etc.
Storing	Warehousemen
Advertising	Advertising agencies, newspapers, and other media
Selling	Special salesmen
Gathering information	Trade papers, government agencies, etc.
Financing	Financial institutions

How one entered into medieval trade.—To make a living in medieval trade, a boy might become an apprentice. This would lead him to the work of a gildsman in the town.



WHERE GOODS CAME FROM IN MEDIEVAL DAYS

Sometimes the king appointed a person who had already succeeded in trade to important work in selling in which the king himself was interested. Also, there was some chance for a boy to go into selling work on his own initiative. This is the road by which most of the peddlers and merchants found their way into this vocation.

The Professions in Medieval England

To-day we should hardly think of going to a clergyman for legal or medical advice or for instruction in our school work, but in medieval England the clergyman did much or all of these kinds of work. The professions as we think of them were then unknown. The work now done by professional men and women was largely performed by the clergy.



A Surgical Operation in Medieval Times[1]

Contrast this procedure with the use of antiseptics and anesthetics in the surgery of to-day.

In addition to the parish priests who preached and taught, there were groups or brotherhoods known as monks. These men, living without much effort to acquire wealth or power, were the great students and teachers of the Middle Ages. Similar to them were the friars, who traveled about and whose duty it was to aid others.

[1] Used by permission from G. C. Coulton, *A Medieval Garner* (Constable and Company).

The Church was one vocation which anyone might enter. Even a villein's son was permitted to leave the manor and enter the work of the Church.

To some extent the work we think of as professional was carried on by gildsmen. This was especially true of medicine and surgery. There were, for example, a gild of apothecaries and a gild of barber surgeons. No one knew much of



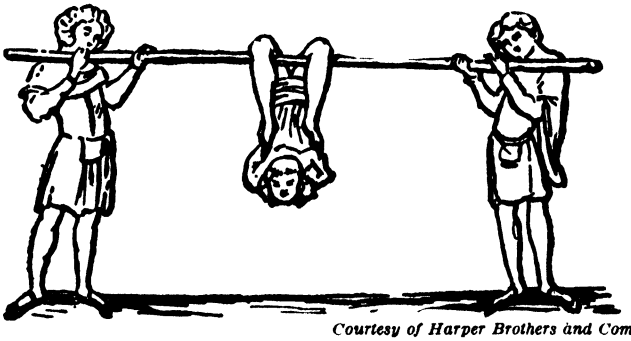
Courtesy of the Metropolitan Museum of Art

AN OLD CONCEPT OF THE MONK AS A TEACHER

how to cure diseases, and magic and religion were relied upon as well as drugs and potions. Strange remedies were given, such as tails of mice and toes of bats.

One very interesting kind of professional work that was not at all the work of the Church was entertainment. The great entertainers of the Middle Ages were travelers who went

alone, or in groups from manor to manor, or town to town, or fair to fair, ready to sing, juggle, dance, or perform acrobatic tricks. Many of these performers were skilled on the harp or other instruments. Some could recite or sing long poems of brave, exciting, or noble deeds performed by the heroes of their time and times past. Sometimes minstrels or



Courtesy of Harper Brothers and Company

ACROBATS

jesters were given a living on a manor just for adding a little to the merriment of life. Honest folks regarded most traveling entertainers with suspicion. They thought them as willing to steal as to sing. Altogether the professions, aside from the Church, did not offer a good living in medieval days.

QUESTIONS AND PROJECTS

1. Explain why government was not important to many people in medieval England as a way of making a living. Do you think it is more important now?
2. Describe the general appearance of an English manor.
3. The worker on a medieval manor did not work for wages. How did he get his living?
4. Do you think more trading with other parts of the world would have helped the people on an English manor to get a better living?
5. What is meant by saying that the manor was "self-sufficing"?
6. What is meant by saying that "custom organized the work on the manor"?

7. List some of the improvements which one of our towns has that a medieval town did not have.

8. What kinds of work must be done continuously to keep our towns more attractive and sanitary than medieval towns were?

9. What reasons occur to you why the people of a medieval town carried on agriculture as well as manufacturing?

10. From the names of five or six of the gilds mentioned, note the work done. Is the same kind of work done by gilds now? By whom is it done?

11. Why were the raw materials used by a medieval craftsman less plentiful than those which a manufacturer can secure now?

12. What reasons can you give to explain why a medieval craftsman had so much less equipment than a modern manufacturer? Did he need as much?

13. It has often been said that a medieval craftsman was capital-owner, manufacturer, and worker all in one. Explain what this means. Is this same statement true of a modern factory owner?

14. Are there any articles in your home which were made in a factory? Are there any which were made "to your order" in a small shop? Are there any which were made from materials which you took to the workers?

15. What is meant by saying there was little specializing in the craftsman's shop? Would you rather work where you made the article from start to finish, or where you did some small part on many articles? Why?

16. It was a fine thing in medieval times to be a master craftsman in a flourishing town. How could a boy become one? Is it easier or more difficult for a boy to become as important in a town nowadays?

17. Make a list of some of the transportation agencies which help us every day in buying and selling. Which one of these did the people of medieval England have?

18. What makes it safer to carry goods from one place to another now than it was in medieval England?

19. Why do you suppose that nearly all the merchants were organized in leagues or bands? Why do you suppose the ships from Italy came to England in groups?

20. Show how each of the following difficulties in medieval trade between countries has been lessened:

a. People of each country spoke a different language.

b. One country did not honor the money of another country.

c. Ships were small and the ocean was uncharted.

d. The people were filled with superstitious fears of dangers that did not really exist.

e. Pirates and thieves were numerous.

Show how chances to work have grown out of efforts to lessen these difficulties.

21. "To market, to market, to buy a fat pig,
"Home again, home again, jiggety jig."
Does this describe the way in which your mother gets a nice pork roast?

22. Where would your mother now go to buy the things that a medieval woman might have bought at a fair?

23. Explain why the medieval merchant had to do so many kinds of work for himself. Show what agencies perform each of these kinds of work now. Does each of these furnish opportunities for making a living?

24. Do you think trading, being a craftsman, or being a medieval villein would have seemed to you the best way of making a living in medieval times? Why?

25. How much choice did a medieval boy have? Show the ways in which he might find his way into one or another occupation. Do we have more choice nowadays? Explain.

26. Probably the reason why so much of the work that we call professional was done by the Churchmen was because they were the only people who spent much time in studying and thinking. Does it seem to you that in most of the professions you listed in question 1 a good deal of study is necessary for success? Why, as compared with some other occupations?

27. Make a list of the different kinds of professional work done by the Churchmen. Opposite each kind of work put the name of the profession by which this work is done now.

28. Why do you think many people in medieval times found Church work a desirable vocation? Why do you think others would prefer the work of the craftsman or the trader?

29. Make a list of the different places where you may go to find entertainment. Make a list of the different kinds of occupations that are concerned with entertaining.

30. When you see an Italian with his monkey and hand organ, you see something medieval. Why were such traveling entertainers popular in medieval times?

31. If people had no stories to read, would they care to listen to long recitals of adventures and battles of the past?

32. Why was it easier in medieval times for the actors to go to the audiences than for the audiences to go to the actors?

33. Lawyers were needed by the Church, by the king, and to some extent by the merchants at the fairs in medieval England. List some of the types of work lawyers do to-day.

34. Why do we need so many more lawyers to-day than were needed in the Middle Ages?

35. Of what special importance to us is the law developed at the fairs?

36. Are there doctors in your town who specialize in surgery? In treatment of the various parts of the body, such as eyes, ears, etc.? How does this differ from the practice of medicine in early medieval days?

37. How would you explain the fact that barbers were among the early surgeons? Can you find out what the barber's pole represents?

38. Why has the study of the human anatomy (the human body) helped greatly in the practice of surgery? Of medicine?

39. Why did the belief in magic, which most medieval people had, make it harder for true medicine and surgery to progress?

40. Have you ever heard of any magic ways for curing such things as warts, sties, and other ailments? Make a list of as many as you can. Do you think these beliefs are inherited from our medieval ancestors?

41. Look up the word "astrology" and be ready to report to the class on its meaning. Why do we no longer believe in astrology?

42. Why is it that fewer people believe in magic now than in medieval times?

43. Would people ever study how really to cure a disease as long as they believed it could be cured by eating the heart of an owl when the moon was full?

44. Make as long a list as you can of things that have changed our professions since the Middle Ages.

SUPPLEMENTARY READINGS

Lyon and Butler, *Vocational Readings*, appropriate selections from Part II.
E. P. Cheyney, *Introduction to the Industrial and Social History of England.*

CHAPTER V

MAKING A LIVING SINCE 1200

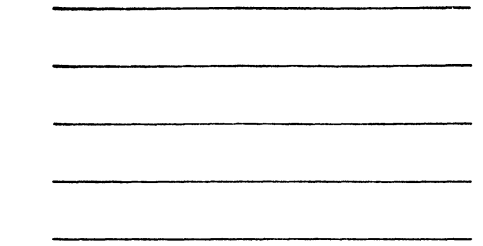
Changing Patterns

If our world were like that of England seven hundred years ago, the last chapter would have given us a fairly good idea of how to fit into our own economic community. We learned something of the kinds of work that were done, the way work was organized, the methods used, and the way in which young people were fitted into the industrial life of the time. But as a matter of fact there have been very great changes. The pattern of modern life is quite different from the life of England in 1200. And so in this chapter we wish to take a long, sweeping view. We wish to try to see in a large way the important factors that changed the medieval world into our world. Just what is meant by a change in the pattern may be illustrated by a diagram.

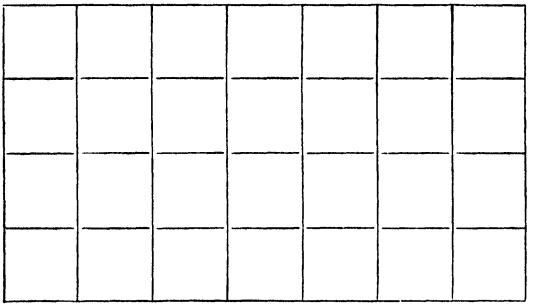
The figure just below shows some vertical lines that make a pattern:



And on the following page there are some horizontal lines that make a different pattern.

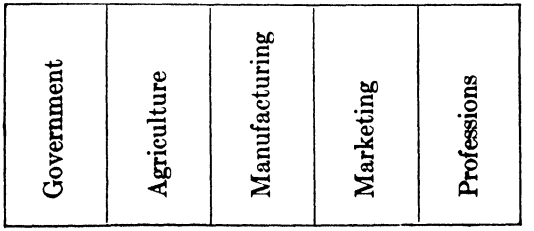


If we run the first figure across the second, we get the third, which is a pattern very different from either of the others:



Such a running of one pattern across another is exactly what has happened in changing the medieval economic world into the modern economic world. The medieval economic world looked like this:

MEDIEVAL ECONOMIC COMMUNITY



The pattern that has grown across that world during the past seven hundred years has six great strands. It is this pattern:

Great increase in resources
Great increase in science and its application
Great increase in specialization
Great increase in the scale of operations
Great increase in the individual's responsibility
Great increase in organization by government

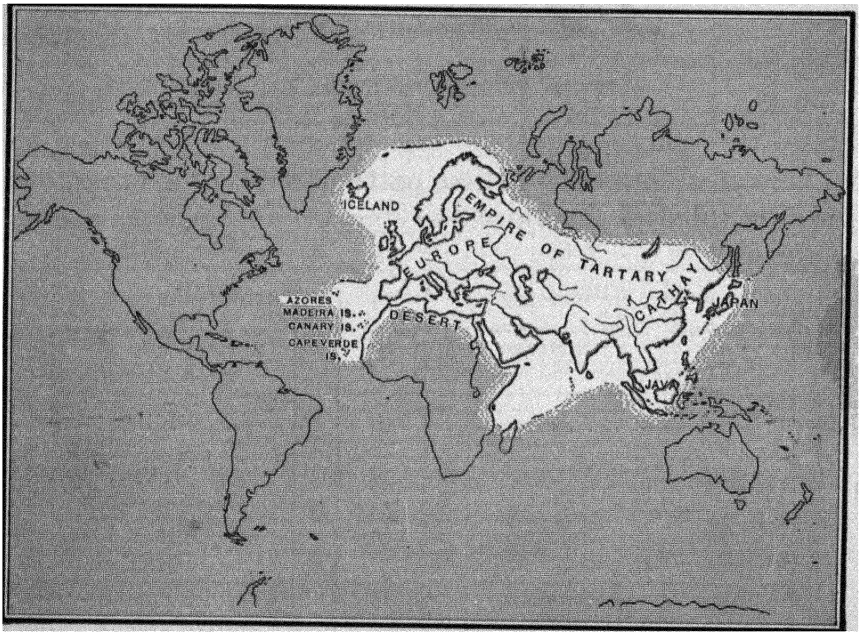
Now if we put one of these patterns across the other, our pattern will look like this:

Government	Agriculture	Manufacturing	Marketing	Professions
Great	increase	in	resources	
Great	increase	in	science and its application	
Great	increase	in	specialization	
Great	increase	in	scale of operations	
Great	increase	in	individual's responsibility	
Great	increase	in	organization by government	

This, then, gives us the pattern of our modern economic community. Of course, the six new strands in the modern pattern did not appear at one time or grow equally fast in government, agriculture, manufacturing, marketing, and the professions. Even now, we have not the same amount of each one in every economic activity. But in general these six strands have been woven into all of our activities. Let us take each one separately and we shall see a little more clearly what has happened.

Increase in Resources

Increase in natural resources.—All forms of resources have increased since medieval days. The increase in natural resources has been due chiefly to the great discoveries. These discoveries have given us for our use great areas of



The Medieval World

The light area shows the part of the world known to medieval traders and travellers. Can you see why it was considered a great exploit to sail around Africa to India?

rich land and greater stores of coal, iron, gold, and other resources than the medieval people imagined to be in existence.

In medieval times no one from England or other European countries had dreamed of venturing across the Atlantic,[1] and

[1] Historians think it possible that some of the Vikings from the Scandinavian countries may have reached America by this time; but if they did do so, it had no effect on the resources that could be used by the people of Europe.

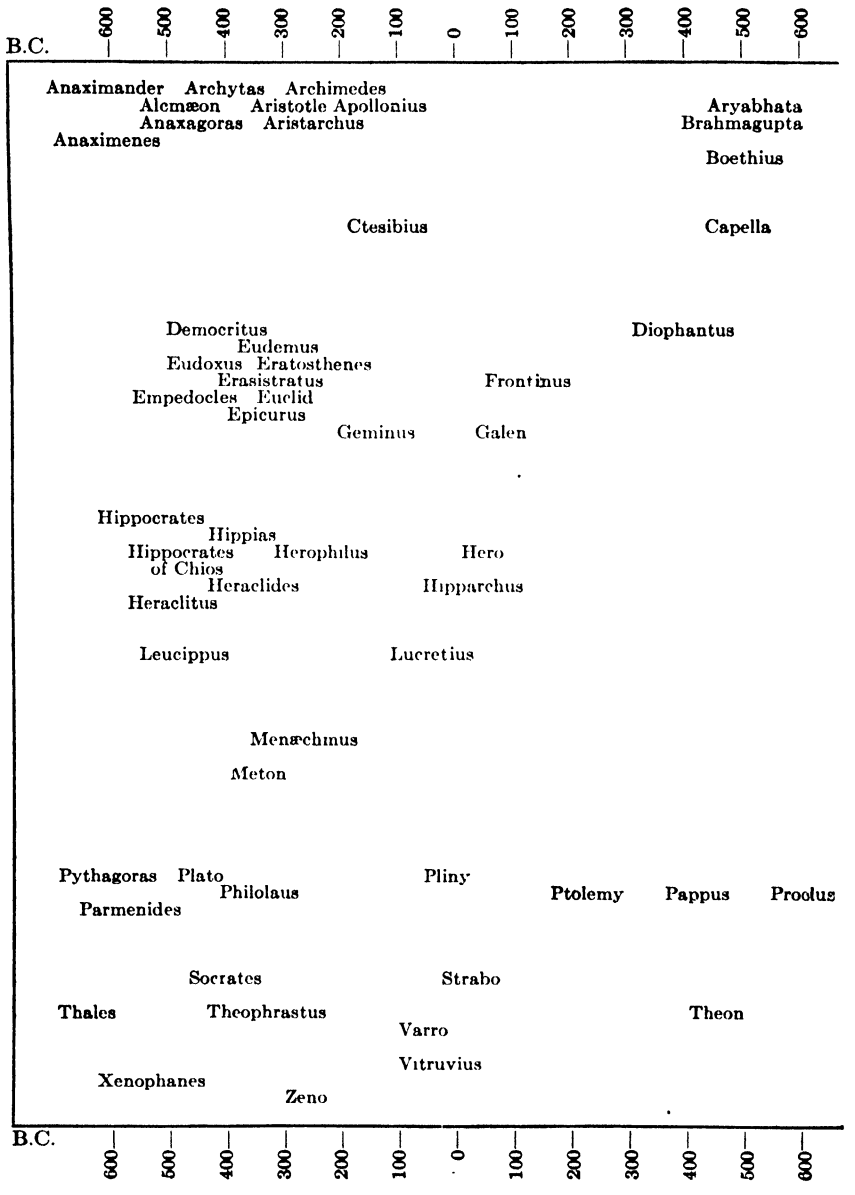
no one had even sailed around Africa to reach the riches of India. But in the latter part of the Middle Ages, and especially in the 1400's, a great deal of exploration went on. An early traveler was Marco Polo, nicknamed " Marco of the Millions " because he told such large stories of what he saw. By 1500, however, Columbus had discovered America and a ship had sailed around the Cape of Good Hope to India. A few years later Magellan's crew had sailed around the world. These explorations and the development of the countries that they opened to England and western Europe added great natural resources for the use of the people of the world. Nor must we overlook the natural resources added through the discovery of natural laws, such as the laws of steam and electricity.

Increased labor power. — The increases in population since medieval days have added immeasurably to the labor power of the world. England's population has increased from some one and one-half or two millions to over thirty-five millions. The population of the United States is well over a hundred millions.

Increases in equipment. — We do not need to say that the equipment of the world has greatly increased. Contrasted with the few simple tools and the muddy roads of those days are the great factories and railroads of modern times. The farm machinery alone in our country is valued at close to three billions; the railroads are valued at more than twenty billions of dollars.

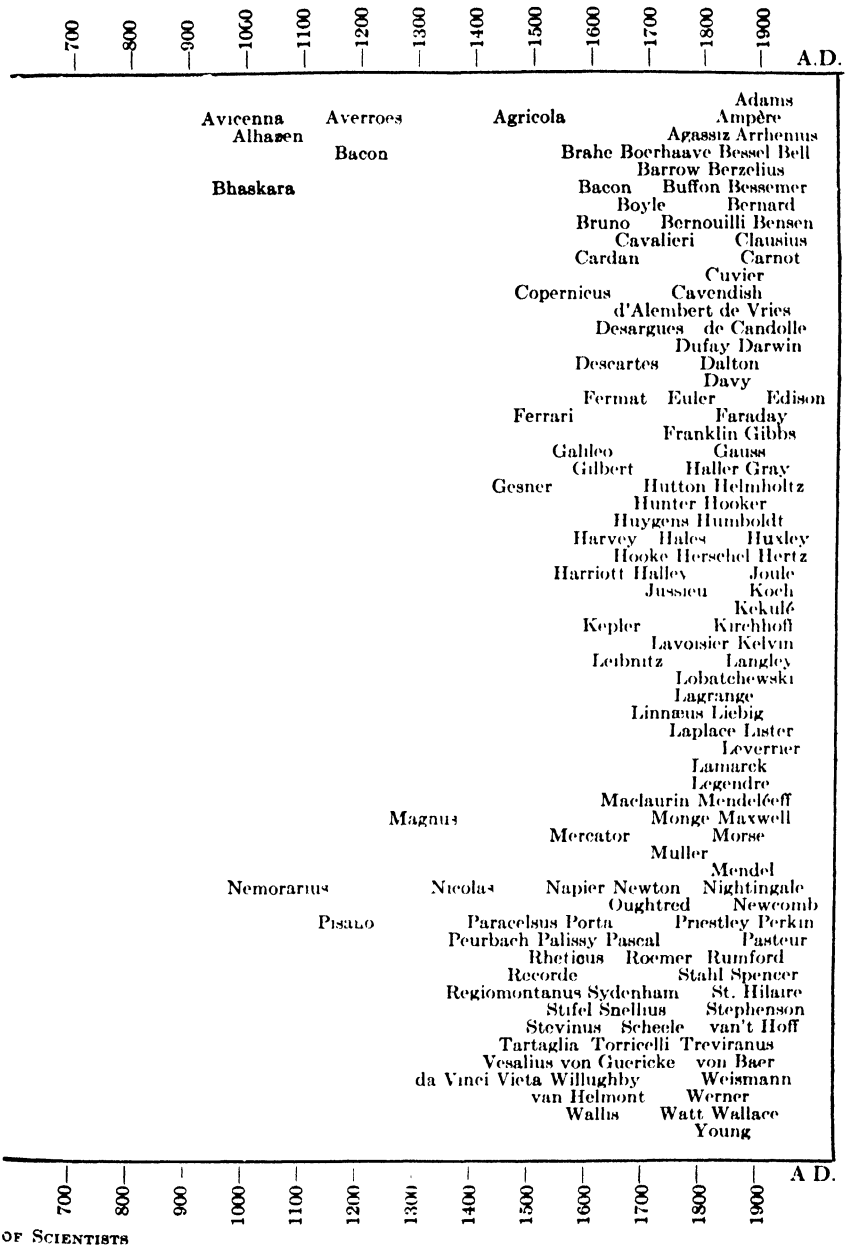
Increase in Science and Its Application

We have seen that the people of the Middle Ages were not scientific. We have seen how superstitious they were and how willing to follow old methods of work, and how much easier they found it to believe things than to explain them.



A Roll of Honor

This chart shows that the Greeks made their greatest contribution 600 B.C. to 300 B.C.; then with very few names for another 500 years. Then comes the great awakening. From L. C.



OF SCIENTISTS

come some Hindu, Alexandrian, and Roman names. The chart is blank for about 300 years, Marshall, *Story of Human Progress*.

Indeed, experimenting was confused with magic and witchcraft and was likely to lead one into trouble. As the Middle Ages drew to a close, however, there came a great awakening of interest in all sorts of learning. The little light of learning — the knowledge of what the Greeks and Romans had known — had been kept alive by the Church and now grew into a great illumination. The chart gives us some idea of the great blank in the Middle Ages, and then of the number of men who took up experiment and study where it had been dropped by earlier students. It is important to us to realize that we live in an age of science, for a knowledge of science proves to be for many people the key that opens doors toward success. Let us notice, therefore, some examples of its effect on ways of making a living.

The use of science in manufacturing caused a revolution. — For some seventy-five years following 1750, the new ideas of science were rapidly applied to manufacturing. The methods used in industry were markedly changed from hand work to machine work. This change is called the Industrial Revolution.

Of course it was not science alone that made the changes possible. The discovery and exploration of new lands and the settlements in America and other parts of the world made it possible for English manufacturers to sell large quantities of goods abroad if they could produce them. Then too, a number of things had happened that took away the control of the gilds over manufacturing. The times had changed (for reasons that you will enjoy reading about in history) in such a way that individuals were free to organize and plan manufacturing and trade. Individual enterprise was now the organizer in England. The new individual enterprisers were what we call "business men," anxious to make money. They seized upon every new machine which

the study of science made possible, and with these new machines they manufactured goods to sell in the world market.

Cloth manufacturing illustrates. — Before the Industrial Revolution the method of making cloth was very slow and tedious. " The raw material for making cotton cloth was the tangled mass of cotton fibers which came directly from the fields. The only work which had been done on it was the laborious work of picking out the seeds by hand. The first step taken toward making cloth was to straighten out the fibers so that they lay parallel. This was accomplished by ' carding ' — brushing and combing the fibers by hand with stiff brushes called ' cards.' The next step was ' spinning,' the process of drawing out the parallel fibers into a loose slender string and twisting them at the same time so that the fibers adhered to one another and formed a cord or thread. The spinning was done with simple hand- or foot-power spinning wheels, in the operation of which the fibers were drawn out by hand and twisted by a whirling device called a ' flyer.' When the fibers had been thus spun into thread, the process of weaving remained to be done. This work was performed on hand looms. The ' warp ' threads were first stretched across a wooden frame and, by means of a large wooden needle which was called a ' shuttle,' the ' woof ' threads were woven horizontally across them. After the cloth was woven it was often bleached by a slow process; and if a figured cloth like calico was desired, the color was stamped on with hand dies." [1]

Cloth-making inventions. — The beginning of a revolution in cloth-making occurred in 1738, when an invention called the " flying shuttle " made it possible to weave much faster

[1] Leverett S. Lyon, *Lessons in Community and National Life*, "The Rise of Machine Industry," pp. 77–78.

than before. But this only made men more anxious to improve their methods of spinning.

In 1764 one of the small manufacturers of England, James Hargreaves, a master weaver, invented a machine with which one man could spin eight threads at the same time. In honor of his wife, Hargreaves called this machine the "spinning jenny." Other workmen soon made such improvements that jennies spinning thirty threads at a time came into use. Finally, Samuel Crompton, another weaver, combined the good qualities of all the earlier machines and made a machine called the "spinning mule." It spun a finer cotton thread than could be spun by the old spinning wheel and made possible the manufacture of muslin cloth.

Other cloth-making inventions. — These great advances in spinning methods stimulated invention in other processes of cloth manufacturing. A machine for carding came into use; a "printing cylinder" was invented with which calico could be stamped a hundred times faster than before; the use of chemicals for dyeing grew out of an increased knowledge of chemistry and replaced the old methods of dyeing cloth; weaving was greatly facilitated by the invention in 1785 of a loom operated by water power or steam which could weave cloth at a speed unimagined before. Finally, in 1792, Eli Whitney, an American, invented the cotton gin. Before the invention of the gin, one man working with hand tools could remove the seeds from four or five pounds of cotton in a day. With the new machine one man could clean a thousand pounds of cotton in a day. This invention made it certain that the new machinery of the cloth manufacturers would be supplied with raw material.

Corresponding changes occurred in other industries. — The new machines appeared in rapid succession and changed the whole industry and the mode of life of the people as well.

What happened in the cotton industry happened also in the other textile industries. Corresponding changes were occurring at about the same time in other branches of manufacturing. The most striking of these occurred in the iron trade. Some of the important discoveries were, how to use coal instead of charcoal in furnaces; Cort's invention for

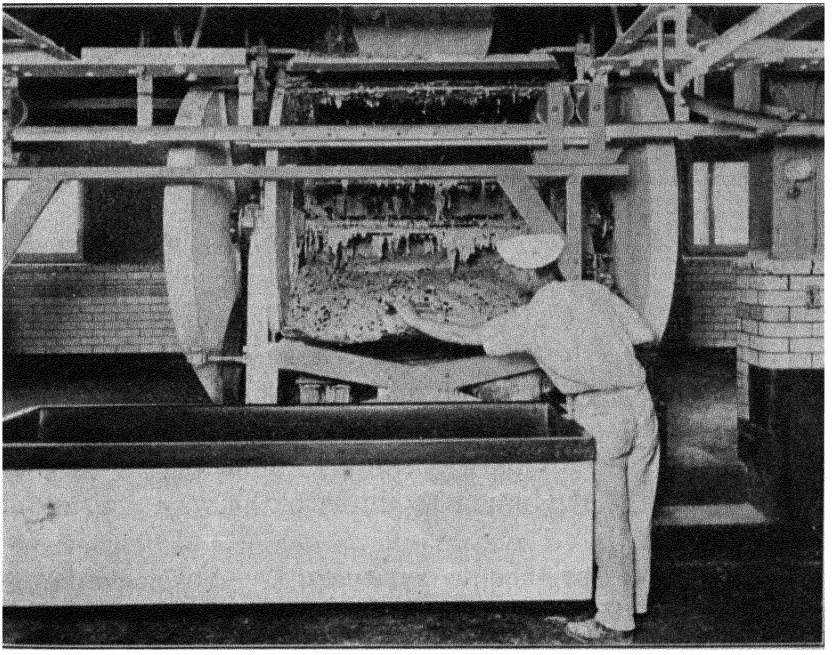


Photo by Brown Brothers

MAKING BREAD

This machine in a modern bakery mixes dough for raisin bread and thus performs work formerly done in the home.

puddling and rolling; and how to use a hot blast in smelting. Such discoveries revolutionized and greatly cheapened the production of bar iron. Since iron is really the foundation of all machine industry, the significance of these facts can hardly be overestimated. They meant a plentiful and

cheap supply of the material which was essential to any considerable supply of steam engines, railroads, and the giant machines that make other machines.[1]

The steam engine at the center of the industrial revolution. — We have not time to describe the industrial revolution in other industries, but just as great changes took place. At the center of all the change we may think of the *steam engine*, and the steam engine may be thought of as a symbol of science. Its practical use is based on a knowledge of steam power and of mechanics. These are studied in the science of physics.

When the steam engine was adopted for practical use in 1781, it meant a great increase in power. But this power was *only where the steam engine was*. Other machines operated by it had to be placed near it. This meant that the worker, instead of working in small shops or his own home, must work in a factory near the steam engine. And since steam engines can run many machines, it meant that many workers were drawn together under one roof in what we call factories. This was the beginning of the factory system. It has had much to do with the way you and I make a living.

Application of science to agriculture. — Science and its applications have also revolutionized farming. The irrigation of dry lands and the application of fertilizers to poor soil have greatly increased the area of productive land in the world. In the western United States alone, over twenty-five million acres of land had been reclaimed by government irrigation by 1920. Many farmers all over the United States increase their crop yields by installing drainage systems on their farms. Rotation of crops and the planting of such

[1] Leverett S. Lyon, *Lessons in Community and National Life*, "The Rise of Machine Industry," pp. 78–80.

crops as clover and alfalfa, as soil renewers, are also results of scientific knowledge. The application of science to the breeding of animals has also wrought great changes. Larger, healthier beef cattle have been produced; better wool- and mutton-yielding sheep have been raised; sturdier, heavier draft-horses, and lighter, fleeter running-horses have been bred. Medieval horses were small, compared with the huge draft horses of today.



Courtesy of Swift and Company

PRIZE WINNING DRAFT HORSES

These excellent animals are greatly superior to the smaller species of medieval days. They show the result of careful breeding.

Science has also aided the farmer by producing labor-saving machinery. The picture on page 91 illustrates plowing in modern agriculture. As the tractor has lightened and quickened the labor of plowing, so the threshing machine has eliminated the slow, back-breaking method of threshing the grain from the straw with flails, and of stacking the straw by hand. The invention of wire fence in 1861 made it possible for the farmer to keep roving stock at home, and so saved the necessity of herding and hunting them. Dozens of examples could be cited, for machinery has been devised to help the farmer in every phase of his work.

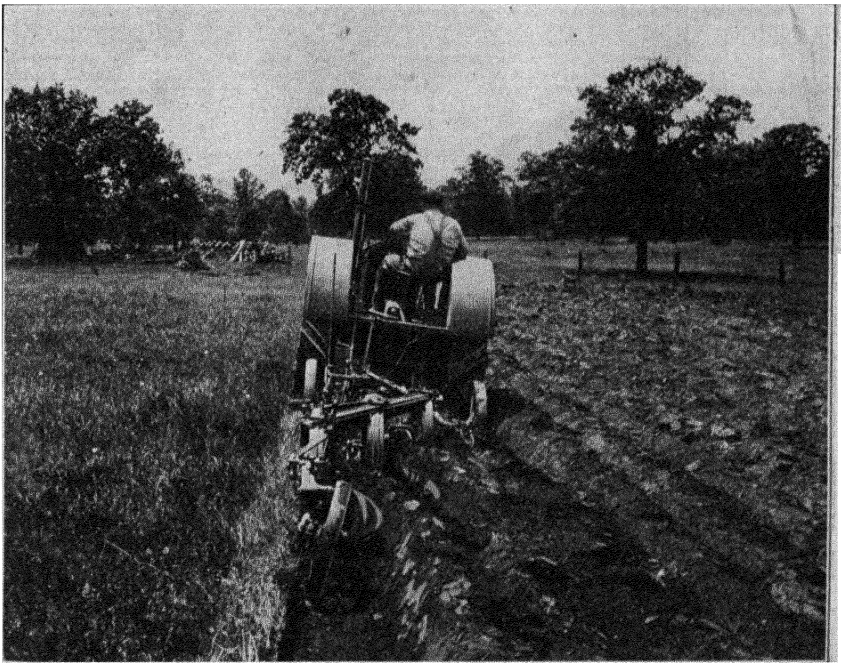


Photo from Keystone View Company

A CHANCE FOR THE TRACTOR

Contrast this method of tilling the soil in Egypt with our present methods. Such primitive plowing still exists in some parts of the world.

Application of science to the professions. — Science and the scientific method have swept through the professions also. To some extent this is true even in religion and law, but medicine and surgery are the most striking examples of the new growth of science in the professions. In these fields, magic, guess-work, and superstition have largely

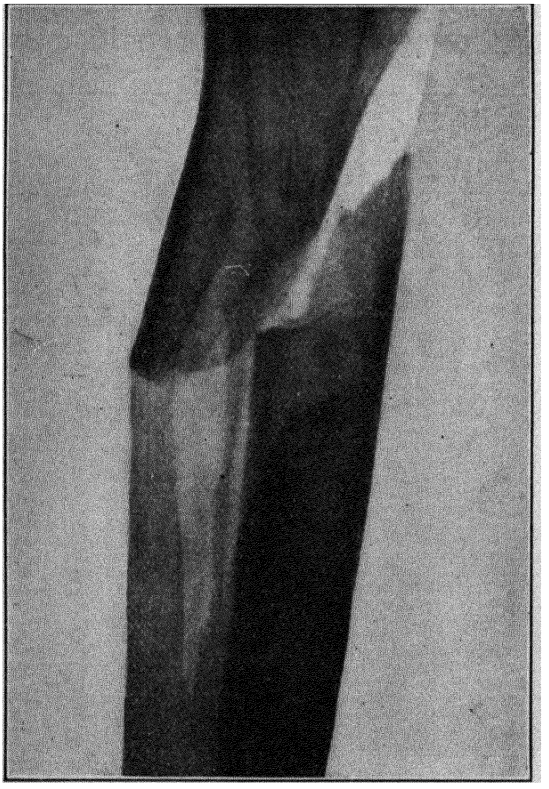


Courtesy of International Harvester Company

A Tractor and Gang Plow Used in Machine Farming
This modern plow turns three furrows and is drawn by a tractor.

given way to observation and careful experiment. One of the most important steps occurred when anatomists began to study the human body, instead of using only the bodies of lower animals. In 1628 the circulation of the blood was discovered. The discovery of anesthetics has lessened the

danger and pain of surgical work immeasurably. The use of the X-ray has proved almost miraculous in showing the nature of internal diseases and injuries. Science brought forth the idea that disease is mostly a matter of germs, and



AN X-RAY PICTURE OF A BROKEN BONE
Note how clearly the location of the fracture can be seen.

this has led to modern ideas about sanitation and sterilization.

INCREASED SIZE OF BUSINESS UNDERTAKINGS

The seven hundred years that saw such an increase in materials and the new use of science saw in almost all eco-

nomic activities an increase in the size of undertakings. It is most pronounced in manufacturing and transportation, though to some extent it is true in almost all work.

We have seen how the craftsman's shop gave way to a factory of many workers. Factories have become larger and larger.

Large-scale government. — One very interesting example of increase in the size of operations is in the work done by

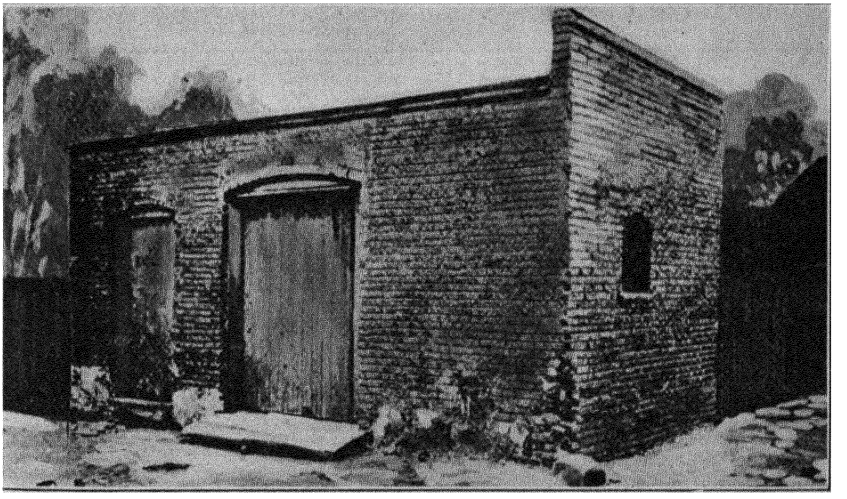


Photo from Keystone View Company

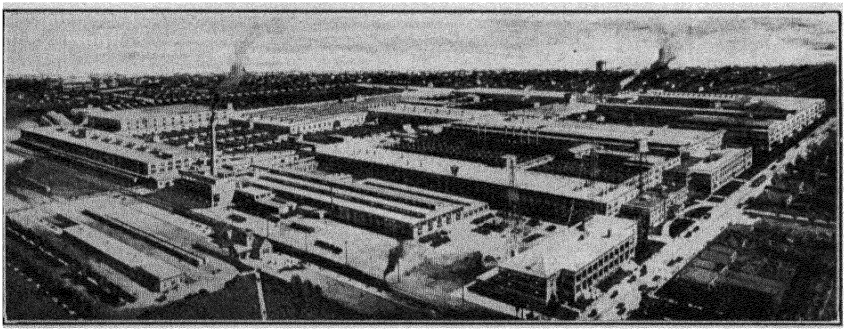
THE FIRST FORD FACTORY

This is a brick barn on Bagley Street, Detroit, where Henry Ford worked on his first gas car.

our governments. We have seen that the national government had very little power in medieval England; but in the centuries since that time, strong national governments have grown up all over the world. From our study of American history we know how our own national government has become great and powerful. Further on we shall see something of the extent of its work. More and more we are put-

ting power into the hands of our national government in the belief that work can be done there better than by our smaller governments.

Large-scale trading. — Our methods of buying and selling have changed as much as those of manufacturing. One great ocean liner now carries more goods than came to England in a whole year of medieval times. Any one of the great department stores in New York or Chicago has more wares for sale than all the fairs in a whole year in medieval England.



Courtesy of the Reo Motor Car Company

A Modern Large Scale Factory

Contrast with the gild shops.

One American railroad operates more than seventeen thousand miles of tracks. The Atlantic and Pacific Tea Company alone has some ten thousand stores in various parts of the United States. This company sold nearly $302,000,000 worth of goods in a recent year. Compare this with the selling done by the medieval peddler. One shoe manufacturing company in the Middle West sells over $100,000,000 worth of shoes in a year. Compare this with the work of a shoemakers' gild. Few things have more changed the pattern of the economic community since medieval days than the increased size of operations.

Increase in Specialization

Of all the changes that have been woven into the pattern of life into which we must fit ourselves, increased specialization of work is one of the most noticeable. It is true in all lines, but in manufacturing it is very marked. We saw

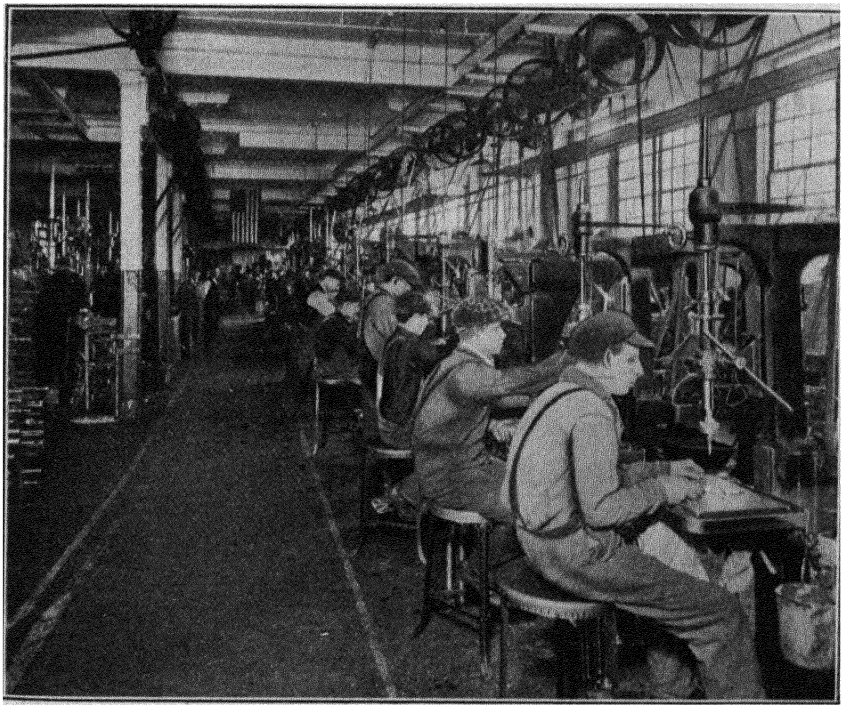


Photo by Brown Brothers

Specialization and Machines

This shows us men at specialized work. Their task is to use the foot and hand controls that set the drills in motion. The rest of the operation is "built in" the machine.

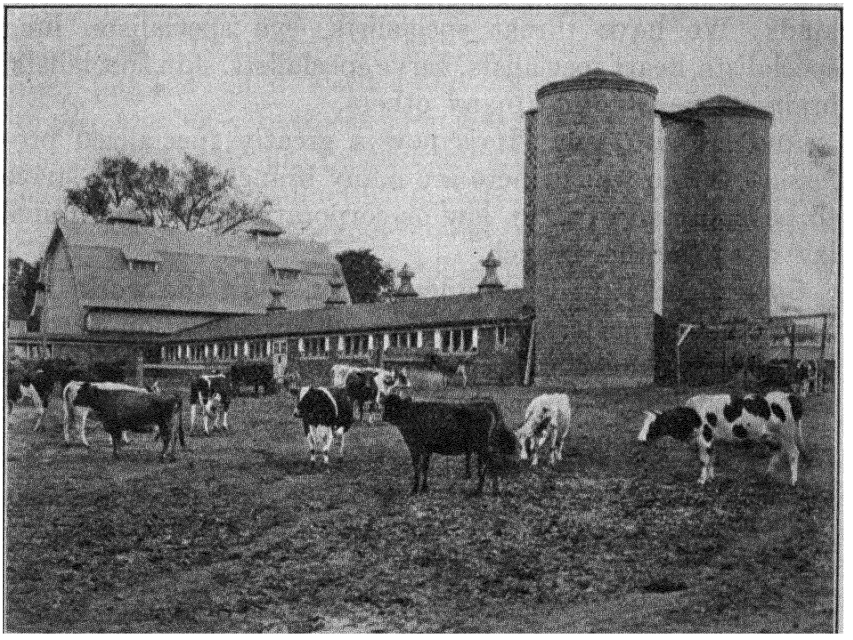
how the gildsman and his apprentices worked on every part of a shoe, hat, or coat. In a modern factory, in almost every case, the work has been split into tiny parts, each of which has been given to a different worker. This list of a few of

the people who work in making just the tops of shoes in a modern shoe-factory shows how the work is divided. Altogether more than a hundred persons take part in making a shoe.

Hand cutters, *Die-cutters* } cut out best shoe uppers.
Blockhands, *Dinkers*, *Clickers* } cut less expensive leathers and linings and gussets.
Skiver bevels edges of pieces for the uppers.
Cementers or *pasters* put cement on skived surfaces, which
Folders fold over and press together by machine or by hand.
Upper-stitchers sew leather and linings on sewing machines.
Eyelet-row stitcher stitches on the quarter, just outside the place where the row of hooks and eyelets will be.
Fancy-stitcher does decorative stitching.
Foxing-stitcher sews leather, called "foxing," to the backs of the vamps of some shoes.
Tongue-binder binds edges of tongues with cloth or leather.
Tongue-stitcher stitches tongues into place.

Other work also is specialized. — In an office there is usually as much specialization as in a factory. Turn to Chapter XVI and notice some of the specialized positions given to boys and girls between fourteen and eighteen years of age. In farm work there is less specialization than in manufacturing, though even there specialization is more marked than formerly. We now have specialized truck farms, wheat farms, hay farms, chicken farms, prune farms, orange groves, cattle ranches, sheep ranches, and others; and in doing the work of these farms, there is much more specialization than there was in the work on the medieval manor. In trading there is also great specialization. Look back to page 69 and notice how the medieval merchant's work has been divided among a number of specialists. Banks have grown up to furnish the merchant money; carriers — first wagons, then

boats, then railroads, then truck lines—have become ready and anxious to carry his goods; men have started insurance companies to carry risks for him and have built warehouses to store his goods. Governments protect him and his property. Dealers, brokers, and salesmen sell for him, and magazines and newspapers advertise his wares. Other com-



Courtesy of International Harvester Company
MODERN DAIRY FARM

panies are ready to find out where the best markets for his goods are located.

Specialization in the professions. — The professions have been almost as much affected by specialization as have other occupations. Much of the work formerly done by the Church has been split off, leaving it concerned mostly with the specialized work of preaching. (Some of the other forms

of work are still practiced by the Church. Examples are Church schools and hospitals.) Not only is most teaching now done by a specialized profession of teachers, but many of these teachers have specialized subjects, such as arithmetic, English, or history. Almost all medical and surgical work is now done by specialized physicians and surgeons. These physicians and surgeons themselves are specialists of many kinds: We have throat specialists, eye specialists, lung specialists, heart specialists, nerve specialists, skin specialists, brain specialists, and many others.

And so with law. It is now a greatly specialized profession within which there are many branches. Men strive to be experts in patent law or corporation law or criminal law or some other branch.

Specialization in government work. — In the work done by the government, there is as much specialization as there is everywhere else. We might think that on a United States battleship, for instance, a man would be a sailor or a gunner. But look! He is a

Boatswain's mate	Water-tender	Aviation metalsmith
Gunner's mate	Electrician's mate	Aviation rigger
Turret captain	Radio man	Printer
Torpedo man	Carpenter's mate	Painter
Quartermaster	Ship-fitter	Sail-maker's mate
Signal man	Coppersmith	Yeoman
Fire-control man	Blacksmith	Storekeeper
Machinist's mate	Boiler-maker	Commissary steward
Motor-machinist's mate	Molder	Photographer
Aviation " "	Pattern-maker	Musician (Bugler)
Engine man	Aviation carpenter's mate	Ship's cook or baker
Hospital apprentice	Pharmacist's mate	

In every other work of government we could find equally good illustrations of specialization.

Organization by Individual Enterprise

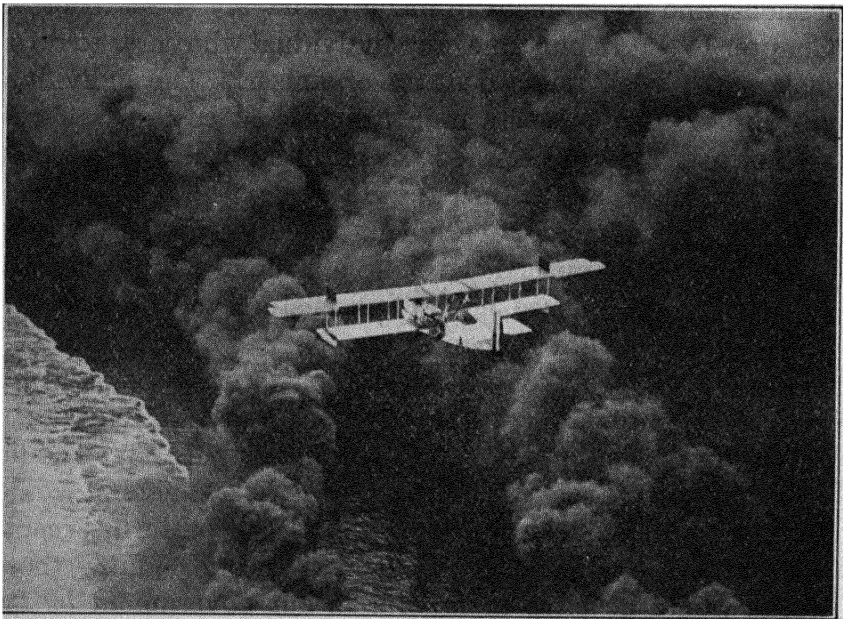
Of very great importance to all of us in making a living has been this thread in the pattern — the increase of individual enterprise. This, like the other great changes that we have discussed, did not come all at once. We saw who organized agriculture, manufacturing, marketing, the professions, and government in medieval days. (Look back to Chapter IV.) In our time, any individual who cares to do so may put himself forward as an organizer. The individual enterpriser as a business man has pushed custom aside in agriculture. He has pushed the gild and other forces aside in organizing manufacturing. He has pushed the leagues and the groups and government aside in marketing. In large part he has pushed the Church aside in the professions. Finally, he has pushed nobles and custom and divine right of kings aside in government.

If we were to make an economic pattern for England for each year since 1200, we should find each year individual enterprise becoming more and more important. We should find that by now the words Individual Enterpriser would be written in bold letters clear across the pattern, excepting across the work of government. In our country these words would go clear across, for in our government *by the people*, the individual has always been as free to go into government as into business or a profession. To-day there is also a great deal of freedom in entering government in England.

Organization by Public Enterprise

And now we come to the last of the cross-lines that we have said were woven into the pattern of the economic community during the last seven hundred years. This is the *increase of organization by the group through government.*

Both in England and in the United States, we are working together as a group, using government to do a larger and larger part of the work of organizing to give us want-gratifying goods. We shall study this method of public enterprise in the later part of our work, and so now we need look at only a few examples.



Courtesy of U. S. Navy, Official Photographers

AIRSHIP SHELTERED BY SMOKE SCREEN

This is an example of the resourcefulness of our government in devising methods of protection.

One example is our great navy, which as a nation we have organized through our national government to protect us. In medieval days no king would have dreamed of a government navy to give complete protection to his country.

Other examples are our national army, state militia, and city police force, which we organize by central and local

governments. In medieval days if a manor was attacked, the people did not ring for the police or call for troops. They had to defend themselves as best they could. We have found that we may create a government to take over the work of protecting us.

Our public school system is another example. This is a great piece of work done by public enterprise working through government. It gratifies our want for education. There are scores of other examples; but we will postpone them until our study of Part IV.

What the Modern Pattern Means in Making a Living

If we can see at all clearly the pattern of work of the modern economic community, we have learned some very important lessons in trying to fit ourselves into it for making a living. Let us list these lessons:

1. Since in making a living we now make use of a wide range of materials, we cannot fail to profit by a knowledge of the world and its resources.

2. Since science and its applications run through all forms of work, we can hardly fail to profit by any knowledge we can get of science and its meaning in modern work.

3. Since the scale of operations in most forms of work is large, we can hardly fail to profit by learning all we can about the way in which large-scale enterprises are planned, controlled, and directed.

4. Since specialization is employed in almost every field of work, we may expect to find it desirable to become specially skillful in some one specialized kind of work. This is particularly true when one begins work.

5. Individual enterprise runs through the pattern. This gives us freedom to try almost anything we wish. It also

gives us, however, a great deal of responsibility. We shall not find a place in agriculture or manufacturing or in government or the other work of the world because of custom or birth or tradition as readily as the medieval boy or girl did. We have many chances; but we must use them. And using the chance means making the most of everything we discussed in Chapter II. Let us look again at that chapter now.

6. Since government has become an organizer and takes a large part in making want-gratifying goods, there are many, many opportunities to make a living in working for the government. There are many opportunities also to be a part of the government.

And finally, we should remember that increase in use of resources, in application of science, in large scale production, in specialization, and in organization by individual and public enterprise, has run through almost *every kind of work*. When, therefore, we find ourselves in a factory, a bank, a store, a ship, a government office, or a schoolhouse, our making a living will be influenced by these figures in the pattern.

QUESTIONS AND PROJECTS

1. Hold a piece of cloth, such as your handkerchief, up to the light. Can you see any pattern in the cloth? Does colored cloth show a more marked pattern?

2. Ask your parents if they can give you two or three illustrations of the ways in which times have changed since they were children. Do you think it would be sensible to say these changes have made a change in the pattern of social life?

3. Ask your parents to tell you in what ways some activity, such as farming or manufacturing or marketing, has changed since they were children.

4. Which of the following are now growing so as to change the pattern of economic activity? Which of the following are decreasing?

Radio	World government
Airplane	War
Use of horses	International arbitration
Motor trucks	Education
Knowledge of electricity	Government by kings
Knowledge of X-ray	

5. Ask your teacher to bring to class a wall map which shows how a ship travels from England to the Mediterranean Sea.

6. When sailors did not dare to travel around Africa to reach India, how could goods be brought from India to England?

7. It is much easier to ship goods by water than to carry them by land without railroads. Would the discovery of a water route from India to England have increased the materials that might be used by Englishmen?

8. Explain how the discovery of America increased the amount of materials for the people of the world. What were some of the more important materials thus made available?

9. Have some student in the class look in the *Census* or *Statistical Abstract* in your school or public library and prepare for the class a chart showing the growth in population in the United States since 1850. Does this chart show that there is more labor power in the United States than there was seventy-five years ago?

10. Show five ways in which the increase of science and its application have given you things which your parents did not have when they were young men and women.

11. Write a careful definition of the Industrial Revolution.

12. Would it have paid a manufacturer to use a steam engine if he had not had a wide market? Show how the discovery of America and other lands helped to widen the markets.

13. Trace the way in which a revolution in cloth-making occurred.

14. Why may we say that the steam engine was important in the Industrial Revolution? Why may we say the steam engine is a symbol of science in industry?

15. Give five examples of ways in which methods of agriculture have been changed since medieval days. Show by two examples improvements in agriculture due to science.

16. Have each student in the class give as many illustrations as he can of charms and magic for curing disease and disfigurement. Give three examples of the way in which science tries to cure disease.

17. Write carefully a definition of science.

18. Are there any examples of large-scale manufacturing in your town? Of small-scale manufacturing, such as was used in the gild shop?

19. In what ways is it harder to plan the work for a large-scale plant than for a small-scale plant?

20. Is your school large enough to require careful planning of work? Explain and give illustrations.

21. Would you say that the railroads that go through your town are examples of large- or small-scale transportation?

22. Are there any examples of small-scale transportation in your town?

23. What is one activity in your town that the national government carries on in a large way?

24. Take each of the above five questions and show how your answer has a relation to the kinds of work people find to do.

25. Ask some friend of yours who works in a factory or in an office if he has been taught how to do all the work in the factory or office, or if he does some specialized part.

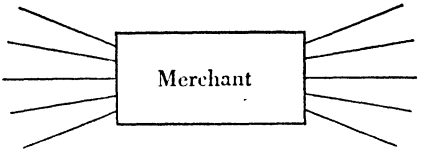
26. If there is some member of your class whose father owns or manages a factory, have him report to the class on the specialized tasks that are performed in making some one complete article.

27. See if someone in the class can do the same for the work of handling a letter in a large office; or handling a check in a large bank.

28. Give examples of the way in which farming is more specialized than it was in medieval days.

29. In a square like the one below write the word "merchant."

Attach lines to this square, and on each line write the name of some specialist who helps the merchant in his work.



30. Have some member of the class talk with a physician and report to the class the different kinds of specialized doctors and surgeons there are in your town or city. Have another student do the same with a lawyer.

31. It is said that specialization is useful —

a. Because it makes it easier to train for a job.

b. Because practice makes perfect in performing one task.

c. Because it saves time otherwise spent in moving from one task to another.

Discuss each of these and show whether or not you think it is true.

32. Do you think specialization might make work more tedious than it otherwise would be? Explain.

33. Do you think specialization in factories or offices would make it

harder or easier to learn all about the business than it was under the system in the medieval shop?

34. Are the specialized workers in a factory or shop coöperating? Explain.

35. Is it true that nearly everyone may now go into nearly any kind of business? Or profession? Or governmental work?

36. Can you see any advantage in permitting anyone to organize a business if he wishes? Is this fortunate for us as individuals? Do you think it is helpful to society at large?

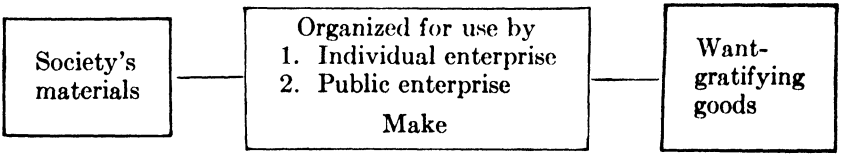
37. May any of our fathers go into government — that is, run for office? Might they have done so if they had lived seven hundred years ago in England?

38. How did a man get to be head of the government in medieval days? How does he now?

39. "There is abundant class consciousness in the feudal ages. Clergymen, knights, peasants — every man knows to which of the three great divisions of humanity he belongs, and acts accordingly. A monkish preacher about 1220 pictures the world as a vast human body whereof the clergy are the eyes, for they show to all men the way to safety; the nobles the hands and arms, for God orders them to protect the church and the weak and to promote peace and justice; finally, the common people form the lower parts of the body — it is their business to nourish the eyes and limbs. A little earlier even, a bishop divided mankind into two great divisions — first, the clergy, who prayed and the seigneurs who fought; second, the toilers; adding that 'to furnish all with gold, food, and raiment — such is the obligation of the servile class.' Since these classes are clearly ordained of Heaven, to rebel against one's status is manifestly questioning the justice of Providence — a damnable impiety."

40. Contrast this description of the way in which people found their places with our present plan of individuals as organizers.

41. Look at the illustration below:



Give three illustrations of organization by individual enterprise in your city. Give three illustrations of organization by public enterprise.

SUPPLEMENTARY READINGS

Lyon and Butler, *Vocational Readings*, appropriate selections from Part II.
L. C. Marshall, *The Story of Human Progress*, Chaps. III, IV, and V.

PART III

ORGANIZATION BY INDIVIDUAL ENTERPRISE

A. BUSINESS MEN AND WOMEN AS ORGANIZERS

CHAPTERS VI TO XVII

B. PROFESSIONAL MEN AND WOMEN AS ORGANIZERS

CHAPTERS XVIII TO XX

CHAPTER VI

THE TASKS OF THE BUSINESS ORGANIZER

We now return to a study of our own economic organization. We shall study it through studying the work of organizers. We have seen that individuals and governments are the two tools that we use to organize our modern economic community. Individuals who conduct certain kinds of work, we call *business* men and women. Others we call *professional* men and women. One class is as free as the other to choose what work is to be performed.

We shall begin by studying business and the work of the business man. If we hope to go into business ourselves some day, such a study will be useful. If we expect to work for a business man some day, such a study will show us the opportunities for work and will help us to see the things that need to be done to secure advancement. We can do this best by studying the various tasks that a business man performs in carrying on a business.

Planning makes for efficient work. — Have you ever taken a journey or gone on a camping or fishing expedition? Have you ever gone down town with several things to do and only a short time to do them? Have you ever had several kinds of school work which had to be done in a short space of time? If so you have had to *plan.* You have had to think what to do before you started doing it.

The way in which Stuart Patterson, a schoolboy who lived in Baltimore, planned how he would sell the *Weekly News,* is

a good example of how planning may be done. His experience will also show us most of the kinds of planning that business men need to do.

Stuart had often read advertisements in the magazines telling of boys who made money selling the *Weekly News*. He decided that he would try this work, at which other boys seemed to succeed. When he talked it over with his father, his father said, "You are not really thinking of working for anyone in doing this; you are planning to enter business in a small way. If you are to succeed, you will need to think carefully about what you must do in carrying on your business." Stuart thought matters over, and a few days afterward showed his father the following list:

THINGS TO DO TO SUCCEED IN SELLING THE WEEKLY NEWS

1. I must get enough money to buy the first lot of magazines.
2. I must make arrangements with the publisher of the *Weekly News* to sell me the first lot and then to sell me each week thereafter just the number I find I can sell.
3. I must arrange to sell my supply of magazines.
   a. I can call on a number of the neighbors and tell them that I shall handle the *Weekly News* and ask them to buy from me.
   b. I can get permission from the owner of the drug store on the corner to have a stand near his door.
4. I must hire some other boy in the neighborhood to work at my corner stand when the *Weekly News* is first issued, while I am making deliveries to the neighbors.
5. I may need to buy or hire a small wagon to deliver my magazines.
6. I must keep an account of the money I spend, the number of magazines I sell, the money I receive, and any other matters that will help me to know better what to do as time goes on.

His father was very much pleased when he saw the careful way in which Stuart had planned his operations. He agreed to lend his son enough money to buy a first allotment of magazines and to purchase a large box for use as a stand. As time went on, the number of magazines that Stuart sold

increased so greatly that he hired several boys to help him. Stuart found, however, that the things he had to look after did not change. He always needed a certain amount of money to carry on his little business; to buy his magazines; to hire helpers; and to make plans for selling and delivering his goods.

Every business man must plan his operations. — The work of a business man in planning the different tasks that he must perform is much like the planning that Stuart did. He too needs to enter business, secure money, buy materials or goods, make goods, sell goods, transport, and communicate. In the following chapters we shall study more carefully these tasks. In this chapter we shall try to see briefly what each means.

Entering business. — First of all, of course, is the entrance into business. In Chapter VII we shall see how men decide what business to enter. We shall see also that a man may conduct a business alone or join with others by forming a partnership, a corporation, or some other form of association.

Securing money. — Men in business need money. We must study briefly why they need it and how they secure it. This will require our learning something about stocks and bonds and such institutions as commercial banks, investment banks, and the stock exchange, for business men use these agencies to secure the money they need.

Buying materials or goods. — To operate a factory, a man must buy raw materials; to run a store, he must buy goods to sell again. Whether his business is running a farm, a ship, or a mine, he must buy materials and equipment. Buying has become one of the most important tasks in almost every kind of business, and business men have learned to use a number of devices to help them in buying. We must study this task enough to know what it means and what

one needs to know to help the business man in his work of buying.

Making goods. — Most business men must make goods with the raw materials they buy. Factories are the best examples, but even in stores and markets some " making," such as grinding coffee and slicing meat, goes on.

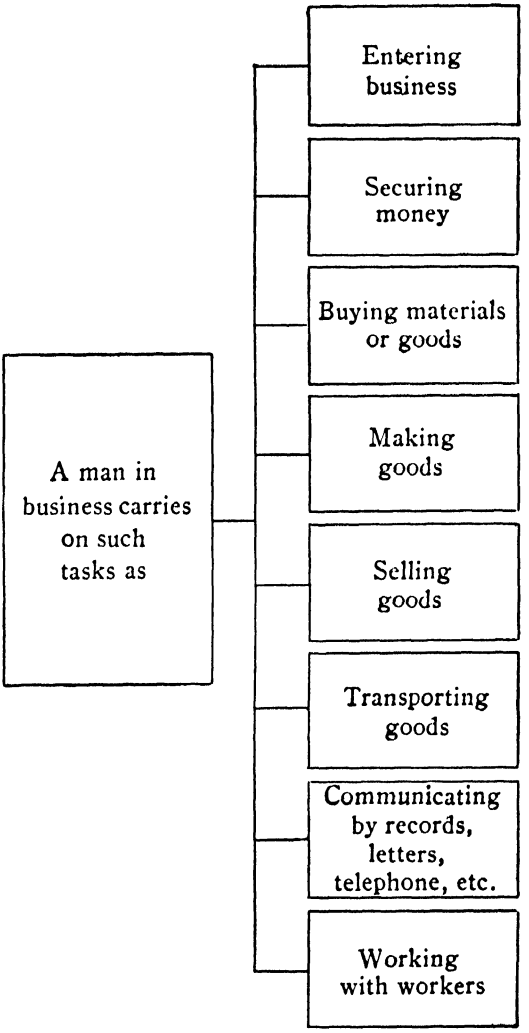
Working with workers. — Business men employ other people to work for them. Sometimes they employ hundreds and ever thousands of men and women. We shall learn something of the kinds of work for which people are employed. We shall learn something of the ways in which a business man can be helped to work well with workers. Whether we become workers or business men or aids of business men, such information will be useful to us.

Selling goods. — All business organizers must sell goods. Farmers sell their crops, mine owners sell their ore or coal, lumbermen sell logs or lumber, and factories sell what they make. Stores sell what they buy. No task of the business man is more important or interesting than selling. We shall see the ways in which business men sell goods. We shall see the chances there are for us in such work.

Transporting goods. — Goods must be transported. The factory ships to the store, and the store delivers goods to our homes. You can give other examples.

Communicating. — The business man must ever strive to do better. Records of what he has done in the past are very important in showing him how to improve. We must see what records mean to the business man. Then too, he needs to send letters and to use telephones, to give information to others and to receive information from them. This keeping of records and exchanging of information is what the business man calls communicating. We shall see how this communicating is carried on.

The tasks of a business organizer may be diagramed. — The following diagram will summarize what we have read, and what we are going to study in more detail:



THE TASKS OF A BUSINESS ORGANIZER

QUESTIONS AND PROJECTS

1. Name five individuals in your town or city who are in business.
2. Suppose you decide that you wish to run a stand where sandwiches and cold drinks can be bought and that you wish to do this in association with some friend. Make a list of the tasks that would have to be performed in doing this work.
3. Compare the list that you have made with the list made by Stuart Patterson. In what ways is it similar? In what ways is it different?
4. Make a list of the tasks that you think a man needs to perform in running a grocery store. Compare that list with the list for your stand and with Stuart Patterson's list.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER VII

HOW ONE GOES INTO BUSINESS

Choosing a Business

Who may go into business. — Anyone may go into business. No permission is necessary. It is true that when men open drug stores, barber shops, soda fountains, restaurants, or any one of many other kinds of business in large cities, they are required to secure licenses. But since generally only a few dollars are charged for a license, the license is a means of bringing money to the city government rather than of preventing men from going into business. In smaller places, however, even a license is not required.

Society really says to everybody: "Here are materials; come and buy them. If you can make any want-gratifying goods out of them that you can sell at a profit, you may keep the profit."

We are using the word *business* broadly. — When we say that a business man may buy society's materials and make them into want-gratifying goods, we see at once that we are using the term "business" in a very broad way. It includes, for example, starting a factory to make shoes; organizing a circus; opening a moving picture theatre, a newspaper plant, or a dancing school; buying or renting a farm; operating a fishing boat, a mine, or a sawmill.

How people decide what business to enter. — With the many interesting choices open to young men and women who wish to enter business, it is not strange that some find it hard to decide what to do. Probably all of the matters that influence and control people in choosing a business may be

included in three. These are *motives*, *knowledge*, and *ability*. Of these we need, at this point, to notice only the influence of motives. Let us see what some motives are.

Perhaps the most important motive that influences men in choosing between one business and another is the motive of profit, the desire to make money. (See Chapter II.)

In deciding what business actually will pay best, men use the dollar as a measuring stick. For example, a man in a small city believed there was room for another cigar store or for a candy and ice-cream parlor. He figured the matter over; his calculations looked somewhat like this:

POSSIBLE YEAR'S OPERATION OF A CANDY AND ICE-CREAM STORE

Total amount of goods I could probably sell		$19,000
Total cost of these goods		10,000
Total gross profit		$9,000
Selling expense		
Rent of store	$3,000	
Help	1,500	
Light	200	
Insurance and incidentals	200	
	$4,900	
Total selling expenses		4,900
Return for work and money invested		$4,100

POSSIBLE YEAR'S OPERATION OF CIGAR AND TOBACCO STORE

Total amount of goods I could probably sell		$25,000
Total cost of those goods		17,000
Total gross profit		$8,000
Selling expense		
Rent of store	$2,400	
Help	1,600	
Light	200	
Insurance and incidentals	100	
	$4,300	
Total selling expense		4,300
Return for work and money invested		$3,700

After "measuring" both opportunities with the dollar unit, it was easy to see that the candy store offered the better chance to make a profit.

No good unit of measure for other motives. — Thus we see that when we are interested in doing the thing that will bring us the most money, we have a good tool for measuring and comparing one kind of work with another. But when some other motive is moving us, it is much harder to decide what to do.

A certain girl was anxious to do the kind of work that would be of the greatest service to others. She thought of being a physician, a missionary, a nurse, or a teacher. But she could not see how to tell which would do the greatest good. She could not set it down in dollars as the man did in considering the cigar and candy stores. Dollar-measuring only showed her how much she would get in each kind of work. She wanted to know how much she could give in each. In what unit can service be measured? The money unit measures only gain or profits.

Still another case illustrating how hard it is to measure satisfaction in terms of service, self-expression, or affection is that of the boy who, although his father wanted him to enter the army, became a lawyer because he knew his mother wanted to feel that she had a son who was a lawyer. His affection for his mother was the motive that moved him. But his mother died soon after he began to practice law, and so his pleasure in pleasing her did not last long.

Choosing a Form of Business Organization

Whenever anyone decides to go into business, one of the first questions he must decide is whether he shall operate it alone or whether he shall have partners or other associates. If he undertakes the task alone, we generally speak of the

business as an *individual enterprise* or firm or business — one conducted by a single individual. If he joins in certain ways with one or more other people in the venture, it is called a *partnership*. If he joins with others in certain other ways, it is called a *corporation*. Let us see what is meant by each of these.

David Peterson had worked for several years as a clerk in a large store and had been advanced in salary and rank. He had done and was familiar with almost every kind of work in the store.

During his employment Mr. Peterson made many friends and saved some money. Later he decided to open a store of his own. Accordingly he rented a building and bought goods. Many of the customers from the old store came to trade with him. He made sales, but many persons complained that his prices were too high. He figured his costs and found that if he lowered prices he would not be able to pay rent and other expenses and have as much left for profit as he formerly made as an employee. He then looked for a way of lowering his own costs of doing business. He decided that he was not buying as well as he should, and he determined to talk it over with Gerald Dinfield, a buyer in the store Peterson had left. He found that Gerald Dinfield knew ways and times to buy well. After talking it over, they decided that it might be well to join their abilities of buying and selling and form a partnership. Mr. Dinfield had been in business once before and knew exactly how this was done. He knew that the law permitted men to form business partnerships by making a *partnership agreement* with each other. Furthermore, he knew that if a partnership was formed each partner assumed a certain responsibility for the acts of the other. In discussing the matter, they made a list of points similar to the following:

1. *How can the partnership be formed?* — By an agreement between the parties that they do form a partnership. It is best that this agreement be in writing and set forth what money or other property each partner puts into the business, what amount of time each is to devote to the business, and what share of the profits each shall receive. Such written contracts to act as partners are called "articles of partnership."

2. *What would be the chief advantages of a partnership?* —
   - *a.* More variety of ability. (This point seemed very important to these two men.)
   - *b.* More money would be made available.
   - *c.* There would be better judgment, as the partners could discuss matters.
   - *d.* It might be easier for a partnership to borrow.

3. *What would be the chief disadvantages of a partnership?* —
   - *a.* Partners might disagree in directing the business.
   - *b.* Profits of the business must be divided.
   - *c.* Each partner is required by law to be responsible for certain acts of the other. The most important is the liability for the debts of the partnership. For example, if one partner, acting in a matter of business, brings large debts upon the firm, either partner may be held responsible for any property which he has, even if he has not put it into the firm's business.

The two men decided to form a partnership, and the following partnership articles were drawn up:

ARTICLES OF PARTNERSHIP

This agreement made and entered into this thirty-first day of October, one thousand nine hundred and twenty-six, by and between David Peterson and Gerald Dinfield, both of Rochester, N. Y., witnesseth as follows: —

1. The said parties, above named, hereby agree to become partners in the business of buying and selling drygoods under the firm name of Peterson & Co., said business to be carried on in the city of Rochester and to continue for the term of five years from the date hereof.

2. The capital of the said partnership shall consist of the sum of ten thousand dollars, to be contributed as follows: The party of the first part shall contribute his stock of drygoods and the good will of the business heretofore conducted by him, which are together valued by the parties hereto at the sum of five thousand dollars; and the party of the second part shall contribute the sum of five thousand dollars in cash. The capital stock so formed is to be used and employed in common between the parties hereto for the support and management of said business.

3. Both partners shall give their entire time and shall share losses and gains equally.

4. Each of said partners shall be at liberty to draw out of the funds of the firm each month for his private expenses the sum of one hundred dollars, and neither of them shall take any further sum for his own separate use without the consent in writing of the other partner. The sums so drawn shall be charged against the partners respectively, and if at the annual settlement, hereinafter provided for, the profits of any partner do not amount to the sum so drawn out in that year, he shall at once repay such deficiency to the firm.

5. All the transactions of the said copartnership shall be entered in regular books of account; and on the first day of January in each year during the continuance of this copartnership, account of stock shall be taken and an account of the expenses and profits adjusted and exhibited on said books; said profits shall then be divided, and one half carried to the separate account of each partner.

6. When the firm is dissolved, the said copartners shall make a just and final account of all things relating to their said business and in all things truly adjust the same; and all and every, the stock and stocks as well as the gains and increase thereof, which will appear to be remaining, either in money, goods, wares, fixtures, debts, or otherwise, shall be divided equally between them.

IN WITNESS WHEREOF, the said parties have hereunto set their hands and seals this thirty-first day of October, 1926.

David Peterson (L. S.)
Gerald Dinfield (L. S.) [1]

The partners form a corporation. — For five years the partners carried on the business successfully. They were,

[1] Cf. D. C. Gano, *Commercial Law*, pp. 222–224.

in fact, so successful in their dealings that two other stores, located near them in the city, offered to sell out to them. This offer seemed to the partners a good opportunity to expand their business; but to do so, they would need more money than they had. They presented the whole matter to a good lawyer. After careful consideration, the lawyer said:

"To enlarge the business in the way you describe, you will need at least $100,000. The thing to do is to form a corporation. To do this is easy and inexpensive and should provide the necessary money.

"To begin the formation of a corporation, we must secure certain blanks from the secretary of state at the state capital. These we must fill out by giving the names and addresses of the men who are forming the corporation, the name of the new company, the purpose for which it is formed, the principal place at which it will transact business, the amount of money to be invested to make it successful, the way in which this money is to be obtained, and some statements regarding the way the new company will be managed. After this information is filed with the secretary of state at the state capital, you will be given permission to get money by selling other people an interest in the company.

"At present you two men have the entire ownership of this drygoods business. But we shall divide the ownership into a thousand parts or shares. We shall represent each share by a piece of paper called a stock certificate. We shall offer the shares for sale at $100 each. When all have been sold, there will be a total of $100,000, which is the amount needed. Everyone who buys one or more of these certificates has an interest in the new business. You men who have been operating the business as partners are, of course, entitled to shares of stock amounting to the value of your

building, your furniture, and the goods that you have on hand. You may also purchase additional shares in the same way as anyone else. You may not have as much to say in directing the corporation as you had while your business was a partnership, because the ownership of each share in a corporation such as we are forming carries with it the right to one vote regarding business policies. But if you men secure a majority of the shares, you will have a larger number of votes than all the other shareholders and can really direct the new corporation just as you have directed the former partnership. It may seem to you that it will be difficult to get people to invest money in this enterprise. I think it will be easy. In the first place, both of you men are now known as good business men. People will wish to join you in a business undertaking. In the second place, these shares may be sold by their owners to anyone who

Incorporated under the laws of the State of Michigan

SWIFT AUTOMOBILE MANUFACTURING COMPANY

No. 20 **10** *shares*

Capital **$100,000** *Shares* **$100** *each*

This certifies that James Monroe is the owner of ten shares, of $100 each, of the capital stock of the SWIFT AUTOMOBILE MANUFACTURING COMPANY of Detroit, Michigan, transferable only on the books of the Company in accordance with the By-Laws thereof, in person or by attorney, upon the surrender of this certificate.

In witness whereof, the said Corporation has caused this certificate to be signed by its duly authorized officers, and to be sealed with the Seal of the Corporation, this second day of September, 1926.

John Cutter, *President*

(*Seal*) William Cox, *Secretary*

wishes to buy them. This fact, which makes it easy for shareholders to withdraw their interest at any time, also encourages investment.

"Of course, if your new company makes profits, they will be distributed among the shareholders in proportion to the number of shares owned. Such payments are called dividends. Here is a stock certificate. The certificates of your new company will look very much the same."

The back of the certificate was the blank to be filled in if the owner wished to sell or give the shares of stock to someone else.

For value received ____ hereby sell, assign, and transfer unto _____

_____

shares of the capital stock represented by the within certificate and do hereby irrevocably constitute and appoint

_____ Attorney _____

to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated _____ 19 ___

In presence of

_____

Notice: The signature to this assignment must correspond with the name as written on the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

The partners decided to follow the lawyer's advice. As soon as permission had been received from the secretary of state, shares of the new corporation were offered for sale. It was not long before all of the shares of stock had been sold. A meeting of the shareholders was then held, at which a

board of directors of seven or eight shareholders was chosen, David Peterson was elected president, and Gerald Dinfield vice-president of the corporation. A treasurer and a secretary were also chosen. The board of directors had the power to direct the operations of the corporation.

The business continued to be very successful. Every year the profits were divided among the shareholders, the amount going to each owner being in proportion to the number of shares owned.

QUESTIONS AND PROJECTS

1. Have one member of your class go to the office of the city or town clerk and ask what, if anything, must be done to start a business in your city or town. Learn if it is different for different businesses.
2. Show how it is true that a man is in business if he is —

Running a store	Running a farm
Running a factory	Operating a mine
Publishing a newspaper	

Name ten kinds of business in your town.

3. Suppose that you are thinking of running a lemonade stand on Saturday and are trying to decide whether that will pay better than working for $1.25 a day. Show how you might try to compare the two ventures.
4. Why is it harder to measure other motives than to measure the gain-motive?
5. If you were to start a lemonade stand, what advantages might there be in having a partner?
6. John Smith, a manufacturer, says he needs a partner. Make a list of the reasons why a partner might be useful to him. What possible disadvantages might there be in a partnership?
7. John Brown, a lawyer, says he wants a partner. Make a list of the ways in which a partner might be useful to a lawyer.
8. White and Greene are partners in running a store. The firm gets deeply in debt. They have not enough partnership funds to pay the debts. White has a great deal of money besides what is in the firm; Greene has nothing. Who will have to pay the debts?
9. Why is it desirable that partners should have a written agreement?
10. Why should men ever wish to form corporations?

11. Name three corporations in your town.
12. What is a share of stock?
13. What is a stock certificate?
14. Inquire if anyone in your class can bring a stock certificate to class.
15. Partnerships and corporations are sometimes arranged so that the people in them have rights different from those that David Peterson and Gerald Dinfield had. Why might men want arrangements in some cases different from the arrangements in others?

SUPPLEMENTARY READING

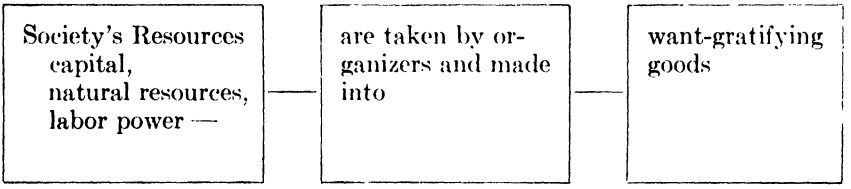
Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER VIII

THE BUSINESS MAN'S TASK OF SECURING MONEY

Why a Business Organizer Needs Money

We have already seen that the business organizer takes society's materials and makes them over into want-gratifying goods. Let us look again at the diagram showing the position of the business man in society's work.



Society's materials are privately owned. — In the above diagram, and heretofore when mentioning society's materials, we have spoken as though they belonged to society. So they do. But society permits most of these things actually to be owned by individuals. Things so owned we call *private property.* This means that some individual (you or I or some partnership or corporation) owns most of the materials. Any of our social resources furnish examples of private property. The rich farm lands of the United States supply us with wheat, corn, vegetables, and fruits. But these farms are *owned by farmers* who decide what kinds of crops shall be grown on them. Another good example is labor power. You and I and other persons may be thought of as

labor power. *We own* this labor power ourselves. We decide whether we shall use it or not use it; whether we shall sell it to one person rather than to another. Nowadays everyone in our country, no matter how poor he may be, owns, at least, his own labor power. Of course this was not true in the days of slavery in our own country. It is only because we have private property in ourselves that we have a chance to decide what we shall do. The slave had no such chance. The villein on the manor had very little chance to choose.



PRIMITIVE METHOD OF ACQUIRING PROPERTY

What have we substituted for this method of acquiring property?

If nobody owned society's materials, the business organizer might go out and take such things as he wanted for making want-gratifying goods. But under our scheme of private property, someone does own them. Therefore to secure them the business organizer must buy or hire them. To use an owner's labor, the organizer must buy it by paying wages; to use an owner's land, coal, trees, or tools, he must buy them or the use of them.

To buy, the organizer must have funds. — Since materials are the private property of other people, the business man must have funds to buy them. If he has funds enough, he can secure almost any quantity of materials (natural resources, labor power, and capital). Funds are, therefore, very important to him. We shall next undertake to see some of the ways in which he secures funds.

How a Business Organizer Secures Money

Often a man who starts a business uses his own funds at the beginning. But obviously one may not have sufficient funds, especially if the business grows; moreover, a man may not wish to use only his own funds. He may prefer to have someone join in the risks of the enterprise.

Sometimes partnerships are formed because two or more men are likely to have more money than one. But the accumulations of several men are too small for the larger undertakings; and there is the liability attaching to partnerships. (See page 119.) For these and other reasons, the formation of a corporation has been found to be a good way to secure money for carrying on a business. (Recall the story of David Peterson and Gerald Dinfield.) This is especially true if quite a large amount is needed. The American Telephone and Telegraph Company, for example, has issued stock with a face value of more than $888,000,000. The stock of the United States Steel Corporation has a value of more than a billion dollars.

More stock may be issued after the corporation is started. — The money paid in for shares by the men and women who subscribe for and purchase them when the corporation is formed may be all that the corporation needs for a time. But a corporation, like an individual enterprise or a partnership, may need more money. It may satisfy such needs by issuing more shares of stock. To do this, it is sometimes necessary to secure permission from the state officers; and, of course, subscribers for the new shares must be found.

If new stock is issued, profits from the business will have to be shared with the owners of the new stock as well as with the owners of the old.

Profits as a source of funds. — If a business is successful

it will make profits. The owners may decide to take these profits out of the business and use them for some other purpose. Or they may decide to " leave them in the business." If they do this, the business may secure additional funds from such " undivided profits."

A man in Boston once started a small store with an investment of a thousand dollars. He made profits, but he used most of them to enlarge his store and to buy more goods. Now he has an investment of two thousand dollars in the store. Half of the total is from profits that he " left in " the business. One oil company which originally received one million dollars from the subscribers for its stock has earned profits of a half million dollars. Half of this amount has been paid to stockholders as dividends, but the balance, a quarter of a million, has been kept and used by the company. Thus every holder of a hundred-dollar share of stock has really twenty-five dollars additional invested in the company.

Financial institutions aid business men in securing funds. — A great many enterprisers have organized businesses that stand ready to help other enterprisers secure funds. Such businesses are often called *financial institutions*. There are a number of these. The ones that are so important that we should look at them here are: (1) commercial banks, (2) investment banks, (3) brokerage houses, and (4) the stock exchange.

The commercial bank. — In medieval days, there were a few men especially well provided with safes and boxes and dwellings strong enough to give protection to the things they owned. These men were goldsmiths, or the craftsmen who used gold and other precious metals to make jewelry and other valuable goods for sale. Many persons who had sizable sums of money fell into the habit of taking their funds to the goldsmith to be put in his strong box for safe keeping.

Some of these depositors had so little use for their money that they left it there for a long time, paying the goldsmith for protecting it. Sometimes a goldsmith came thus to have a large sum of money on hand. He found that it was *safe for him to lend* a considerable part of this, since all the depositors did not come at one time to ask for their money. He could reap an income in this way, for he *charged interest* for the money lent. While the goldsmith could not lend all of it because every now and then some depositor would come in and ask for his money, yet, he could safely lend perhaps three fourths of the total. Thus there grew up an interesting method of accepting money for deposit and then lending it for a payment of interest. The name "commercial banking" is generally given to a business carrying on this kind of operation. Probably most of the banks that you know about are commercial banks which do the sort of work we have just described. The following diagram shows in a very general way the work of a commercial bank.

AN ORDINARY COMMERCIAL BANK

Funds of the bank	are lent	to whom?
1. *The bank's own funds* 2. *Depositors' funds* — such as those of storekeepers, factory owners, you and me, and others.	*The bank officers* — president, vice-president, and cashiers — decide to whom and in what amounts funds can safely be loaned and what rate of interest shall be charged.	*Borrowers* — storekeepers, factory owners, you or me, or others. Many persons are often both depositors and borrowers.

Both state and national governments have passed laws which control to some extent what the banker may do. The government has also done much to help bankers. Especially useful are the federal reserve banks.

Anyone to whom the banker will lend may borrow from a bank. It may be a person not in business, or a business operated by one man, or a partnership, or a corporation. The steps any one of them would take to borrow are the same. In case of the corporation, of course, some officer would act for it.

No. 902 Due May 31, 1926

ROCHESTER, N.Y. April 1 1926 $1,000.00

Sixty days after date, without grace, I promise to pay to the order of

THE FIRST NATIONAL BANK OF ROCHESTER, N.Y.,

One thousand and no/100 DOLLARS,

with interest at the rate of 6 per cent per annum until paid. Payable at **The First National Bank of Rochester, N.Y.** Presentment for payment, protest, and notice of dishonor are waived by each maker, endorser, and guarantor hereof.

I have transferred and delivered to said **The First National Bank of Rochester, N.Y.**, as collateral security for the payment of the above note and of any other liabilities, either direct or contingent, of the undersigned to said bank or to the legal holder and owner of said note, due or to become due, or that may hereafter be contracted, the following property: _____

David Peterson

P. O. ADDRESS 19 Harrison St.

Notice that this promissory note is nothing more or less than David Peterson's written promise to pay the bank a certain sum of money at a certain time.

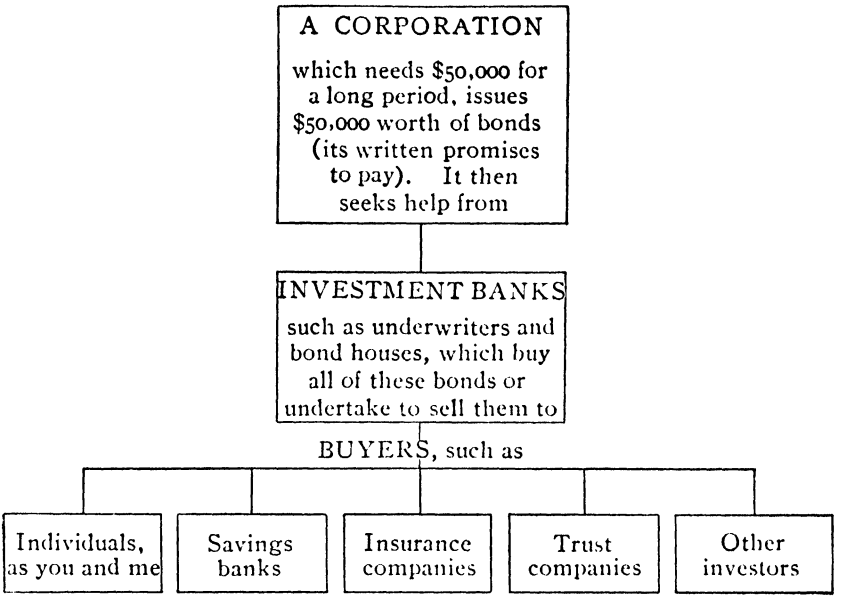
We can illustrate making a loan by supposing that our old friend, David Peterson, comes to the bank wishing to borrow $1,000. He wishes to use this money to buy a small stock of women's hats for the Easter trade. He expects that he will sell these hats within sixty days, and so he wishes a loan

for that period. He talks with the cashier of the bank, explaining the purpose for which he wants the money. The cashier, perhaps, asks to see certain records of his business to satisfy himself that the loan will be paid. He considers also the reputation for honesty which Mr. Peterson has gained. He then fills out a promissory " note " which he asks Mr. Peterson to sign.

When bankers are afraid that a borrower may not be able to repay, they often demand that the borrower leave in the banker's charge some valuable property, such as stock certificates or bonds, in addition to their written promise. The banker is given permission to sell this property if the note is not paid when due. If he does so, he may keep enough to pay the debt, but must return the balance.

Borrowing from a commercial bank is one of the important ways, then, in which a business organizer can secure funds. It is a very convenient way, because money can thus be borrowed for the short time desired and then repaid. If there is still need for the money when the debt is due, the note may generally be renewed if the borrower's business condition is still good.

Other institutions needed where the loan is for a long time. — A commercial bank will not lend money which the borrower will not promise to pay back within a rather short period. It is not strange, therefore, that other financial institutions have grown up to provide funds where the loan may be for a period of many years. There are a number of these that differ in detail, but all may be classed under the head of *investment banks*. The most important examples of an investment bank are the " Underwriting Company " and the " Bond House." In the diagram on the next page we may see how investment banks furnish funds to a business and collect the funds from several sources.



How Investment Banks aid a Corporation to Secure Funds

What a bond is. — When funds are borrowed for a long period, the borrower, as in the case of a short loan, must give a written statement concerning the time of repayment, the time and rate of interest payments, the security, if any, behind the promise, and any other obligations or conditions. The written statements most commonly used are those called *bonds*.

A Simple Form of Corporation Bond[1]

The ———— Company, a corporation of the state of New York (hereinafter called the Company) is indebted and for value received promises to pay to the registered holder, the sum of

ONE THOUSAND DOLLARS

in lawful money of the United States, on or before August 15, 1931, and interest semiannually on said sum, at the office of the Company in the

[1] Cf. William H. Lough, *Business Finance* (The Ronald Press Co., New York, 1920), p. 152.

city of New York, at the rate of six per cent per annum, on August 15 and February 15 in each year.

This debenture (bond) is one of a series of 47 debentures, all of the same date, 27 being in the principal sum of $1,000 each; 3 for the principal sum of $500 each; 13 for the principal sum of $100 each, and 4 for the principal sum of $50 each — a total of $30,000.

A Register of the debentures shall be kept at the Company's principal office containing the names and addresses of the registered holders and particulars of the debentures by them held, respectively. Every transfer of the debenture must be in writing, signed by the registered holder or his legal personal representative, and shall be delivered at the Company's principal office, and duly acknowledged, if required by the Company, and thereupon the transfer will be registered and a note of registration entered thereon.

IN WITNESS WHEREOF the Company has caused this instrument to be signed in its name and behalf by its President, and its corporate seal to be hereunto affixed and attested by its Secretary, this 11th day of August, 1911.

Attest _____ Company

_____ By _____

Secretary President

Although bonds may be sold by the borrowing corporation directly to anyone who has money to invest, a borrower often finds it easier to get an investment bank to sell them. Of course, the corporation pays the investment bank for this work, but this may be cheaper than to hire salesmen of its own.

The investment bank then sells the bonds, just as the corporation might have done. The diagram on page 133 shows the buyers. One investment bank has more than thirty thousand clients or customers who buy from it somewhat regularly.

Savings banks, trust companies, and insurance companies. — Although we must postpone until a more advanced course a careful study of savings banks, trust companies, and insurance companies, let us see just enough of them here to see why they buy bonds.

Savings banks, of which no doubt there are several in your town or city, will receive funds and pay a low rate of interest — say 3 per cent — for them. The savings bank uses the

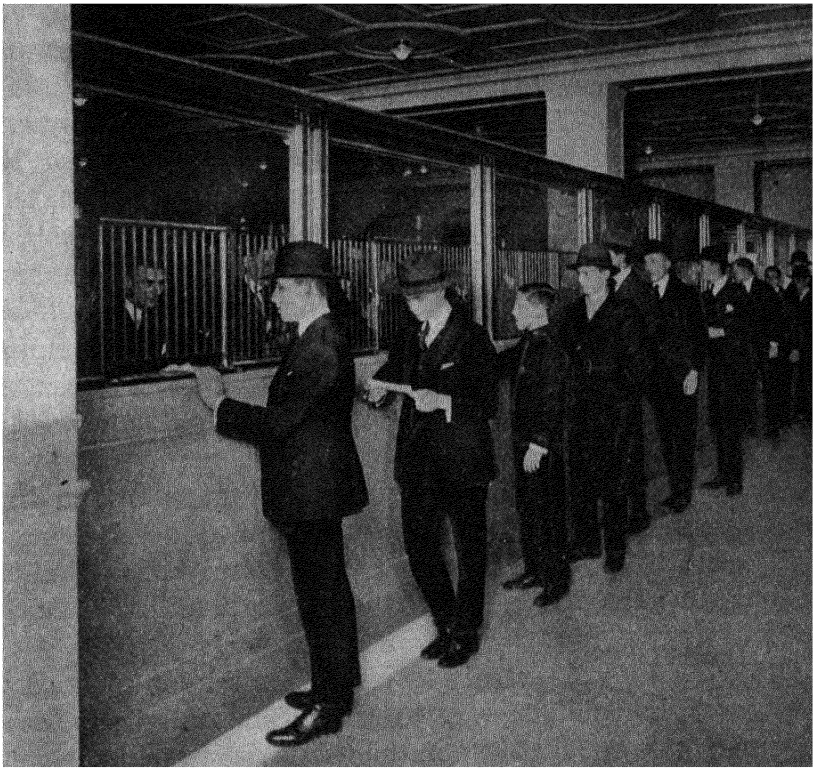


Photo by Brown Brothers

A Scene in a Savings Bank

The funds of these depositors may be loaned to business men for their use.

money to buy investments that pay a higher return. Thus it becomes a bond buyer.

Trust companies do many kinds of work. Among other things, they invest funds for others who do not wish the work of doing so for themselves. And they are often given the

work of taking care of money for children, women, hospitals, or schools. They buy bonds as investments for such funds.

An insurance company is a concern that for a certain sum of money paid to it promises to pay a much larger sum in the event of certain misfortunes. For example, for a few dollars a year a fire insurance company may guarantee to pay several thousand dollars if one's house burns. Or a life insurance company for a small sum paid each year will guarantee to pay a thousand dollars to one's heirs when he dies. Of course, such a company, from its collections, has large amounts to invest. This enables it to buy bonds.

Brokers are a great aid. — At any stage of selling the " promises to pay " by means of which they borrow, business houses may want agents to help them. One very helpful class of agents is called brokers. The business which a broker operates is commonly called a brokerage business or a brokerage house. Brokers are sometimes employed to sell the promissory notes of large businesses to commercial banks; again, an investment bank may ask them to sell bonds to individuals or businesses. Brokers are also sometimes useful in finding subscribers for stock when a corporation is being formed.

One of the most useful services of brokers is in finding buyers for shares of stock and for bonds which owners (persons who have bought them in the past) wish to sell. People would hesitate to buy shares of stock in a corporation or the bonds of corporations if it were not easy to sell them. Who, for example, would buy a bond which is not to be paid for a hundred years, if he thought he could not get the principal back without waiting for that length of time? Brokers keep in touch with persons who have money to invest and so can usually find a buyer for any security that has any value.

In many large cities, particularly New York, brokers have

formed a group or association which they call the *stock exchange.* The association in New York has built a fine building for its work. All of the exchanges have definite hours for trading. Each exchange permits only certain securities to be sold at its " meetings." Those that it has approved for sale are said to be " listed on the exchange." The fact that there are organized groups of brokers makes it much easier for corporations to sell shares of stock and bonds to any one of us. For we know that we can probably sell the security if we wish.

Banks help to decide what use shall be made of society's materials. — We must not leave this study of the ways business men secure money without understanding that sometimes they do not secure it. Commercial banks, of course, will not lend money to a business they think not likely to succeed. Honest investment banks will not sell investors stock and bonds of companies they think will fail. Refusal by banks limits the work of the organizer to the use of his own funds or those of persons whom he himself may interest. Banks are, thus, continually deciding what business men shall have money and what ones shall not. In so doing, they have a great deal to say about the kinds of goods business men shall try to make. On page 115 it was shown that the business man helped decide what kinds of want-gratifying goods should be made. We see now that the banks have much to say about the matter also.

QUESTIONS AND PROJECTS

1. List the tasks of a business man. Show why funds are needed for carrying on each of these tasks.
2. Who owns the building in which you live? Is this an example of private ownership? Give five other examples of private ownership.
3. Show clearly the relation between private property and the business man's need of funds.

4. Write a careful definition of slavery.

5. By the time Jennie Marsh had been graduated from high school, she had saved a hundred dollars. With this money she bought utensils and a supply of sugar, chocolate, and other ingredients and made home-made candy which she sold at a counter near the elevator in an office building. Describe three ways in which Jennie might have expanded her funds as her business grew. Give two other examples of small businesses that a man or woman might start with five hundred dollars or less.

6. A man in New York City was heard to say: "I have one million dollars, but I need at least twice that much to start the business I wish to enter." Give three examples of businesses that take such large funds.

7. A Chicago man recently said: "My business is successful and needs to be enlarged. I have plenty of money to enlarge it, but I think I shall take a partner who has funds instead. I do not like to put all my eggs in one basket." Explain this statement.

8. Refer to Chapter V and explain what is meant by the "increased size of business." Do you think partnerships and corporations have been more useful since many kinds of business have grown large?

9. Show, by an example other than those given, what is meant by leaving profits in the business.

10. Explain how the medieval goldsmith found that he could make money by being a commercial banker.

11. From what sources does a modern bank get its funds? Who decides how these funds shall be loaned?

12. Who borrows from commercial banks?

13. Give two examples showing circumstances under which some business man might wish to borrow. Give five examples of businesses that might wish to borrow money for a long period of time.

14. Explain where funds for investment are obtained by an insurance company; a savings bank; a trust company.

15. Suppose that a railroad company needs to borrow half a million dollars. Why might it ask the help of an investment bank instead of selling its bonds directly to investors?

16. John Smith has ten shares of United States Steel Corporation stock. He wishes to sell them, but does not know anyone who will buy them. What would you advise him to do?

17. Why are people more willing to buy bonds and shares of stock than they would be if there were no brokers and no stock exchange?

18. Look at the financial page of your daily paper and be ready to report to the class the price at which three different kinds of stock were sold yesterday or to-day.

19. Two men went into a bank one day. One wished to borrow ten thousand dollars to buy materials to use in his shoe factory. The other

wished to borrow ten thousand dollars to buy materials to use in his clothing factory. The banker loaned the money to the latter, but refused the former. List those persons who have something to say about the kinds of goods that shall be made.

20. Are there any courses in the high school of your town or city that are planned to help you learn more about business men's task of securing and using money? Have some member of the class secure information and report on this.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

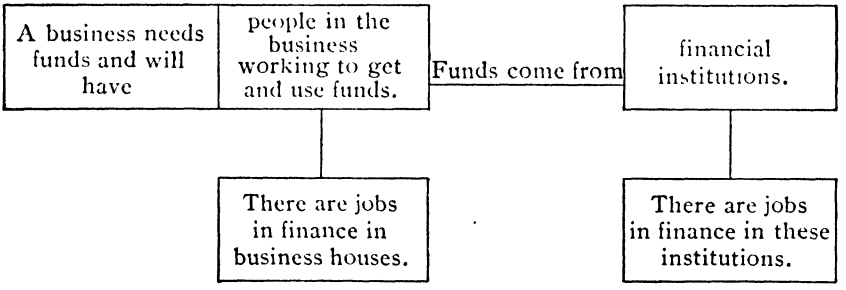
CHAPTER IX

JOBS IN FINANCE

In Chapter VI we saw that one of the tasks of a business man is to secure money. In the chapter that we have just read we saw that money is secured from various kinds of financial institutions. This should make it clear to us that there are two places in which a person may find jobs in financial work:

1. In any business, he may work to help secure and use funds.
2. In any financial institution.

This idea may be shown by a diagram:



JOBS IN FINANCE

FINANCIAL WORK IN ANY BUSINESS

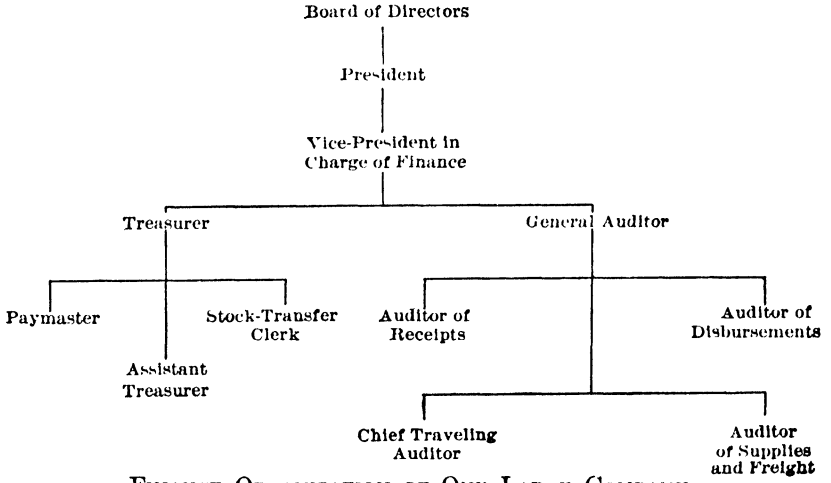
The kinds of work to be done in securing and using funds are very much the same, no matter what business one is in.

Such work as planning the financial needs of a company and deciding how best to secure needed funds is so important that it is often done by the head of the business himself. In

a small business this is almost always true. In a larger business, however, most of this work is placed in the hands of a *financial manager*. Usually such a person is called a treasurer, a comptroller, or a general auditor.

Besides planning for the financial needs of the company, such a man, or his assistant, is usually placed in charge of the payment of bills, the signing of checks, and similar work that goes on from day to day. Of course the latter type of work is much easier to turn over to assistants than the work of planning.

Better positions are the result of experience and worth. — The responsible positions in financial work are few in any



FINANCE ORGANIZATION OF ONE LARGE COMPANY

business, and one may expect to obtain them only after he has shown a real knowledge of the business and a real ability. To prepare for such positions nothing is more important than to know as much as possible about how businesses are run. It is as important to know all one can learn about buying, selling, and making goods as it is to learn about money

and accounting, for the financial manager is required to plan for and secure funds for use in all these activities. Equally important is a thorough knowledge of notes, bonds, and stocks and of the various kinds of financial institutions from which funds can be secured. The chart on page 141 shows how one large company divided the work of handling its financial matters. This business would not need so many officers for its financial work if it were not a very large one.

Many clerks may be needed. — In addition to the more important work of planning for financial needs and dealing with financial institutions, there are jobs in the financial department for a large number of clerks. Calculations must be made; records must be kept; information must be sent; various kinds of financial papers must be filled out and filed away. This work calls for clerks. But, since the work of a clerk in the financial department of a business is very similar to that in any other department, we may postpone our study of such duties to Chapter XVI.

Work in Financial Institutions

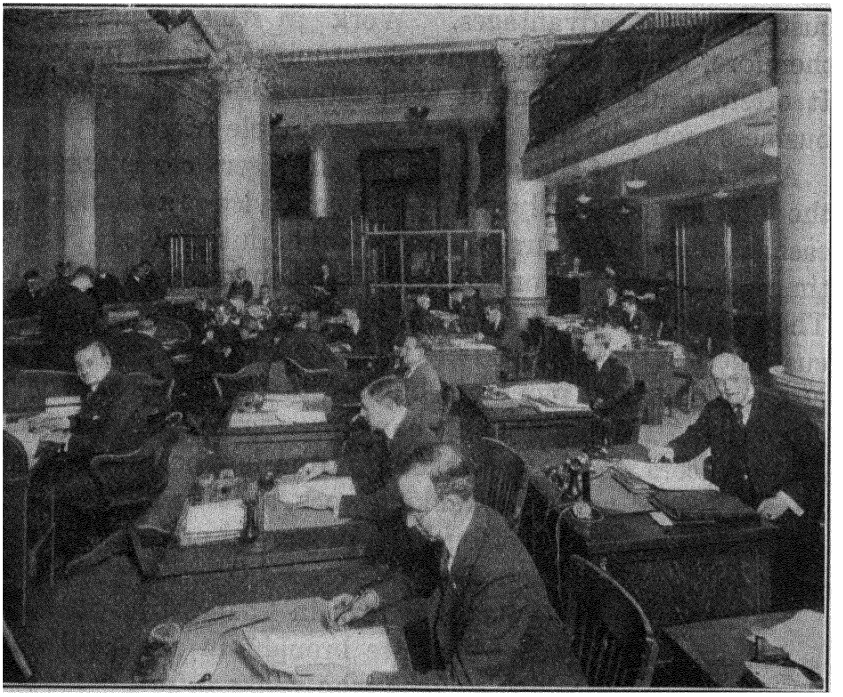
Selling jobs in a bank. — A business that furnishes funds is, at bottom, just like any other business, and in running it the same tasks must be performed. Therefore a financial business will offer many jobs much like those in a factory or a store. Every bank is anxious to attract new customers, to sell its services to more people. For this purpose many large banks have a department called the *new business* department, where men and women are kept busy doing nothing but selling the bank's services. They advertise and use all the selling methods spoken of in Chapter XIII. To work in the *new business department,* one does not need a great deal of special training. Given the ability to persuade others that it is to their advantage to patronize his

bank, one can acquire the particular knowledge necessary while on the job. Ability to make friends and inspire confidence is invaluable to anyone who sells a bank's services. In order to make the new business department most effective, the people in it are taught a great deal about the work of the bank so that they may tell their friends and prospective customers its advantages. Work in this department, therefore, offers an excellent opportunity to learn banking. It often results in contact with interesting and important business men who may later prove valuable friends.

A great deal of the selling of a bank's services is done by the officers, especially the president, vice-president, and cashier, though of course they have other duties also. Sometimes officers carry on their work when not in the bank. They make friends at clubs and elsewhere, who later become customers of the bank. It is not easy to become an officer of a bank without money to buy an interest in a bank or to start one. There are many bank presidents, cashiers, and other officers who have worked up from low positions, however. Proved ability in banking work, a wide acquaintance, and a good knowledge of business in general are usually prerequisites.

Handling funds. — Another task in financial institutions is handling the funds which are brought in and paid out. This is the work which anyone who walks into a bank can see carried on by the *receiving teller* and the *paying teller*. In a small bank one man may do all of this work. In a large bank a number of tellers are needed. These jobs are usually secured by persons who have been in the employ of the bank for some time in a clerical capacity. Such work requires skill in handling money and quickness in making notations, and can be given only to people in whose honesty the bank has complete confidence.

Clerical work. — Almost all the remaining work of a commercial bank may be listed under the head of clerical work. One writer goes so far as to say that " banking is a clerical industry." [1] Since it deals so largely with other people's money, great care must be taken to have an exact record of



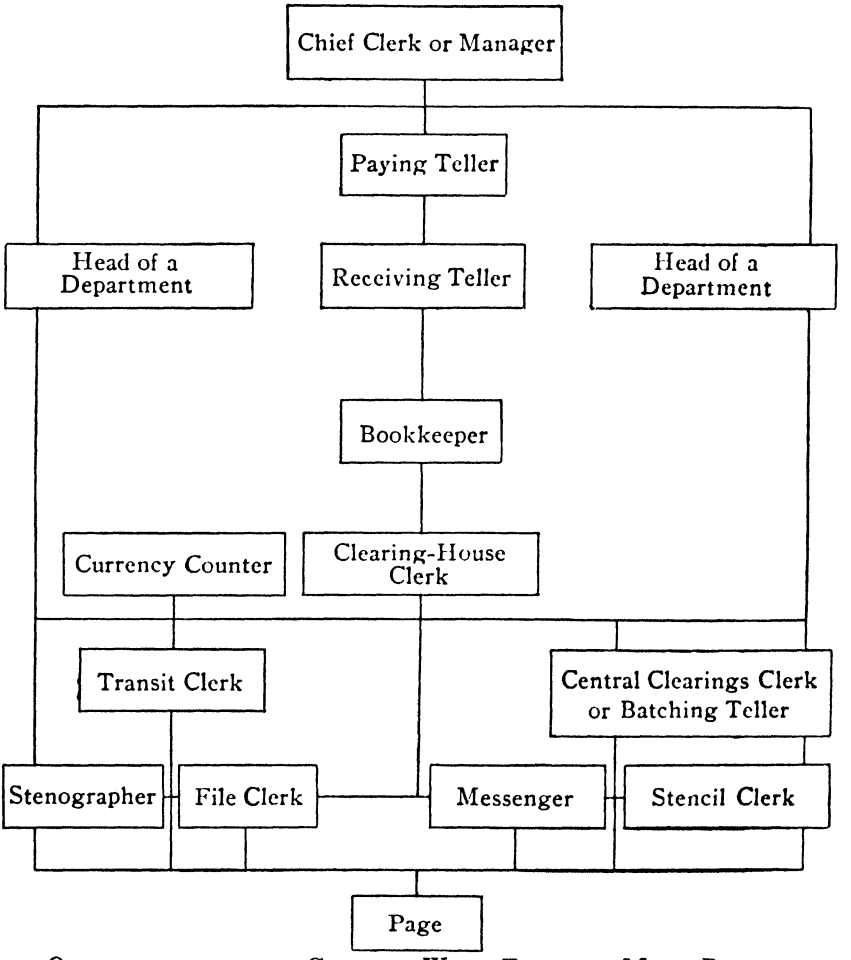
OFFICE WORK IN A BANK

Photo by Brown Brothers

every transaction. As a result, an army of clerks finds employment in a large bank. There is no use in trying to learn the names of all of these clerks or their duties at this time. The work given to them, except in smaller banks, is very specialized and differs from one bank to another. It

[1] W. H. Leffingwell, *Office Management* (A. W. Shaw Company), p. 14.

is worth while, however, to look at the chart which is shown here and which is fairly typical for many banks.[1]



ORGANIZATION OF THE CLERICAL WORK FOUND IN MANY BANKS

Other jobs in commercial banks. — There are some other tasks in a bank besides selling the bank's services, handling the funds, and keeping the records (we shall read more about

[1] *University of California Part-Time Education Series*, No. 5, Bulletin No. 4.

clerical work in a later chapter). There is, for example, a small amount of purchasing of equipment and supplies. But, excepting in the largest banks, this is a very small part of the bank's work. There is also the work of employing and training workers. This is an important duty, and in large banks there is sometimes a special person in charge of personnel. A discussion of what is involved in personnel work we must postpone until Chapter XVI. What we shall learn there can be applied to banks nearly as well as anywhere else.

Jobs in Investment Banks, Insurance Companies, and Brokerage Houses

Selling work with investment banks and insurance companies. — Investment banks and insurance companies offer fully as good a chance, in selling, as do commercial banks. Investment banks which, as we have seen (see page 132), furnish funds to business men, must sell securities to investors. Insurance companies (see page 134) obtain their funds by selling insurance contracts or policies. Both investment banks and insurance companies, therefore, employ a large number of salesmen and saleswomen. To sell for either, one must have a good knowledge of different kinds of investments and insurance policies. Of course, the company for which one works will do a great deal to give him this knowledge. Ability to work hard and to make friends is of great importance in selling investments and in selling insurance. People do not come to a salesman to buy these things, as they do to buy hats and shoes. Buyers must be convinced. Men and women who can persuade people to buy investments and insurance are well paid. Education that enables one to understand the various kinds of investments and insurance policies is one of the best ways to get ready for success in such work. The better companies in

these fields do a great deal to help promising employees to learn, but general education gives an advantage.

Buying work with investment banks and insurance companies. — If an investment bank is to have securities to sell, it must buy them. For this purpose it will need people who can select such securities with skill and judgment.

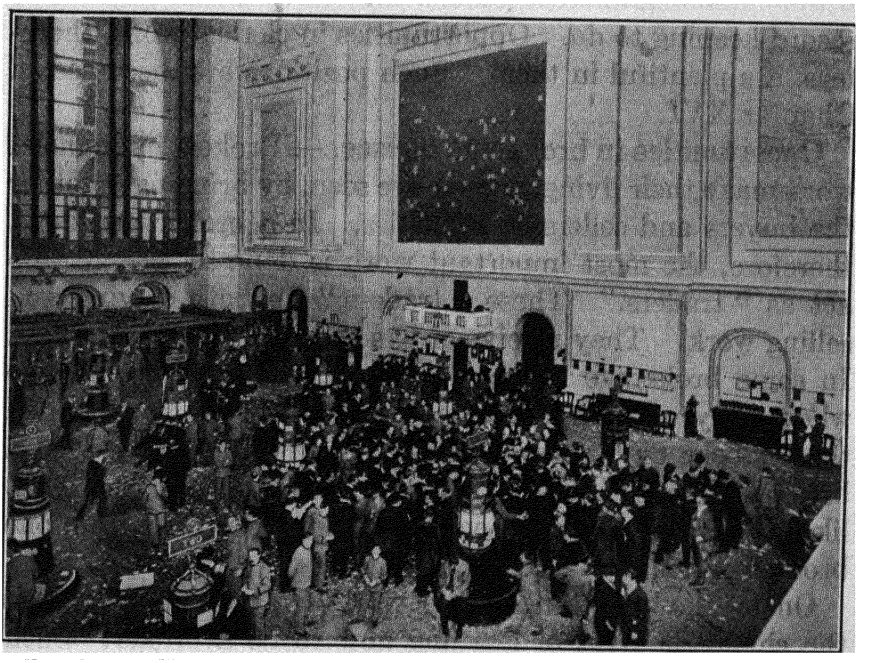


Photo by Brown Brothers

THE NEW YORK STOCK EXCHANGE

At each of the "posts" certain kinds of stocks are bought and sold. The exchange makes it easy for persons to invest money, or to secure money for investments.

Since insurance companies also buy stocks and bonds with their funds, they too must have men and women who can make a good choice of investments. Purchasing in such financial institutions furnishes an interesting occupation for people who can do the work successfully. A good general

education with as much study of all kinds of business and of financial matters as possible is the only basis for success in such work.

Other work in investment banks and insurance companies. — Aside from selling, buying, and a large amount of clerical work, investment banks and insurance companies offer very little. Like commercial banks, they have a vast amount of record keeping to do. Opportunities in clerical work, therefore, are plentiful in them. Such positions are discussed in Chapter XVI.

Opportunities in brokerage houses. — Brokers in financial work make their living, as we have seen, by bringing together the buyers and sellers of securities. In a brokerage house, therefore, the most important work is done by people who act as " traders." These " traders " do both buying and selling work. They receive orders to sell and orders to buy. In some brokerage houses they have lists of customers to whom they write or telephone regularly in an effort to sell them stocks or bonds. Most of the rest of the work in a brokerage house is clerical work — keeping records. This, like all clerical work, is specialized and varies little from one brokerage house to another.

One of the best things about work in a brokerage house is the chance it gives of learning how to be a broker. Such work seems very mysterious and difficult to many people, but it is, after all, reasonably simple. It is much easier to learn from " being in the business " than most businesses are nowadays. If one in such a business can secure a clientele, there are many opportunities for profit in buying and selling. Brokers also are often in a position to secure special information on the value of stocks and bonds. This information furnishes them an additional opportunity for making money. To succeed in such work a student should

take courses which will give him as much information as possible about financial matters and should then secure work of some sort in a brokerage house. It may be less important for the average broker to know a great deal about businesses

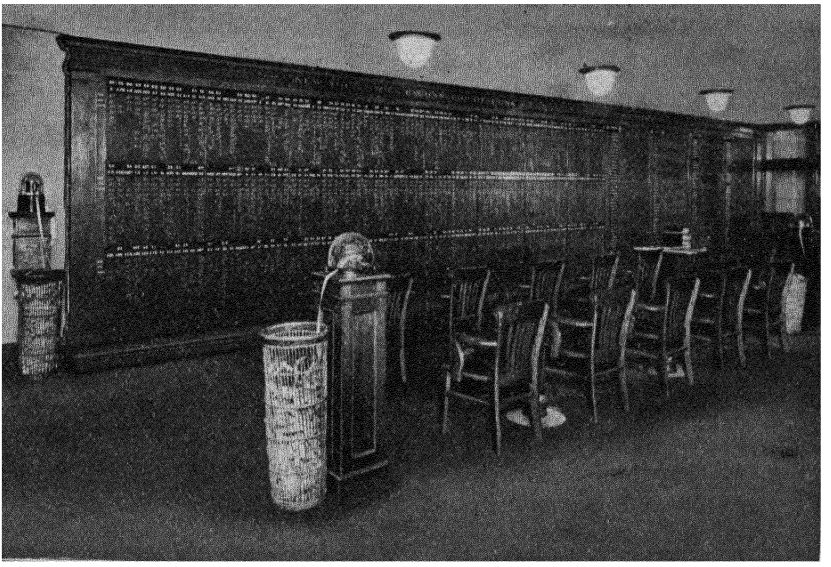


Photo by Brown Brothers

THE BOARD IN A BROKERAGE HOUSE

The little white ribbon running into the basket is the "tape" coming from the "ticker." The tickers are small printing machines operated by electricity from a central office. On the tape is printed the prices at which stocks are selling on the exchange. From the tape the prices are transferred to the board.

of various kinds than it is for the commercial banker or the investment banker, but it is important for him.

A Summary. — We may summarize this chapter in this way:

1. Opportunities to work in finance are either —
   - *a.* In some business, planning the needs for funds, making connections with financial institutions, and using funds; or
   - *b.* In a financial institution, aiding other businesses.

2. Most of the financial work in an ordinary business falls upon executives high up in the business, or upon special financial workers.

3. A financial institution has tasks, and therefore jobs, similar to those of any other business. It must buy, sell, finance itself, transport (securities, for example), and keep records. It has to do only a small amount of any of these, however, except keeping records, buying, and selling. This means that the real opportunities in the financial field are to be found in these three activities.

QUESTIONS AND PROJECTS

1. Why does any business need people to work at securing funds and using funds?

2. Explain why persons might be needed in financial work by a manufacturing business; by a department store; on a farm.

3. Why might such a person need to know about the different kinds of financial institutions?

4. Do you think such a person should know about promissory notes and different kinds of stocks and bonds? Why?

5. Should a person who plans the use of funds for his own business make a careful study of the amount of funds needed at different times of the year?

6. A store that sells shoes buys a large stock for fall selling and another for the spring. Would such a store need more funds in the fall and spring than in the summer and late winter?

7. Give two other examples of the way in which the amount of funds needed by some business might vary at different times of the year.

8. Why do banks need to have people selling their services? If a bank gets you to start a savings account, has it sold you something?

9. Whenever anyone borrows money from a bank, he pays interest. It is from this interest that the bank makes its profit. What does the bank sell in return for the interest payment?

10. Suppose you were a bank cashier and a business man wished to borrow five thousand dollars for three months. What should you wish to know about him and his business?

11. What does your answer to the above question show you about the kinds of things with which a bank cashier should be familiar? Does it

help you to see why the bank cashier should know something besides banking?

12. Show how friendship might help a man in securing a position in a bank.

13. Show how work in a "new business department" might help one to get acquainted with many business men.

14. Go into some bank near your home or school. Notice the men in the cages of the receiving and paying tellers. What kind of work do they seem to be doing?

15. Have one member of the class ask a teller what work he does and if he will give the student copies of the blanks he uses. Let this student report to the class.

16. If a trip to the bank can be arranged, try to count or estimate the number of people who seem to be doing clerical work. Compare this number with the number of tellers and the number of cashiers. Make out in advance a list of other things to look for.[1]

17. What things does it seem to you a commercial bank would need to buy?

18. If you know anyone who sells insurance, ask him to tell you of some of the different kinds of policies and their uses.

19. Ask somebody in your class to go to an insurance office and make a list of the different kinds of insurance that may be bought there and report to the class.

20. A life insurance company sells many different kinds of policies. One kind is called an endowment policy. If a person pays in a certain number of dollars each year for a certain number of years, say twenty, the insurance company will pay him $5,000. Suppose a man saves and buys bonds with $500 each year for ten years. Would you think of both the endowment policy and the bond-buying as investments?

21. Does the above question show you why a man who sells investments or insurance should know as much as possible about the various kinds of investments?

22. Explain as clearly as you can why investment banks must buy investments as well as sell them.

23. Explain why investment banks offer jobs in purchasing and in selling.

24. Are there any stock brokers in your town or city? If so, ask some member of your class to visit one and secure information from someone there concerning the kinds of work done and the jobs that are available.

[1] Bankers are usually glad to have such visits made if arranged for in advance.

25. Are there courses dealing with finance offered in your school? Does your school offer courses that you think would help you to do clerical work? What other courses are there in your school that you believe would be helpful preparation for jobs in finance?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER X

THE BUSINESS MAN'S TASK OF BUYING AND JOBS IN BUYING

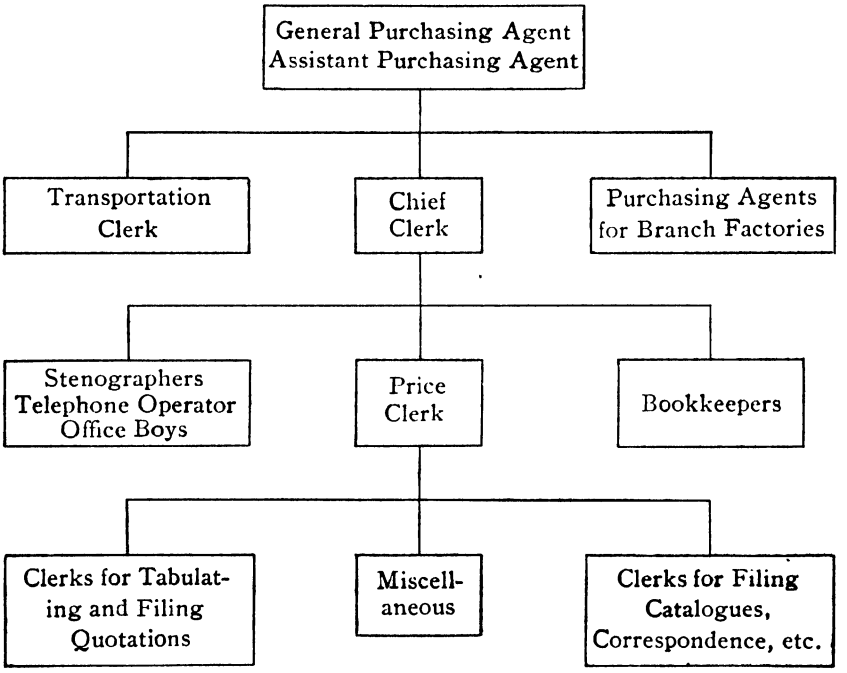
In Chapter VIII we saw that materials and goods are, for the most part, privately owned. We saw that, as a result of this, organizers must *buy* them if they would use or re-sell them. For this reason the task of buying is one of the main tasks in every business, although it is more important in some than in others. Let us look at an example that will show more clearly what the buying task is and how it differs from business to business.

What some types of businesses buy. — Anyone who has made a purchase at a grocery store can see why a storekeeper needs to buy goods. Unless a grocer has goods in his store to sell, he can make no sales. Without sales there are no profits; without profits a grocer cannot afford to stay in business. And so it is important that the grocer buy enough goods at the right times to have a supply when the customers call for them. This is as true of one kind of store as another. The smallest delicatessen and the largest department store have the task of buying.

A farmer, who is, of course, in business as much as a man running a store, must buy land or the use of land. He must purchase machinery, seed, fertilizer, and live stock. A man who publishes a newspaper must buy presses, ink, and paper. The man who operates a moving-picture theatre buys a building, or buys the use of one. He buys seats, a projector, a screen and the use of films.

If we live in a city, the coal man, the ice man, the butcher, and the grocer have, in almost every instance, bought the goods they sell us. If they manufacture the goods, they have bought the materials and equipment for making what they sell.

We could learn something of purchasing by studying how it is done in every kind of business. This procedure would



ORGANIZATION OF THE ASSISTANTS OF A PURCHASING AGENT

be confusing, however, and so the best way is to choose one industry as an example and study it. The manufacturing business furnishes an excellent example.

In small factories the owner may do all the buying, just as he may do all the selling and much of the other work himself; but in all large manufacturing plants the work

of buying is placed in the hands of a special person. This person is usually called the *purchasing agent.* In some of the largest businesses, there are purchasing agents for each of the divisions or departments of the business. The chart on opposite page shows how the helpers of a purchasing agent may be organized.[1]

The Work of a Purchasing Agent

Several kinds of work are included in the task of the purchasing agent. His duties may be listed as follows:

1. To know the needs of the factory
2. To collect and keep information about other businesses from which he can buy
3. To make purchases
4. To check goods received
5. To check the correctness of charges made [2]

In some factories he would also be given these additional duties:

6. To store the goods received
7. To supervise and organize the work of the people who assist him in all his tasks

Knowing the needs of the factory. — The man who does the buying of supplies for a factory must know what the factory needs. Since it usually takes some time for purchases to reach the factory, it is desirable that the purchasing agent shall know well in advance what will be needed. One way for the purchasing agent to get this information is to have those in charge of work in the factory (this part of the business is often called *the production department*) figure out requirements for a month, three months, six months, or a year in the future. If the purchasing agent has this infor-

[1] C. S. Rindsfoos, *Purchasing* (McGraw-Hill Book Company, 1915), p. 82.
[2] Charges are shown on papers called "invoices."

mation, it will not be hard for him to plan the buying. But how will the production department know how much material is needed? The amount needed will depend on what goods are to be made and the quantity of them. The amount of goods to be made will depend on the amount that can be sold. It is desirable, therefore, to have the men who are in charge of selling the goods do their best to determine how much will be sold for one month, six months, or a year in advance.

Specifications are helpful. — Suppose you were a purchasing agent, and a foreman in one department of the factory where wooden boxes were made sent in a statement to you that a hundred pounds of nails were needed. Should you know what to buy? What could you do until you knew the size and kinds of nails wanted (whether finishing nails, spikes, shingle nails, or what)? Or suppose that you, the purchasing agent, called by telephone three hardware dealers and asked each the price at which he would offer a hundred pounds of nails. Would you get very satisfactory results? Probably not, unless you could state or *specify* more exactly what you wanted. But suppose you said to the hardware dealers, "I want your best price on a hundred pounds of round, wire, eight-penny finishing nails." Stating these detailed facts about what you wanted would be called giving the *specifications*. Exact specifications are very important to the purchasing agent. If he gets or gives the wrong specifications, he may order a large amount of useless materials. Definite written specifications save much work. A buyer may dispense with even looking at goods before he buys them. Giving the specifications, he can say to a seller, "*This* is what I want." The seller thus knows what is desired just as well as though the buyer said, "I will take those in that large box in the corner."

Information about sources is needed. — If the work of the purchasing agent is to be carried on easily and quickly, he must have several kinds of information about the sources from which he can buy. The purchasing agent for an automobile factory, for example, needs to know the different sources from which rubber, leather, aluminum, steel, wood, and ready-made parts can be obtained. A purchasing agent for a flour mill should know the markets in which grain can be bought. The buyers for a department store or a large mail-order house (either of which may handle thousands of types of goods) need to be familiar with more different sources of merchandise than we could list on several pages. A year of study dealing with markets and marketing does not give a bit more information than a purchasing agent can use to advantage.

For keeping a record of information about particular companies, purchasing agents make use of several records. For instance, they keep a list of the manufacturers or dealers who can supply desired articles. A convenient way to keep such a list is to have a card for each concern. On each card should be the name of the company, the location of the plant, the name of the officer of the company who receives orders, the cost of shipping goods from this company's place of business, the size of orders which the manufacturer can supply promptly, the time taken in shipment, the promptness and honesty of the company, and satisfaction given by the goods in the past.

Catalogues give information. — Most manufacturers or merchants who sell to factories publish pamphlets or books in which they list and describe the various articles they sell and the prices at which the articles can be bought. Many purchasing agents have hundreds and even thousands of catalogues filed in cases in their offices.

NAME OF MAN'F'R	Tip Top Hardware Company	SHELF	NO.
ADDRESS	915 Lincoln Way, Buffalo, N. Y.	A	50

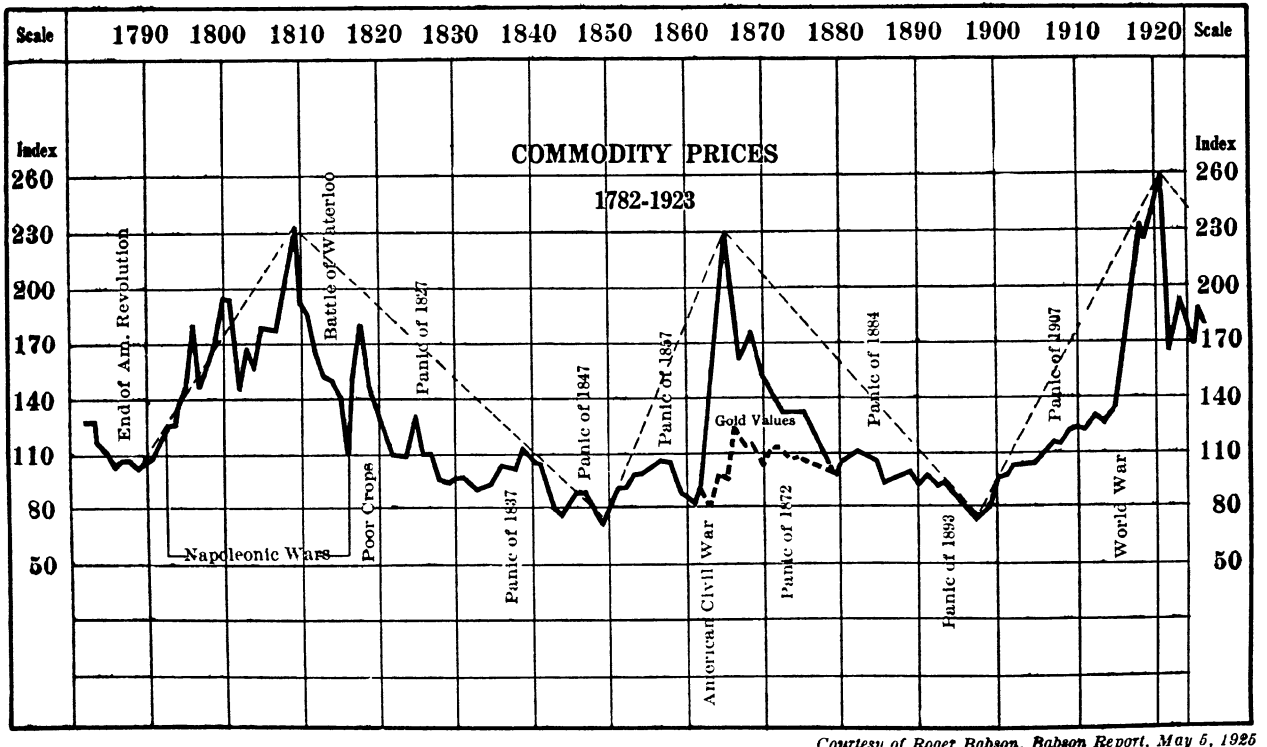
List of Material Manufactured

Hinges
Door Knobs
Brackets
Screws
Small Bolts

CARD FOR INDEXING CATALOGUES UNDER NAME OF MANUFACTURER

These cards are arranged alphabetically in a small box or file. By looking at this card the purchasing agent sees that the hardware company's catalogue is on shelf *A* and is number 50 in the catalogue case.

The buyer must buy well. — Knowing what is needed and knowing where to get it are the beginnings of the purchasing agent's work. But he must know also how to make purchases well. To do this, he must be careful of several matters. He should know enough about agreements and contracts to be sure that he is acting in a legal way in making the arrangements with sellers. When he buys goods, he wants to be sure that they will be delivered at the price and time agreed upon and, of course, he cannot compel delivery by law unless the agreement has been properly made.



Courtesy of Roger Babson, Babson Report, May 5, 1925

THE UP AND DOWN OF PRICES.

Every point in such a line as this is made by averaging together the prices of a number of important commodities. This is called an index.

Some knowledge of business law is, therefore, valuable to the purchasing agent. It is important, also, to buy in the right amounts. If too many supplies are bought, there may be loss from goods' spoiling, going out of date, or not being used. And there is cost of storage: Space is valuable, and money invested in needless materials earns no profit. The aim of the good purchasing agent is to keep his stock of supplies *as small as possible*, but at the same time to have on hand *as much as is needed.*

One of the hardest tasks of the purchasing agent is to buy at the right times. Prices of goods have their ups and downs. They swing through what is called a cycle. Men who buy goods can make or lose money by buying at the right or the wrong time. Many large and important business houses went into bankruptcy in 1920 and 1921 and many others lost money because they had bought large supplies of goods during the high prices of 1919. There are no facts more important to buyers than those that deal with the up-swing and the down-swing of prices.

Checking the goods received. — One important part of the purchasing agent's work is to see that all the goods are of the kind and amount ordered. Usually the charge, or bill, or *invoice*, as it is called, is mailed at about the time the goods are shipped. Someone must see that this bill or invoice is correct. Such work as this the purchasing agent generally turns over to his clerks. (See Chapter XVI.)

Storing goods. — When goods have been received in a factory or store, they must be cared for until they are used or sold; they must be so kept that they will not spoil or be stolen and so that they will be convenient. The cupboard and ice box of your own home and the shelves and bins of a corner grocery store are all means of storing goods. Factories also have shelves and bins, cupboards, drawers, racks,

and boxes in which goods can be placed while they are waiting for use.

Goods to be stored usually come in large lots; they are taken out in small lots to be used or sold. The man in charge of supplies (often called the storekeeper) may not notice that all of the supply has been used until it is completely gone; or if not careful, he may order an additional

BIN TICKET

Bin No. 9

Location Storehouse No. 1

Material Cement

Send this ticket to storekeeper when only

10 remain in bin, and replace it with temporary ticket.

Date	In	Received by	Out	Balance
Jan. 10	50			50
Jan. 11		J. Smith	3	47
Jan. 12		A. Brown	2	45

quantity before it is needed. He needs to keep track of the amount of goods on hand at any one time; he needs an *inventory record.* Of course, he could count the items in each shelf and bin every day; but this would consume much time, and so better ways have been worked out. *Running inventory records* have been devised. It is not hard to see how a running inventory record is kept. Suppose that on Monday morning 50 bags of cement were put in a certain

bin. Tuesday 3 were used. At night there were 47 left. Wednesday 2 were used. Clearly, that night there were 45 left. The running inventory record tacked to this cement bin would look like the one on page 161.

A glance at this ticket will show at any time just how much cement is left. Of course, it is not necessary for the purchasing agent to walk around and look at each bin and shelf each night. He can have an account book or a sheet of paper on which each kind of goods is listed. Some clerk can put on this sheet the balances which show on these tickets. Thus the buyer can tell at a glance just what stock of goods is getting low.

The purchasing agent may supervise and organize. — The purchaser generally has a number of assistants and clerks to help him, for many records and accounts must be kept. We shall study record-keeping further in Chapter XVI. We shall have something to say of accountants in Chapter XVIII.

Jobs in Buying

We can get a good idea about jobs in purchasing, the opportunities to be found in them, and the way to work toward such positions, by looking at the matter under three heads:

1. Purchasing in businesses using quantities of raw material and equipment. Examples are factories; railroads; mines; and street-car, gas, and electric light companies.

2. Purchasing goods for merchants. The most important examples from the standpoint of jobs are department stores, mail-order houses, and chain stores.

3. Special types of purchasing work, such as the work of the professional and comparison shopper and the resident buyer.

Jobs in Purchasing for Businesses Using Quantities of Raw Material and Equipment

An idea of factory purchasing was given in the preceding chapter. Almost everything that we learned there about purchasing can be applied to railroads; mines; gas, electric, and street-car companies; in fact, to all companies that use raw material, tools, and machinery.

All these businesses together offer many good purchasing jobs. There are nearly 300,000 factories in the United States; there are over 251,000 miles of steam railroads in the United States. Although not every factory has a special buyer and although jobs do not vary with miles of road, yet from these figures we can realize the amount of buying of raw materials and equipment and sense somewhat the number of people that must be employed in the work.

Preparation for purchasing raw materials and equipment. — We have seen that the buyer for a factory should have a knowledge of raw materials. The same fact holds true for one who buys for a railroad, for a telephone company, or for any user of materials or equipment. This is why some men prepare for such work by taking courses in mechanics, chemistry, physics, and other sciences that will help them plan tests for determining the ability of materials to withstand heat, pressure, and other strains. Since science plays so large a part in producing materials, a knowledge of it helps in understanding materials. Further, if experts are employed to determine just what materials are best suited for use, they will report their findings in technical language; and unless the purchaser has a "speaking acquaintance" with this language he will be unable to understand and be guided by it in purchasing.

Running machines in a factory and working in the store-

room in a clerical job where one learns of materials are roads that may lead toward purchasing. One trouble with working at such tasks as a method of becoming a buyer, however, is that the ordinary worker has little chance to learn beyond his own job. Such a worker therefore will do well to take courses in evening schools to supplement the work he has had. Courses in applied physics and chemistry and in marketing and purchasing will help him.

If one is interested in learning to buy for *some particular factory* or other business, it may be helpful to ask advice of a successful member of the purchasing department. Ordinarily people who have been successful themselves are willing and anxious to help others who are really trying to make good.

Purchasing Goods for Merchants

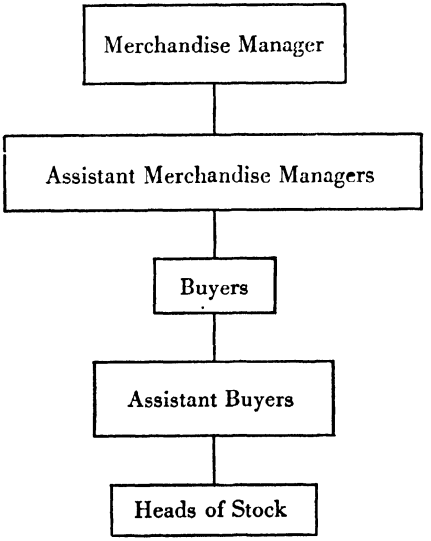
Anyone who keeps a store may be thought of as a merchant. Every storekeeper has his task of buying, whether he runs a grocery, a drygoods store, or a meat market. But in small stores the buying is usually done by the owner. It is the larger types of stores, such as the department stores, mail-order houses, and chain stores, that offer opportunities for specialized buyers. These opportunities are the outgrowth of the increase in size of operations which we read about for the first time in Chapter V.

Buyers for department stores. — A department store is a retail establishment that sells a great variety of goods. Marshall Field's in Chicago, Macy's in New York, Scruggs-Vandervoort-Barney's in St. Louis, and Wanamaker's in Philadelphia are examples. They usually are patronized by women and endeavor to carry all the goods most commonly shopped for by them. Goods are not all thrown together when displayed, however, but are shown in different departments, such as the

furniture department, the jewelry department, and the dress goods department. In large establishments each department is treated as a separate store and has its buyer, who is responsible for the success of the department. The department store, therefore, offers many jobs in buying. It is a field where women as well as men have been successful.

Department store buying is usually organized with the following persons in charge:

1. Merchandise manager
2. Assistant or group merchandise managers
3. Buyers
4. Assistant buyers
5. Heads of stock [1]



USUAL ORGANIZATION OF BUYERS IN DEPARTMENT STORES

The merchandise manager. — At the head of buying for all the departments is the merchandise manager. He must

[1] Cf. Hahn and White, *Merchants' Manual* (McGraw-Hill Book Company, Inc.), p. 146.

be a capable man and he should know a great deal about the most important lines of merchandise carried in the store. He is held responsible for all goods bought and put in stock. His general duties are four:

1. To control the buying so that it will conform with the general rules and policies of the store as a whole.

2. To know the amount of merchandise that the store can afford to carry in each particular line.

3. To know what class of merchandise each department should carry to harmonize with the other departments.

4. To know the general trend of market prices and the conditions controlling the buying of merchandise and its re-sale to the public.

In short, the merchandise manager needs a wider view of market conditions than department buyers. He acts as advisor to them before they leave for buying-trips.[1] The position of merchandise manager frequently leads to membership in the firm.

The assistant merchandise manager. — In large organizations, the merchandise manager has one or more assistants, each of whom oversees some group of related departments, such as women's apparel, or children's furnishings. Their work is important and is excellent training for the position of merchandise manager, for they really have an opportunity to learn his work. One woman who is an assistant merchandise manager says: "My principal work is watching the figures of the departments, keeping down expenses, watching advertising, and being present when nearly all merchandise is bought, especially style pieces." [2]

Most people to be found in merchandising to-day have not

[1] *Merchants' Manual*, p. 336.

[2] *Studies in Occupations*, No. 5 (Bureau of Vocational Information, New York, 1921), pp. 17 and 19.

received any training other than that acquired by experience, and many of them feel that further education is unnecessary. As one woman in this work said: "A college education is no drawback (if you don't talk about it), and it has many indirect and personal advantages, but a college woman cannot expect to find much direct use for her university knowledge nor any appreciable short cut through the years of experience which are necessary." [1] Among positions from which assistant merchandise managers have advanced are positions as buyers, advertising-copy writers, and style experts.

The buyer. — A department store buyer is usually given complete charge of one department or of several closely related departments. He is responsible solely to the merchandise manager. His most important duties are:

1. To select the stock of goods. This involves interviewing salesmen who come to the store and also travelling to the sources of supplies. Some western department store buyers make several trips to Chicago and New York each year. Many buyers for important departments of large stores go to Europe every six months or year to purchase.
2. To price the goods so that they will be attractive to the patrons of the store.
3. To prepare or direct newspaper advertising, stock layout, and window displays.
4. To teach the salespeople the selling points of the goods and how to show them to best advantage.
5. To promote coöperation and good will among the salespeople of his department.

Although some buyers have had experience in purchasing before they are employed by a department store, a great

[1] *Studies in Occupations*, No. 5 (Bureau of Vocational Information, New York, 1921), pp. 17 and 19.

many of them are chosen from the ranks of salespeople. A buyer's success is judged by the profits made in his department. Unless he makes his goods pay well, he cannot expect to retain his position. Moreover, the buyer's salary often depends upon the profits of the department. Although some stores believe the buyer's salary should be a fixed

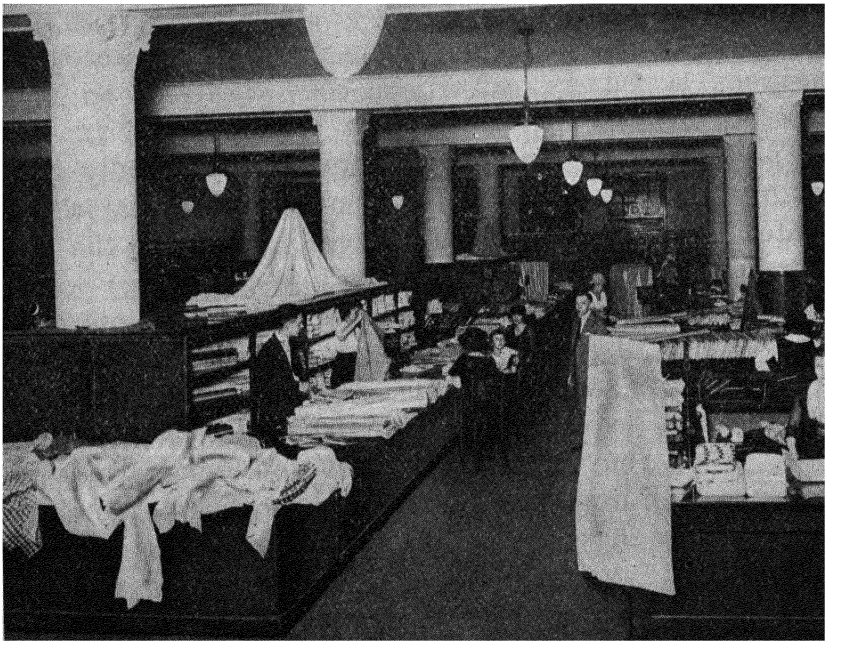


Photo by Brown Brothers

A Section of a Large Department Store

A buyer for such a department may be responsible for a large variety of goods.

amount, say five thousand dollars yearly, regardless of the profits of the department, the more common custom is to make the buyer's salary proportional to the profits of his department.[1] Successful buyers command excellent salaries.

[1] Cf. *Merchants' Manual*, p. 353.

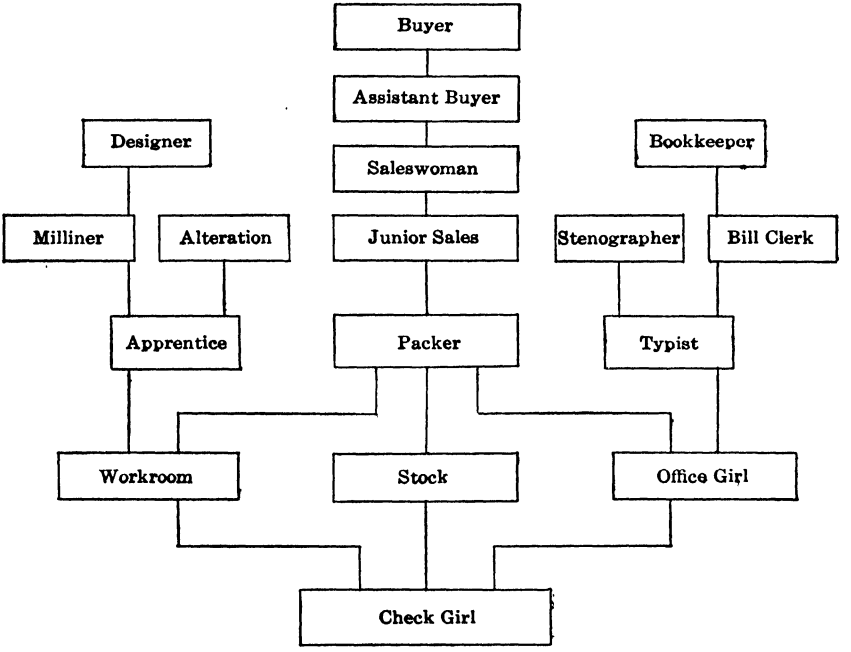
Five, ten, and fifteen thousand a year are not uncommon, and twenty-five thousand dollars yearly is not extraordinary. Some buyers receive even more.

The assistant buyer. — Each buyer has an assistant buyer to help in the work and to take his place in case of absence. (It will be remembered that some department store buyers make frequent trips to Europe and to the trade centers of the country.) The assistant buyer keeps in touch with the supply and condition of merchandise on hand and relieves the buyer of much detail work. Assistant buyers receive from fifteen hundred dollars to five thousand dollars a year.

The head of stock. — The head of stock of each department is usually promoted from the rank of salesperson. He or she looks after all merchandise after it has been bought. He or she works directly under the assistant buyer for the department and sees that all the routine of selling the goods is well carried out.

Qualities needed in department store buying and lines of promotion. — Department store buying offers an excellent opportunity for both men and women. A study made in the East shows that there are nearly as many women as men in this work. Women, for example, are buyers of blouses, coats and skirts, suits and costumes, negligees and house dresses, misses' and children's garments, infants' wear, millinery, books, neckwear, art goods, lingerie, hosiery, corsets, gloves, notions, toilet goods, underwear, boys' clothing, handkerchiefs, jewelry, pictures, silverware, stationery, and paints. The road to good buying jobs seems to have been about the same in most stores. From head of stock to assistant buyer and thus on up is the ordinary way. There are a number of cases where people have changed successfully from other work in a department store to the work of buying. Some buyers have previously been advertising-

copy writers, clerks, shoppers, or welfare workers. Many merchants say that the more education one has the better, but that education alone will not bring success in this work. This is because the buyer must have experience with the work of the store and the kinds of goods that people will buy. In nearly every store, buyers succeed best who have persistence, good judgment, and ability to get along with people.



PROMOTION CHART IN ONE STORE

Although not all positions are shown here, you will find the chief paths of promotion by following the lines upward.

One woman who has succeeded well in this work says that a woman entering it "must know all classes of purchasers, because she must supervise the buying of articles to be sold to the poor as well as to the rich. I myself lacked this, and I took a position in a cheap store in Providence, Rhode

Island, which catered to the trade of the industrial workers. We used to have infants' garments which sold for nine cents each and which I bought, literally, *by the ton!* I needed that experience to round out my knowledge of the buying public."

One student of department store buying shows the above line of promotion from smaller jobs to that of buyer.[1]

Buyers for mail-order houses. — A mail-order house is a retail establishment that depends entirely upon orders received through the mail to sell its goods. A catalogue is prepared each year and mailed to old customers and prospective customers. Sears, Roebuck and Company, Montgomery Ward and Company, and the National Cloak and Suit Company are examples of large mail-order houses. Anyone who has seen a mail-order house catalogue knows the variety of goods bought and sold by these stores.

Like the work of department stores, the work of the mail-order house is divided among departments; and every department has its buyer, who must know thoroughly the classes of goods carried in his department. He must be as familiar with all phases of purchasing as is the factory buyer. He must reason surely, bargain shrewdly, and be quick and clear in judgment.

Buyers for large mail-order houses have but few restrictions placed upon them. For the most part they may buy what, when, and how they wish. Each one is considered a specialist. However, his department must show a good profit at the end of the season; failing to do so the buyer may be dropped. Changes in department buyers are not at all unusual, and the executives of large mail-order concerns are always scouring the country for able buyers.[2]

[1] *Bulletin No. 22*, Federal Board for Vocational Education (Washington, D. C., 1919), p. 19.

[2] Cf. P. H. Nystrom, *The Economics of Retailing* (Ronald Press Company, 1915), pp. 248–49.

Buyers as a rule are experienced men before they are employed by the mail-order house. For instance, a successful buyer for some tea and coffee jobber might be approached and offered a position at a better salary to buy tea and coffee for a mail-order house. A successful mail-order buyer receives from twenty-five hundred dollars to twenty-five thousand dollars yearly, and sometimes much more.

Buyers for chain stores. — In Chapter V, we spoke of the Great Atlantic and Pacific Tea Company and its chain of more than ten thousand stores. This is only an example of many such store systems. Others are the United Cigar Stores, the Woolworth Five and Ten Cent Stores, the Piggly-Wiggly Stores, and the Owl Drug Stores. It is hard to believe that the buying for all the stores of a great chain like the Woolworth Five and Ten Cent Stores or the Owl Drug Stores is directed by one man. And yet this is often true. One man is made responsible and directs the work of all who buy. This man is known as the purchasing agent. He has assistant buyers to help him. Very often buyers are stationed at distant points, such as London and Paris. Chain stores that sell clothing are very likely to have buyers who stay in New York and Chicago, the centers of the garment trade.

Buyers for chain stores, as for mail-order houses, may be promoted from within the business or may be picked from men and women who have succeeded with other companies.

Special Types of Purchasing Work

There are a number of opportunities in buying that are somewhat specialized but that are worthy of study. Interesting and profitable opportunities exist in the positions of buyers for institutions, resident buyers, professional shoppers, and comparison shoppers.

Buyers for institutions. — Hospitals, hotels, and homes for the aged and poor all buy supplies in large quantities and usually find it profitable to employ a person skilled in buying. This is an ever widening field of opportunity for women, especially women trained in food values and household management.

The government and its many institutions offer a great many positions in buying, but government positions will be spoken of later. (See Chapter XXV.)

Resident buyers. — A resident buyer is a man or woman who has an office in one of the larger cities, here or abroad, and is in the business of buying for owners of small department stores and other merchants who do not have buyers of their own. A resident buyer usually buys for several stores. He not only can keep in close touch with prices better than his clients can, but he can save money for them by buying in large quantities. Some dealers pay such brokers specified salaries every month, while others pay them a certain per cent of the amount purchased. Sometimes individual retailers employ resident buyers who buy only for them.

The professional shopper. — Some magazines, such as *Good Housekeeping*, conduct shopping departments. That is, they devote a portion of each issue to attractive descriptions of miscellaneous articles likely to be in demand for gifts, bridge prizes, or household or personal adornment. The price is named, and readers are instructed that if they will write to the magazine shopping service, the desired articles will be purchased for them. A professional shopper employed by the magazine does the buying.

Many large department stores employ professional shoppers who personally select goods ordered through the mail or by telephone by customers of the store. Good taste and

a thorough knowledge of the goods carried by the store are essential for the successful shopper.

There are also professional shoppers who are not connected with any department store, but who make it a business to shop for out-of-town customers. These shoppers usually

A SHOPPER OF EXPERIENCE personally shops for or with you at leading N. Y. shops gratis. Chaperoning. Magazine sent free. Tel. Kingsbridge 1137. Katharine W. Sergison, 3819 Orloff Ave., New York

ADVERTISEMENT OF PROFESSIONAL BUYER

In the larger cities there are many persons who shop professionally for others.

charge a certain per cent for buying. For instance, if they bought twenty-five dollars' worth of material, they might charge their customer, say 5 per cent, or $1.25 commission. Very often responsible designers and dress-makers undertake to shop for materials for their customers.

HOW TO ORDER

Write to Homemaking Shopping Service, 900 West 50th Street, New York City, sending them a complete description of the article desired, together with a check or money-order

THE WAY ONE MAGAZINE CONDUCTS ITS SHOPPING SERVICE

Comparison shoppers. — Department stores employ a peculiar type of buyer called a comparison shopper. Her duty is not actual buying; it is going from store to store in the city inquiring prices and collecting samples to see if com-

petitors are offering better values than her own store. She also " shops " at the different departments within her own store to see if the salespeople are doing their work well. The identity of the shopper must not become known or her usefulness would be at an end. As a rule these positions have been held by mature women who have had a good deal of experience in buying in department stores.

QUESTIONS AND PROJECTS

1. What are twenty kinds of goods that a groceryman must purchase?
2. What is one important factory in your town? What are three kinds of material that this factory must buy?
3. What are the important things that a farmer must buy to carry on his work?
4. Define the term "purchasing agent."
5. Explain why the fact that things are privately owned leads to the task of buying.
6. Look through the list of duties of the purchasing agent and be ready to explain why each duty is important.
7. Look at the chart near the beginning of this chapter. Explain why each kind of work given would help in carrying on the work of the purchasing agent.
8. Are there any times of the year when a grocer sells goods more rapidly than at other times? Must the man who buys for a large grocery store keep this fact in mind?
9. Explain why a shoe store or a clothing store needs different amounts of stock at different times of the year. Why do stores have clearance sales to lower stocks of goods?
10. Explain with illustrations the meaning of "specifications."
11. Suppose you wish to have a friend buy a copy of a certain book for you. Write specifications that would make certain he would get exactly the right book if he went to a book store.
12. What are three different sources in your town from which you might be able to buy a pair of shoes; a hat; a pound of meat? Do you think some of these sources are better for your purposes than others? Why?
13. Have some member of your class find out the chief sources from which one factory in your town buys some of its materials.
14. Have some member of your class do the same for a store in your town.

15. On a sheet of paper draw lines to represent a card 3″ × 5″. Make this card into a form which could be used for keeping the names of concerns from which a store might buy canned corn.

16. Explain why most manufacturers publish catalogues. Find out if there is any member of your class who can bring to class a manufacturer's or wholesaler's catalogue.

17. When groceries come into your home, does anyone check over the bill to see that the prices charged and the goods delivered are correct? Show how a factory or store in buying has the same task. Why can this work of checking be turned over to a clerk?

18. Look in a grocery store and notice how several kinds of goods are stored. Do the same in a clothing store or a shoe store. Do the same for some of your school supplies. Would an inventory record be useful in the last case? If so, prepare one that might be used.

19. Make a list of the ways in which the purchasing agent of a large factory might make use of helpers.

20. Look at the tasks of the purchasing agent given at the beginning of this chapter. Explain why these tasks would be required of the purchasing agent of a railroad, a mine, or a street railway company.

21. What are some of the goods that a railroad would need to purchase in great quantities? A steel manufacturing plant?

22. If you do not know the meanings of the terms "mechanics," "chemistry," and "physics," look them up in the dictionary. Show how a study of these subjects might be useful to the purchasing agent of a factory or a railroad.

23. Suppose you were working as a clerk in a purchasing agent's office, counting the goods received. What are some of the things you would learn that would be useful if you wished to become a purchasing agent? What are some of the things needed by a purchasing agent that you would not learn by this method?

24. The purchasing agent deals with the market. What does this suggest about knowledge needed for purchasing?

25. Do you know any small stores where all the buying is done by the owner? Are there any stores in your town or city where you think the buying is not all done by the owner?

26. Are there any department stores in your town? Any chain stores? Do you know of any mail-order houses? Name those of which you know.

27. In the old days when trading posts were established for trading with the Indians, was a special purchasing agent needed? Do you think a special purchasing agent was needed by the medieval craftsman who made shoes or hats or bread?

28. Have you ever been in the general store of a small town? Does

the man who runs such a store need to hire special buyers? Why, or why not?

29. Do you think the need for specialized buying has come as a result of the increased size of operations that we learned about in Chapter V? Would you say that the work in a department store is more specialized than in an Indian trading post or in a chain store? Give reasons for your answers.

30. What are the features of the work of a merchandise manager that seem to you attractive or unattractive? What experience or training should such a man or woman have?

31. What do you see attractive or unattractive about the work of a department store buyer? What experience and training should such a person have?

32. Explain why department stores so often find women buyers useful.

33. What does one learn while working in a store as salesman that might help him to become a buyer?

34. Show the steps by which one might advance from some lower job in a department store to the job of buyer.

35. Compare the work of a buyer in a mail-order house with the work of a buyer in a department store.

36. Why are buyers for department stores often taken from among the buyers in other kinds of business?

37. Make a list of the more important institutions in your city, aside from stores and factories, that buy large quantities of supplies. Begin the list with the name of your own school.

38. Explain why a resident buyer may be valuable to certain merchants.

39. What does a professional shopper do?

40. Look through some women's magazines and bring to class an illustration of the work done by a professional shopper for some magazine.

41. If there are department stores in your city, find out about the work of the professional shopper in one of them.

42. Why do department stores need comparison shoppers?

43. Do you think it is true that the general knowledge needed by all kinds of buyers is similar? If so, make a list of what a buyer should know. Make a second list showing the kinds of experience and the kinds of study that would be helpful. Make a third list showing any courses in the high school of your town or city that you think would help give the needed knowledge.

44. Have some member of your class bring from the library the names of three books dealing with purchasing; two or three dealing with marketing.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER XI

THE BUSINESS MAN'S TASK OF PRODUCING GOODS

In this chapter we shall think of producing goods as that work which takes materials and makes them over so that they are more nearly in the form in which people use them. Production is one important task of the business man.

Producing goods is more important in some businesses than in others. — In Chapter VI and in the chapters following, we saw the several large tasks of every business. But we saw also that in certain businesses some of these tasks are much more important than in others. A farmer, for example, has a task of purchasing; but purchasing is a far smaller task in his business than it is in the business of a manufacturer or a merchant. So, too, with financing. The small storekeeper does not find this as important a problem as the owner of the great department store does, or the owner or directors of a large factory.

And so it is with the task of *producing*, as we are using the term in this chapter. The merchant, though he may grind coffee or cut meat or cheese into the form we wish, does little producing. Although other tasks are important in a bank, it would be difficult to give good examples of production there. But in some lines of business, the time and attention given to production greatly exceed the time and attention required for any other task of the business.

In what industries is production of great importance? — The types of business in which production takes a very prominent place are the following:

1. Farming, which has such divisions as
   - Grain farming
   - Fruit culture
   - Stock farming
   - Mixed farming, etc.
2. Lumbering [1]
3. Fishing, which has such divisions as
   - The salmon industry
   - The cod industry
   - The oyster industry
4. Mining, which has such divisions as
   - Coal mining
   - Iron mining
   - Copper mining, etc.
5. Manufacturing, which has such divisions as
   - Iron and steel industries
   - Food industries
   - Clothing industries
   - Clay, glass, and stone industries, etc.

The United States census for 1920 shows the following persons employed in these industries:

Population Ten Years of Age and Over	Total	Male	Female
Dairy farm, stock farm, and general farmers and workers on farms, about	10,250,000		
Orchard and nursery laborers	38,998	37,044	1,954
Fishermen and oystermen	52,836	52,457	379
Lumbermen, raftsmen, and woodchoppers	205,315	205,036	279
People engaged in extraction of minerals	1,090,223	1,087,359	2,864
People engaged in manufacturing and mechanical industries	12,818,524	10,888,183	1,930,341

[1] Forest conservation will be discussed in a later chapter.

Ways in which these industries are alike or unlike. — Almost everyone knows enough about these great industries in which production is so important to point out some of the ways in which they are alike or unlike. Farming, fishing, and lumbering are outdoor industries and are all attractive to persons who like work in the open above everything else. They are alike also in that they require hard physical work and take the workers, for the most part, away from towns and cities. In lumbering, the life of the worker often centers in the lumber camp, a great many miles from the sociability and entertainment to which city people are accustomed. Automobiles and good roads have made the farm less isolated. Telephones, daily mail service, and the radio have brought the farmer as well as town dwellers into closer communication with other people. Nevertheless, the farmer works alone a great deal. During the busiest seasons, he may not leave the farm for days and even weeks at a time. The fishing industry also often involves isolation.

The fact that fishing, farming, and lumbering are outdoor industries does not mean that they are in every way similar. Farming is an occupation of cleared land, with its greatest development in the open prairies; fishing is an occupation of the sea, lakes, and rivers; and lumbering is an occupation of the woods. Many persons find the isolation and out-of-door life required by these industries attractive, and many are repelled by them.

Mining is essentially underground work, and the workers frequently live in a small town near the mouth of the mine. It differs in this from the industries just discussed and also from manufacturing, which takes place within factory buildings and usually in cities of fair or large size.

Physical work is important in all producing industries. It is of great importance in farming and lumbering, in most

mining and fishing work, and in some kinds of manufacturing. In other types of manufacturing, however, the machine does so much of the work that women and children can easily perform the tasks required.

In all of these industries we find the ever growing application of science. Wherever we study the making of goods, we shall see the use of geography, geology, chemistry, physics, botany, and biology. Most often we see science applied in some machine. This is true alike of farm, mine, lumber camp, fishing fleet, and factory.

Besides the increased use of machinery, the application of science to all these industries means that more and more people who have a knowledge of applying science to industry are being called upon for help. In agriculture we find the agricultural expert; in mining, the geologist and engineer; in manufacturing, the engineer and efficiency man; in fishing, the biologist and chemist; in lumbering, the trained forester. We will mention some of these men again in our study of the professions.

Specialization is increasing in all of these industries. This is least true of farming; but in mining and lumbering, specialization has made great strides; and in manufacturing, it is being carried to ever increasing lengths. Mr. Ford says that in his great plant in Detroit most jobs are so specialized that they can be learned in two days. There are some good and some evil results of specialization in connection with our own work. It has given us all more goods, for people who are put at specialized tasks learn more quickly, work more expertly, and can move more readily from one job to another. On the other hand, a specialized worker has little chance to learn " all about the business " or trade. He may find his work monotonous and he is not usually hard to replace.

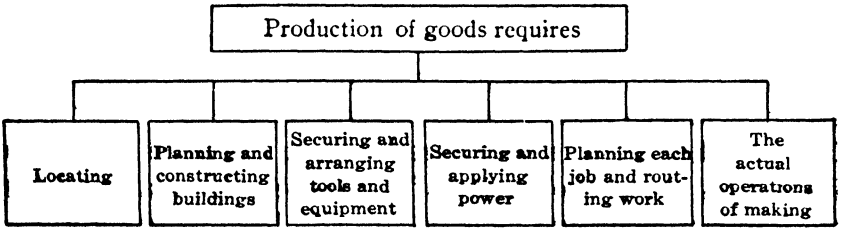
The scale of operation is increasing. This, again, is least

true of farming. In fact, in the Far West the size of farms is decreasing. But units of some of these producing industries have grown so large that hosts of men are employed in them. Notice in the table below [1] the armies of employees of some companies, and how much the ranks have grown in the last ten years:

	Employees			Wages		
Name of company	Ten years ago	Now	Per cent increase	Ten years ago	Now	Per cent increase
U. S. Steel Corp.	134,313	243,776	81	$121,714,000	444,662,000	265
Am. Tel. & Tel. Co.	142,527	279,651	96	96,483,000	376,814,000	290
Pennsylvania R. R.	198,273	208,081	5	176,475,000	359,266,000	100
N. Y. C. Lines	130,719	160,085	22	116,400,000	282,000,000	142
Bethlehem Steel Corp.	49,796	60,383	21	41,712,000	111,680,000	167
General Electric Co.	41,669	68,406	64	32,339,000	110,938,000	243
Armour & Co.	35,610	58,905	65	28,000,000	82,000,000	193
Swift & Co.	39,000	54,000	38	30,000,000	76,800,000	156
Westinghouse Elec	16,000	35,600	122	12,000,000	57,600,000	380
F. W. Woolworth Co.	12,123	25,106	107	5,625,000	20,540,000	265
Marshall Field & Co.	15,000	22,500	50			90

The Tasks of Production

When goods are made in a modern factory or mine or on a farm, several things must be done. These can be shown in a diagram:



[1] *Forbes*, March 15, 1925.

Locating the place to make goods is important. — After a business man has decided what goods to make, his next task is to find the proper place for making them. This is sometimes called the business man's problem of location. A great deal has been written about locating factories, but it is just as important to locate well for working a mine or an oyster bed, or for raising wheat, cotton, apples, or live stock as it is to locate well for making automobiles, shoes, or clothing. Mine operators employ geologists to study rock formations and make sure of the presence of ore or coal, and in other ways take pains to locate advantageously. One writer on farm management mentions the following factors as being important in choosing the location for carrying on farm operations: the lay of the land, whether hilly, swampy, or level; fertility of the soil; physical properties of the soil; drainage; water for irrigation; water supply; climate; healthfulness; roads and markets; neighbors; taxes; community improvements; prospective development.

Well planned buildings help in making goods. — The manufacturer finds it pays to plan a factory building so that it will house his operations well. Let us take cotton cloth making as one example. The main steps in making cotton cloth are the following:

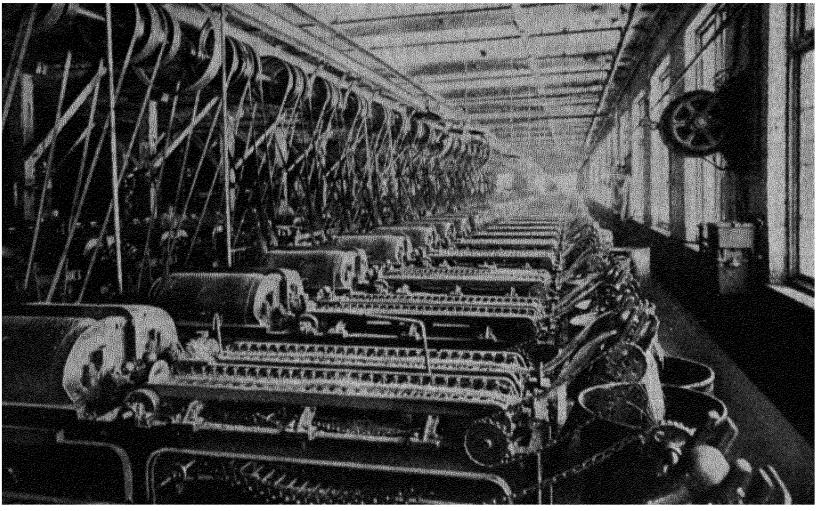
1. Loosening the fibers. Cotton usually comes to the cloth mill in bales. These must be opened, the fibers of cotton which are compressed, matted, and lumpy must be loosened so that they can be cleaned.

2. Cleaning. When the fibers have been separated, they are cleaned with strong blasts of air.

3. Making the cotton fibers parallel. After the cotton has been cleaned, it is combed or carded with machinery, which draws the fibers into parallel lines, leaving as little matting and twisting as possible. This process may be

followed by or combined with another which stretches the fibers and partially twists them.

4. Spinning. Spinning is the process of taking the parallel fibers of cotton and twisting them into a thread.



Courtesy of International Harvester Company

SPINNING TWINE

After the rough fibers of sisal, or manilla, or both have been combed in drawing machines, they are passed on to these spinning machines. So completely is the required skill supplied by the machines, that only an occasional tender is necessary to see that the machines keep going and remain in order. The power is brought by the belts from above.

5. Dyeing. The thread, which is now called yarn, may be dyed at this stage to any color desired.

6. Weaving. Weaving is the actual making of the cloth from the thread or yarn. There are various types of weaving; in the simplest, threads called "warp threads" are placed on a loom, and other threads (called "woof") are laced through them so that a closely woven cloth is formed.

7. Finishing. This is the process in which the cloth is

cleaned again, perhaps stretched, and otherwise treated for the market. It may be, of course, that the yarn was not dyed, and it may be dyed or stamped at this stage.

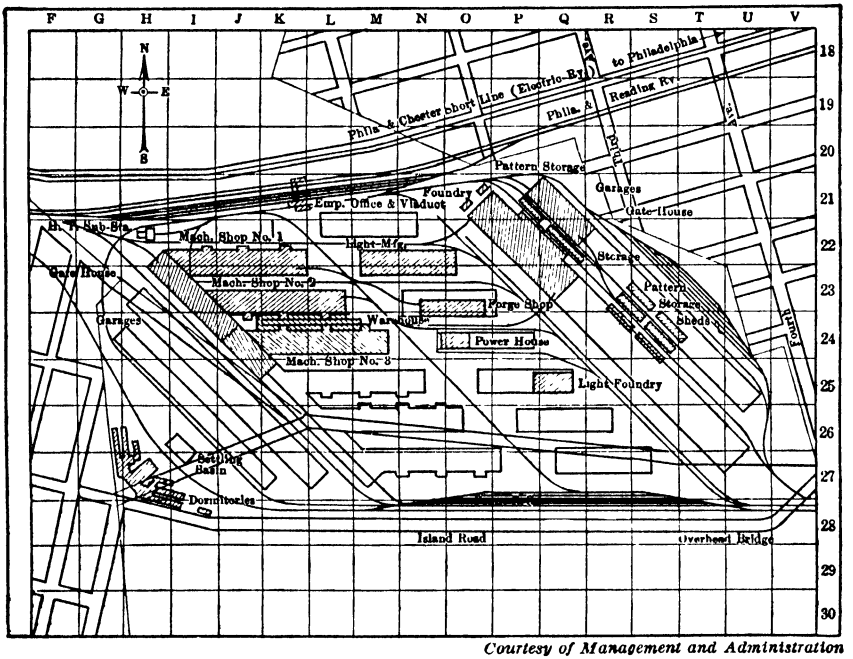
Different industries need different types of buildings. — An industry such as cloth manufacturing, which carries the raw material directly from one process to another without introducing new materials or discarding any important part, needs one type of building. The raw materials can come in at one end and the product go out at the other. All that is necessary is space enough to extend one process after the other.

Furthermore, the material handled is of light weight, and so the building may be constructed of comparatively weak materials. If ground is expensive, a building for such a manufacturing process may be built many stories high and the light cotton cloth carried from one floor to another as the manufacturing proceeds.

How different is the nature of the building needed for a steel plant! Here, too, the process is continuous, but the great weight of the material handled — ore, pig iron, and steel — makes it practically impossible to utilize buildings more than one story high. Still different must be the building plan for such an industry as meat packing, which makes some hundred different products from a single animal. The plant for such an industry must be divided into departments or must have buildings where many activities, each one of which is a separate manufacturing process in itself, can be carried on. One large packing company in Chicago has such departments as a lard refinery, a vinegar department, a smoke house, a canning department, a beef-extract department, a sausage department, a meat-curing department, a refinery plant, an electrical department, a beef freezer, a wholesale market, a bone-novelty department, a wool house,

and many others. Many of these departments are in separate buildings which are adapted to the needs of the work done there.

The "layout" of work is important. — The discussion above surely makes clear the fact that it is important to have the work in a factory "laid out" in such a way that



Courtesy of Management and Administration

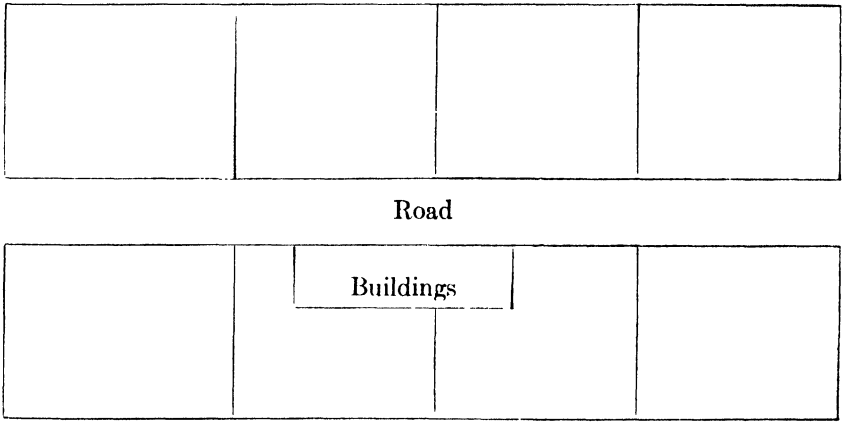
LAYOUT OF SOUTH PHILADELPHIA WORKS OF THE WESTINGHOUSE PLANT

In this industry there is a problem of layout of the several buildings as well as the layout within each building.

it can be done most easily and conveniently. We have seen also how such planning of work will affect the shape and kind of building needed. In many kinds of manufacturing, such as making shoes, for example, there are many more operations than in making cloth.

In stores it is just as important to have the arrangement or

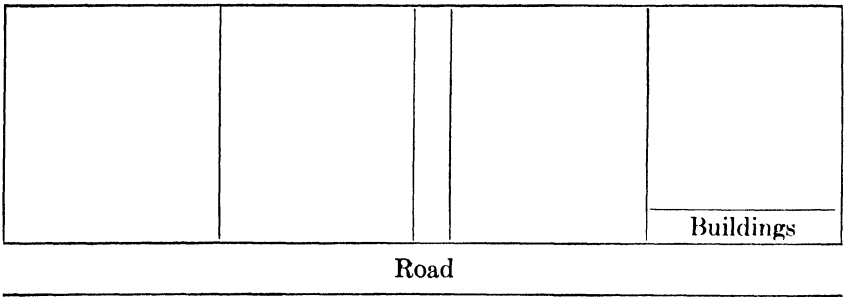
layout of the work carefully planned. Some small stores are so well planned that the articles which are most often called for are all arranged near the place where the customers usually stand. Near this place are also kept the proper bags, paper, and twine, and the cash register. This planning saves many steps. Articles which sell least often are farthest away. Larger stores, such as department stores, have problems of storing their supplies of goods so that they can be moved to the shelves as conveniently as possible and of arranging ways in which goods that have been sold can be sent to a shipping room for delivery with the least time and effort. Chutes and traveling belts are often used for these purposes.



FARM LAYOUT NO. 1

Farms also furnish a good example of the importance of layout. If the farm buildings are put near the center of the farm, it is possible to reach any of the fields quickly. Having the house and other buildings near the road is also an advantage in reaching market. For these purposes notice how much better is the arrangement of farm No. 1 than the

arrangement of farm No. 2. Every farmer knows that it is useful to have his fields in continuous strips so far as possible. This enables him in plowing, in using a harvesting machine, or in other work, to drive his team or tractor for a long distance before he loses time in turning. If the field is small, he will turn often, and if it is small and square, he will perhaps be turning half the time.



FARM LAYOUT NO. 2

A farmer also has building problems. — Deciding where to place his buildings does not end the farmer's building problems. The farmer needs buildings in which he can most economically care for his stock, house his implements, and store his crops. Any building which had walls and a roof was once thought to be good enough for a farm. But studies such as have been made by agricultural schools have shown farmers that much time and money can be saved by properly designing their buildings. Since cattle and horses must be fed, it is important to have their grain stored where it can be placed before the animals without much effort. Since cows are to be milked, the farmer needs to think about the distance which he must carry the milk before it is strained, put in cooling-tanks, or poured into a separator. The farmer's " layout " problem is as important in his buildings as it is in his lands.

Buildings can be too large and fine. — The farmer needs to think also about the size of the buildings. Nearly every farmer is proud to own a large red barn and other buildings which are noticeable. It is quite likely, however, that

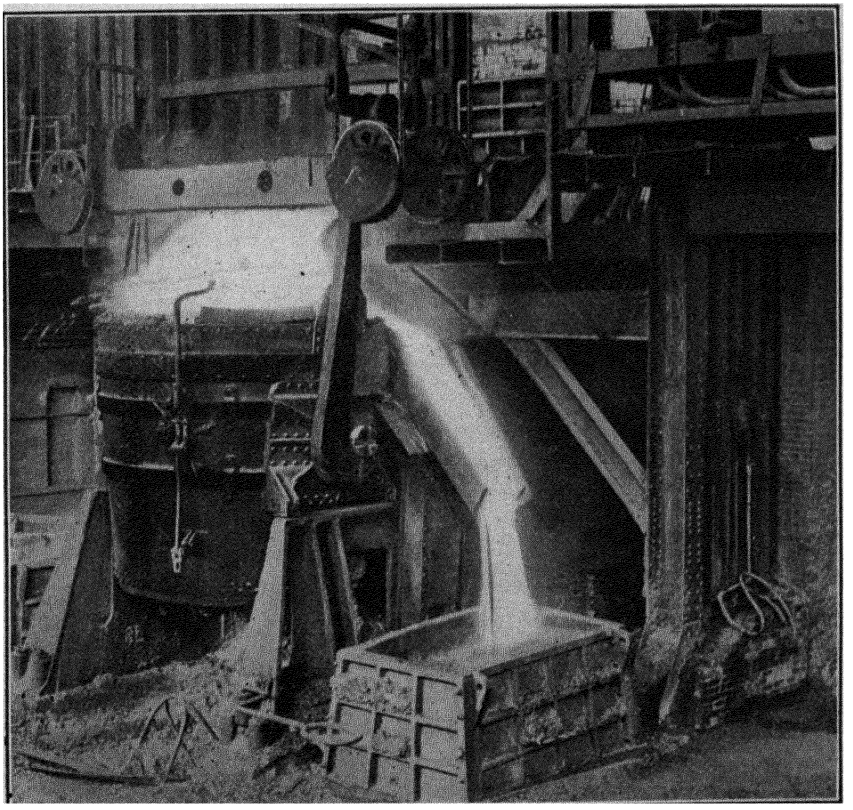


Photo by Brown Brothers

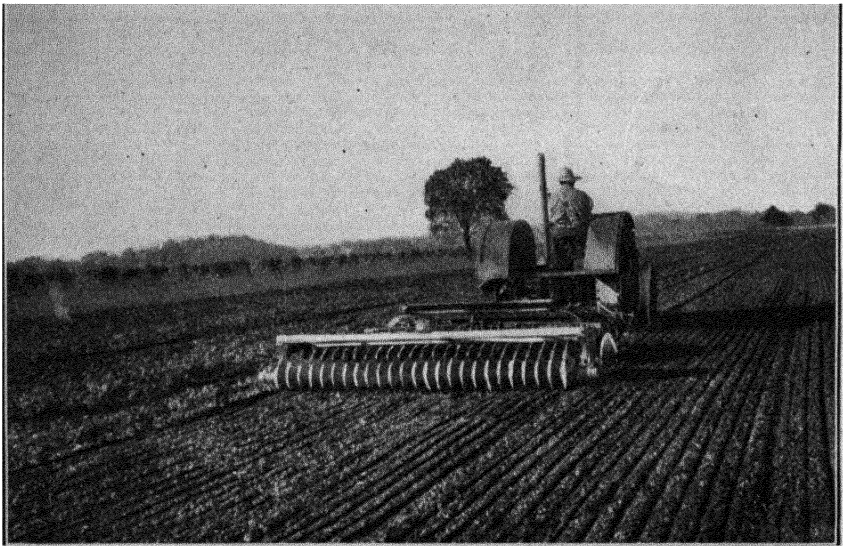
STEEL BEING TAPPED FROM OPEN HEARTH FURNACE

Could such work as this be carried on at all without machines?

large and expensive buildings may not be able to pay for themselves. If a hen house costs more than one dollar for each hen that it will hold, it is not likely that the hens can

pay their house-rent. Fifty dollars put into a barn for each cow that it will hold — for example, a thousand-dollar barn for twenty cows — is all that can be paid for on most farms.[1]

Securing and using machinery. — If one has never been in a factory, he should by all means visit one. Machinery is everywhere in manufacturing, and it performs almost as large a part of the work on the farm as it does of the work



Courtesy International Harvester Company

DISC HARROW DRAWN BY TRACTOR

After the land has been plowed, this machine stirs and cuts the soil, thus preparing it for seed.

of the factory. The wheat or corn seed which for so many years was planted by hand is now placed in the ground with a machine. Machines cut weeds from among growing crops. For the harvesting of almost every crop machines have been built. The flail used by the medieval villein, and even by our grandfathers, has given place to the threshing

[1] Warren, *Farm Management*, pp. 396–97.

machine. And the threshing machine itself, given power by horses until relatively a few years ago, is now operated by the steam or gasoline engine. In handling stock, ma-



Photo by Brown Brothers

WOMEN MACHINE WORKERS IN AN AUTOMOBILE FACTORY
These machines are operated by electricity. The workers do one specialized task again and again.

chines can be used for cutting feed, milking cows, skimming milk, and in other ways eliminating much of the drudgery of such work.

The need of power in making goods. — Very closely connected with the business man's task of choosing and using machinery in making goods is the task of choosing and using power. We know from our earlier studies that hand power and the power of horses, oxen, and other animals were almost

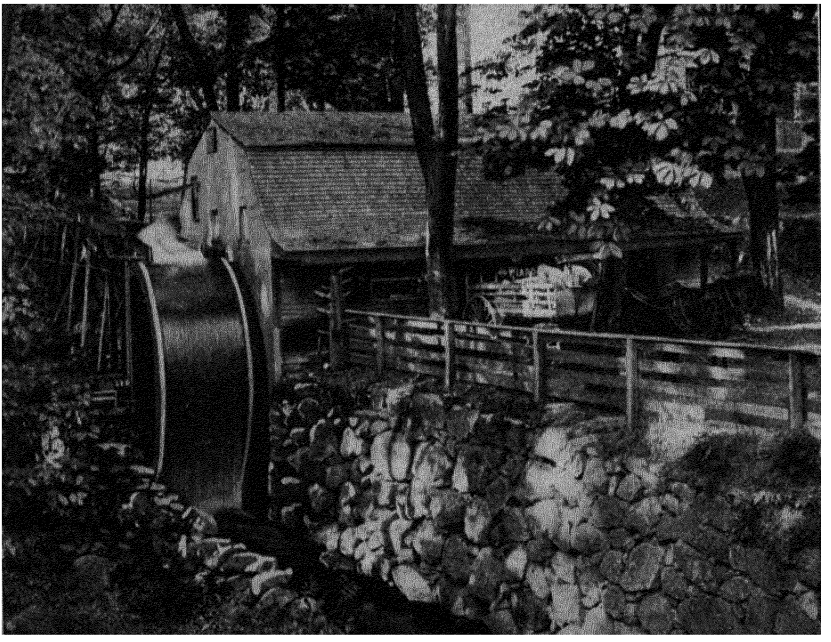


Photo from Ewing Galloway

OLD WATER WHEEL

This mill was built by John Winthrop, at New London, Conn., for the grinding of corn into meal. At the left you will notice the flow of water turning the wheel. The power is transmitted to the mill stones and these, turning one upon the other, grind the grain into flour. What advantages result from our present ability to convert water power into electrical energy and to utilize that energy?

the only kinds available even two hundred years ago. One of the greatest inventions in mankind's method of making goods was the invention of the steam engine. Other great

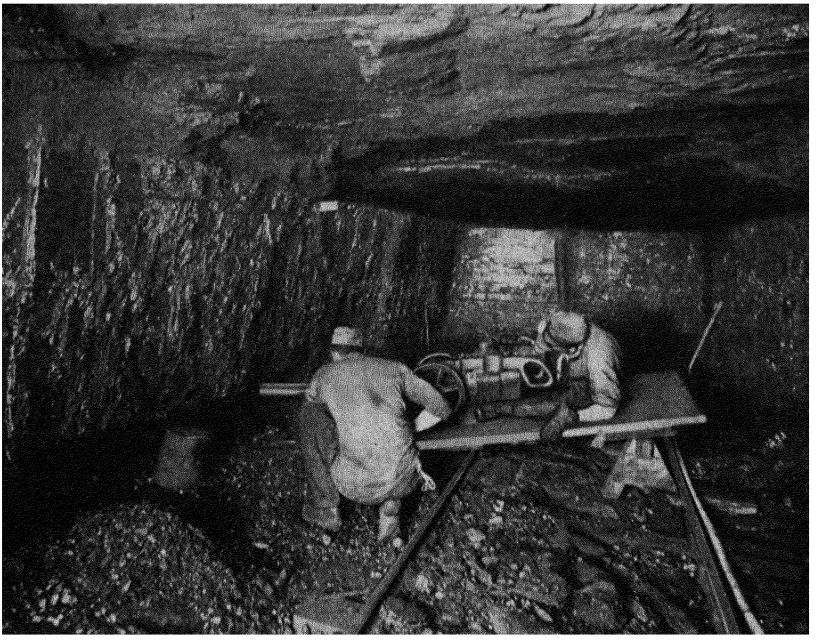
sources of power have since come into existence. Most important of these is the *electric dynamo*, which can be used to transform power generated by the steam engine, by falling water, or by other means, into an electric current. This electric current can in turn be made to run machinery by means of a motor.

Besides steam power, electric power, and water power, gasoline is very important as a source of energy. So, too, is gas. Indeed, one of the largest gas companies advertises widely, " You can do it better with gas."

If one decides to use steam, there are different types of steam engines from which he must choose. The same thing is, of course, true in selecting dynamos and gas or gasoline engines. No matter what machines are used, there are many problems of building them in the most efficient and economical way. There is, for example, the problem of having them large enough to do the work required, but not so large that there is needless expense. If a steam engine is used, it is sometimes necessary to " soften " the water as it comes from the city pipes or from a well. This may require extensive filtering machinery. If coal or coke is used to heat the water in the boiler, there are many types of automatic *stokers or feeders* which can be bought. Of course the manufacturer will need to decide whether it will pay him to use one. If he decides to buy, then he must choose the one which will do his work best and with least cost. There is also the problem of deciding whether to create the necessary power in one's own plant or to buy it from some other company. In almost every city, electric power and gas can be bought from some central plant. In some places, steam also can be purchased.

It is necessary to carry power to various parts of the factory where it is needed. Steam can be taken by pipes

from the boilers where it is generated and applied to small engines at the place where it is needed. A much more common way of moving power is by means of belts. Nearly everyone who has visited a factory has seen long belts running from the engine room to large wheels and then



Courtesy of U. S. Bureau of Mines

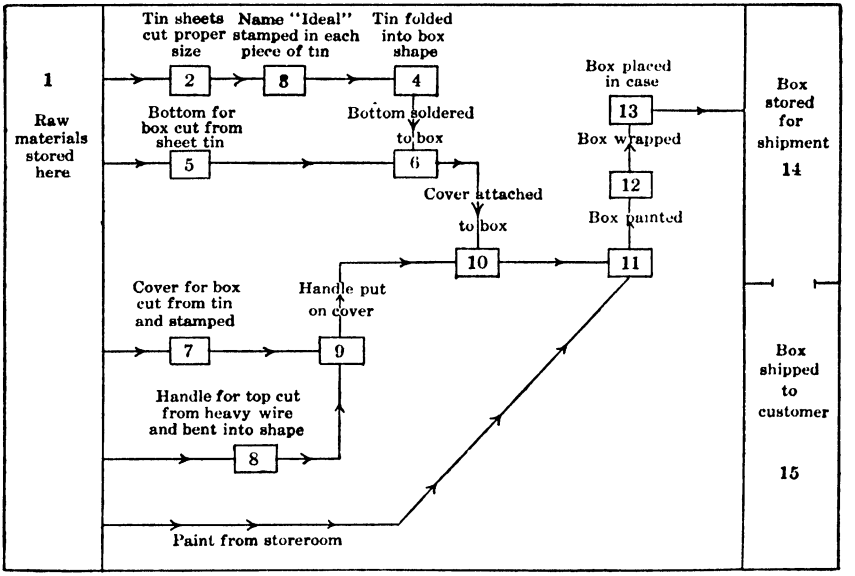
A Machine in a Mine

Miners undercutting preparatory to blasting. Note the importance not only of the machine but of the electrical power which is easily conveyed to the mine by electrical current.

in turn from these wheels to other wheels attached to machines. These are distributing power.

Planning each job and routing work. — Perhaps the most important task of all in production is deciding just what specialized parts a job should be broken into. If specialization

is used, such breaking up must be done. Then machines and workers must be arranged so that each job fits correctly to the one preceding and the one following. This is planning and routing the work. The chart shows specialized jobs and routing of work in one small factory where specialization is not carried very far.



SEQUENCE OF SPECIALIZED JOBS IN ONE SMALL FACTORY

This plan shows progress of work on sheets of tin in a tin bread-box factory.

The actual operation of making goods. — Finally there comes the actual task of making goods. Sometimes this is difficult; sometimes easy. Sometimes it calls for skilled workers; sometimes for unskilled. It may be done largely by machinery or it may be hand work. Many jobs in production arise from the making of goods, and we shall devote all of the next chapter to these jobs.

Records are needed in making goods. — Good records and accounts in the manufacturing department are important to the business man because it is here that most of his costs occur. Unless the manufacturer of automobiles, for example, knows how much the wood and metal which go into a machine cost him, and unless he knows how much he is paying for the time given in making this machine by the several different workmen who are employed in making it, he cannot know its cost to him. If he does not know its cost, how can he tell the price at which it can be sold for a profit?

It is not easy to keep accurate records of the costs of making goods in a factory. One can see that this is true by looking at the case of making the tin bread-box. Each of the workers on one tin box took only a few minutes to do his part of the work, but each was paid at a different rate per hour. The materials used by some workmen were more expensive than those used by others. The labor and materials were *costs* which the manufacturer kept recorded. He realized that he also needed to count as part of the cost the money he paid for rent each month, as well as part of his costs for light, heat, and insurance. In addition to this, there was wear and tear on machinery which he had to consider, as well as part of the payment of the superintendents of the factory and a payment for his own time.

The need for records leads to cost accounting. — The difficulty of keeping the records needed in making goods has led to the development of a special branch of accounting which is called " cost accounting." It is of great value to manufacturers. Besides helping them to know whether they are making a profit on the articles made, it helps them to know whether one way of making an article is more expensive than another. Cost accounting is of great value also to merchants and farmers. Although farmers have

COST SHEET

.....Department

Order No.....

Date ....

Article and Description ....

....

Material Costs					Labor Costs				
Dept. No.	Description	Quantity	Price	Amt.	Employee's No.	Hours	Total Hours	Rate	Amt.
.....	.....	.	..	...	. . ...	.	..	.	.
.....	.....	.	....	.	..... .	..	..	..	...
....	.....	....	....	. .	. .....	....	..	..	.. .
.....	.....	.....	....	.	.....	....		..	.
.....	.....	... .	....	.. ..	.....	...	.. ..	....	...
.....	.....	.....	..	.....	.....	.	.	....	...
.....	.....	.....	....	.....	....	....	.	..	.. .
....	Total ..	.....	....	.....	Total ...	..	.	.	.

Checked by..... .....

Summarized .. ..

Approved ....

A Cost Ticket [1]

All well organized manufacturing plants keep careful record of the cost of the material and the labor that go into each article manufactured.

made little use of it in the past, they are using it increasingly. Engineering schools and agricultural colleges sometimes give courses in cost accounting, and schools of business in colleges and universities nearly always do so. Some high schools give such courses, and nearly all of them give courses in accounting that prepare for cost-accounting study. But

[1] Cf. Nicholson and Rohrbach, *Cost Accounting* (Ronald Press Company), p. 217.

again we must remember that it is worth while to try to learn first something about the tasks of the business man that need to be "accounted." That will make the bookkeeping and accounting study more full of meaning. We shall have a chance to look again at accounting in Chapters XVI and XIX.

QUESTIONS AND PROJECTS

1. Sometimes we say all the people in our country help in producing the things we use. One business man says, "I carry on the work of production in my factory." Can you show what the word "production" means in each of these instances?

2. Sometimes people call farming, lumbering, fishing, and mining *extractive* industries. Can you see any reason for this?

3. Of all the industries which we have called production industries, which one is first in the number of people engaged in it? Which one is second?

4. Make two lists. At the head of one put "Ways in which the production industries are alike"; at the head of the other put "Ways in which the production industries are unlike."

5. In which of these production industries would there be most opportunities for women?

6. Give as many reasons as you can why a manufacturer might try to specialize all the jobs in his factory. If you were working in a factory, give reasons why you might prefer a specialized job. Give reasons why you might prefer one that was not specialized.

7. Try to give reasons for the location of some factory in your town.

8. Name at least one thing that would be looked for in locating a mine; a fishery; a farm; a shoe factory.

9. Make a list of the things that you think would be important to plan for in building a house. Make a list of the things you think it would be important to plan for in building a factory.

10. Go into the kitchen of your home and notice the way in which it is "laid out" for the work that is to be done there. See if you can suggest any improvements in arrangement that might make it possible to do the work more easily and quickly.

11. At the place in which you work at home or in school, can you suggest a better layout for the following things: light, books, pencils, paper, chair, and desk?

12. If a class visit to a factory cannot be arranged, try to visit a factory with some older person. Be prepared to report as well as possible on the

machinery used; on the power used and its distribution in the factory; on the way in which materials and partly finished goods are passed from one machine to another.

13. Is there an electric power plant in your city? Have some member of the class find out what its charges are and whether they are the same for factories as for homes.

14. Why do you think the first five tasks of production, if well done, make the sixth task easy?

15. Why might it be difficult for a factory owner to decide what kind of power to use?

16. Where work is specialized, there must be planning and organization. Explain this statement and give an illustration.

17. It has been said that a man who produces goods must keep records of the following things: raw materials in his storeroom; materials that are being worked upon in the shop; amount of work done on each article made by each different worker; rate of pay of each worker; number of articles turned out; expense of each machine while it is working on each article. Can you show why it would be worth while to have a record of each of these matters? What would be your definition of cost accounting?

SUPPLEMENTARY READING

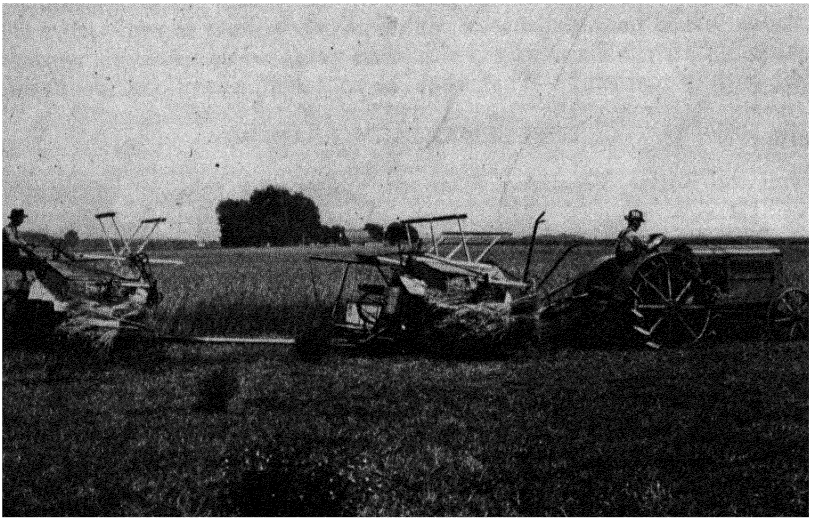
Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER XII

JOBS IN PRODUCTION

Samples of Jobs

There are more jobs in producing goods than in any other activity. The industries in which production is of foremost importance employ more than one half of all the people



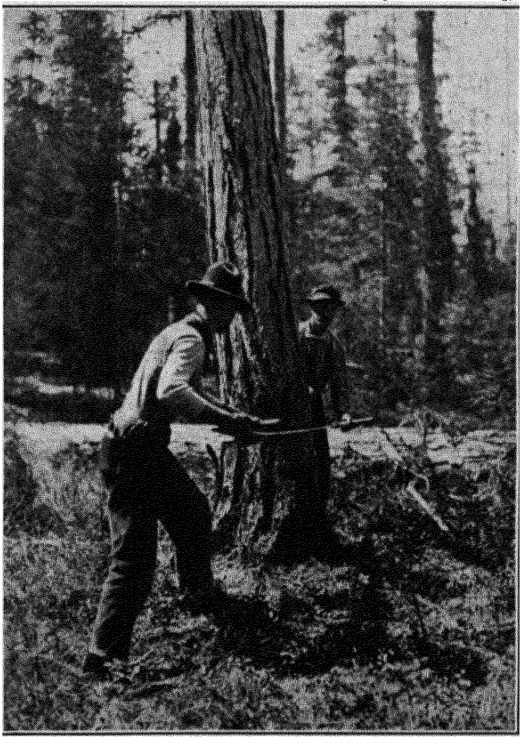
Courtesy of International Harvester Company

A Gasoline Tractor Pulling Binders

This picture illustrates wheat harvesting on a large farm in the Middle West.

who work. There are about forty-two million persons in occupations in the United States, and of these almost twenty-five million are in the kinds of work which we are discussing in this chapter. So great is the specialization in some of

these industries that no one knows how many *different kinds* of jobs there are to be found in agriculture, lumbering, fishing, mining, and manufacturing. We can get some idea of production work, however, by looking at the jobs,



Courtesy of U. S. Forest Service

CUTTING YELLOW PINE IN A NATIONAL FOREST IN MONTANA

or the workers filling jobs, in some of the production industries or in particular businesses in some of these industries.

SAMPLE 1. WORKERS ON A MIDDLE WESTERN GRAIN FARM[1]

1. The owner of the farm, who takes part in all kinds of work.

[1] There are about ten and a quarter million persons over ten years of age engaged in farm work in the United States.

2. One or two hired men who share in every kind of work on the farm. Their wages run from thirty-five to sixty dollars a month and board.

3. An extra man or two who may be employed during the summer for haying, threshing, or corn husking. The wages of these extra men run from two to five dollars a day and board.

SAMPLE 2. WORKERS USED IN A LUMBERING CAMP IN ARIZONA

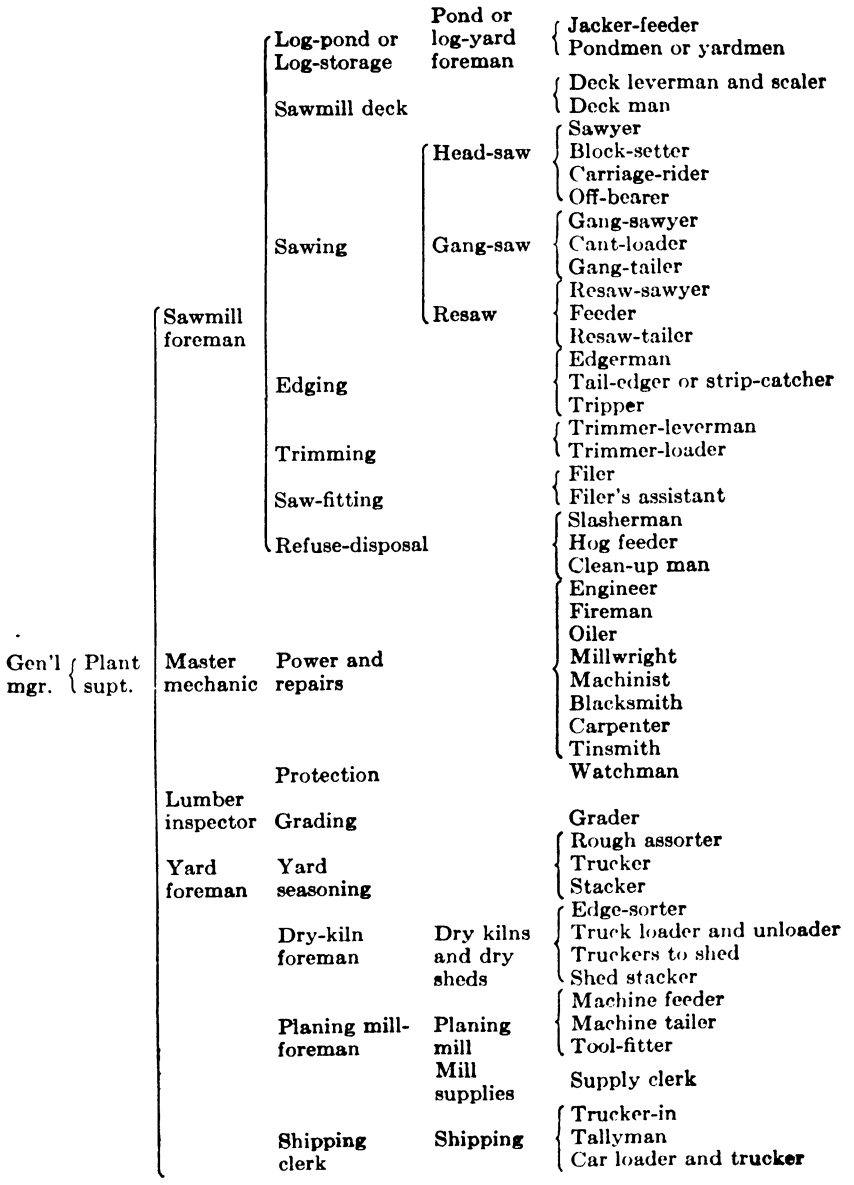
In lumbering, trees are felled and bucked into logs; a part of them are skidded to "trails" by horses and pulled direct from trails to railroad spurs by steam machinery using steel cables. Other logs are assembled by horses and hauled on big wheels by horses to the railroad spurs. All logs are loaded on cars by steam machinery.

The following schedule shows the classes of workmen and their wages for six recent years in a logging camp operated by a large lumber concern which cuts western yellow pine in Arizona:[1]

Teamster	$ 3.90 per day
Swampers	3.50 per day
Drum pullers	4.75 per day
Choker hookers	3.70 per day
Flagmen	3.50 per day
Choker tenders	3.50 per day
Rigging clingers	4.00 per day
Firemen	3.80 per day
Wood choppers (for fuel)	3.50 per day
Trail snipers	3.50 per day
Night watchman	3.50 per day
Roll-up men	3.50 per day
Landing men	3.50 per day
Steam loader operator	7.00 per day
Top loaders	5.50 per day
Blacksmith	5.70 per day
Blacksmith helper	3.00 per day
Wheelwright	5.60 per day
Barn boss	120.00 per month
Time keeper	125.00 per month
Bull cook	85.00 per month
Woods superintendent	290.00 per month
Woods foreman	200.00 per month

There are 205,315 persons over ten years of age engaged in lumbering in the United States.

[1] Figures from U. S. Department of Agriculture. Wherever rates of pay are given we must remember they are only approximate because of differences in place and time.



GENERAL SCHEME OF SAWMILL LABOR ORGANIZATION

After the logs have been cut and shipped from the forest, they are taken to a sawmill to be made into lumber we use in building. The preceding diagram gives an idea of the jobs afforded by a sawmill.[1]

Sample 3. Jobs on a Fishing Boat or in the Fishing Industry

Although there are 52,836 persons engaged in the fishing industry in the United States, little has been done to guide those who wish to engage in this field of work. So many things must be considered, and these factors differ so in different localities, that the Bureau of Fisheries of the United



Courtesy of U. S. Forest Service

Winter Logging Camp, Pine Island, Minn.

States Department of Commerce advises anyone who considers entering the industry to obtain all the information possible from local fishermen, or to secure employment with a commercial fishing company in the district in which he desires to engage in fishing. In this way he could learn of the manner in which fishing is carried on in that locality, the type and cost of boats and fishing apparatus needed, and the markets for the products.

[1] Ralph Clement Bryant, *Lumber* (John Wiley and Sons, Inc., 1922), p. 181. Reprinted by permission.

The fishing industry employs many of the same sort of routine workers engaged in any large industry. There are some workers who are peculiar to this work, however. For instance, there are the fishermen who actually catch the fish from schooners and steam trawlers. These men work either for straight wages or on a share basis, and in either case they earn their board and from twenty to thirty dollars a week. The mate of a fishing vessel makes about ten per cent more than the crew, and the captain about twenty per cent more. There are also shore fishermen,

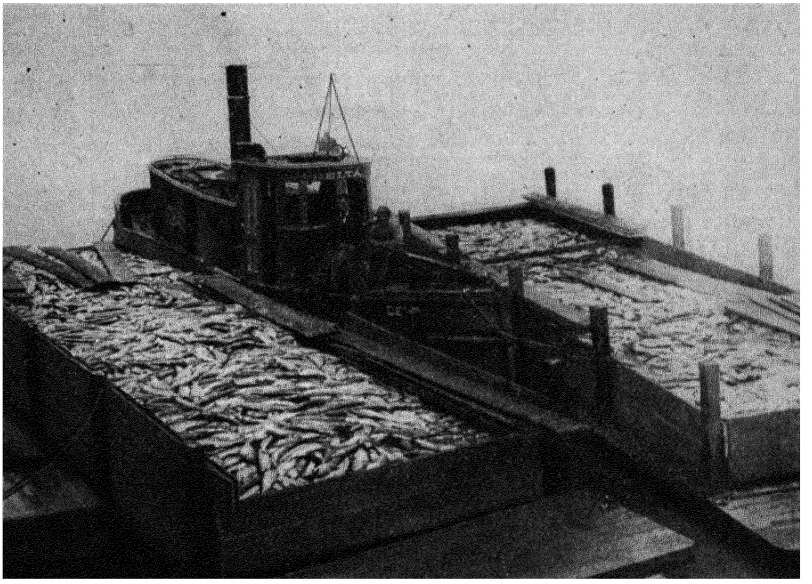


Photo by Brown Brothers

SCOWS LOADED WITH 50,000 SALMON READY FOR THE CANNERY

who usually work for straight wages and earn from twenty-five to forty dollars a week.

After the fish have been caught, they must be dressed and cleaned. This work gives jobs to specialized workers. The *cut-throat* cuts the fish open; the *header* discards the head and viscera; the *splitter* cuts out the backbone; and the *salter* washes the fish, salts it, and piles it up for drying.

Both wholesale and retail fish traders employ *cleaners*, who receive wages ranging from thirty to forty dollars a week.

Native-born Americans do not often perform the menial work attached

to the fishing industry, but they frequently own the fishing gear or hold executive positions in the packing plants. It requires only a small amount of capital to purchase fishing gear and boats, and the fish canneries furnish a ready market for the catch. Most fishermen, however, work for canneries, who furnish the equipment and pay the rivermen fixed rates.[1]

SAMPLE 4. WORKERS IN A COAL MINE[2]

OCCUPATION INSIDE	AVERAGE EARNINGS PER HOUR	OCCUPATION OUTSIDE	AVERAGE EARNINGS PER HOUR
Blacksmiths	$.592	Ashmen	$.444
Brattice men	.561	Blacksmiths	.572
Cagers	.517	Cagers	.458
Car runners	.507	Carpenters	.560
Company miners	.581	Car runners	.454
Company miners' laborers	.526	Dumpers	.449
Consideration miners	.636	Engineers	.532
Contract miners	.840	Firemen	.503
Contract miners' laborers	.639	Jig runners	.410
Door tenders (boys)	.315	Laborers	.434
Drivers	.499	Loaders	.448
Engineers	.542	Machinists	.517
Laborers	.519	Oilers	.434
Machinists	.568	Plate men	.430
Masons	.577	Repair men	.485
Motor brakemen	.502	Slaters (boys)	.298
Motor men	.558	Timber cutters	.452
Pump men	.417	Trackmen	.477
Timbermen	.695		
Trackmen	.570		

Mining, even by improved modern methods, is a dangerous occupation, and the miner runs daily risks. He may be hurt by falling roofs, inrush of water, a falling mine cage, poison gas, or an explosion. More-

[1] Cf. T. N. Carver *et al.*, *Trade Foundations* (Guy M. Jones Company, Indianapolis, Ind.), p. 62.

[2] U. S. Department of Labor, Bureau of Labor Statistics, *Bulletin No. 265*, pp. 169–170.

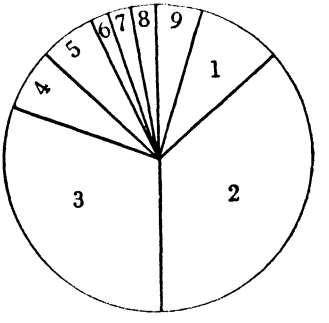


A Gold Placer Mining Operation in Alaska

over, the dampness of the mines, the sudden changes of temperature, and the continual dust sometimes cause pneumonia and tuberculosis. Miners may receive fair wages while they work, but they cannot work all the time. Oftentimes mines are closed for weeks. The strenuous and unhealthy work also shortens the working years of a man's life. Chances for advancement are few. A man usually starts as a helper, and if he is a good worker he may become a regular miner. Sometimes, but not often, a miner is made a boss; and in rare instances miners have become coal salesmen or dealers. As a rule, however, the miner remains in his original position.[1]

[1] Cf. T. N. Carver *et al.*, *Trade Foundations* (Guy M. Jones Company, Indianapolis, Ind.), p. 68.

[2] *U. S. Census*, 1920, Vol. XI, p. 21.



Percentage Distribution of Value of Mineral Products, by Industries, 1919[2]

These numbered segments show the relative value of mineral products in our country. The percentages are given below. This chart gives us an idea of the importance of each kind of mining.

	Per Cent
1. Coal, Anthracite	11.5
2. Coal, Bituminous	36.3
3. Petroleum and Natural Gas	29.5
4. Iron Ore	6.9
5. Copper	5.7
6. Lead and Zinc	2.4
7. Gold and Silver	2.2
8. Limestone	1.7
9. All Others	3.8
	100.0



Official Photograph, U. S. Army Air Service

THE MINING TOWN OF SEARCHLIGHT, NEVADA

This picture illustrates the lonely and unattractive appearance of many mining towns. Coal and ore are usually found in remote and isolated places, and here mining populations must make their homes. As the supplies of natural resources are expected to become exhausted sooner or later, mining towns consist of temporary buildings, constructed only for the time required to "get out the ore."

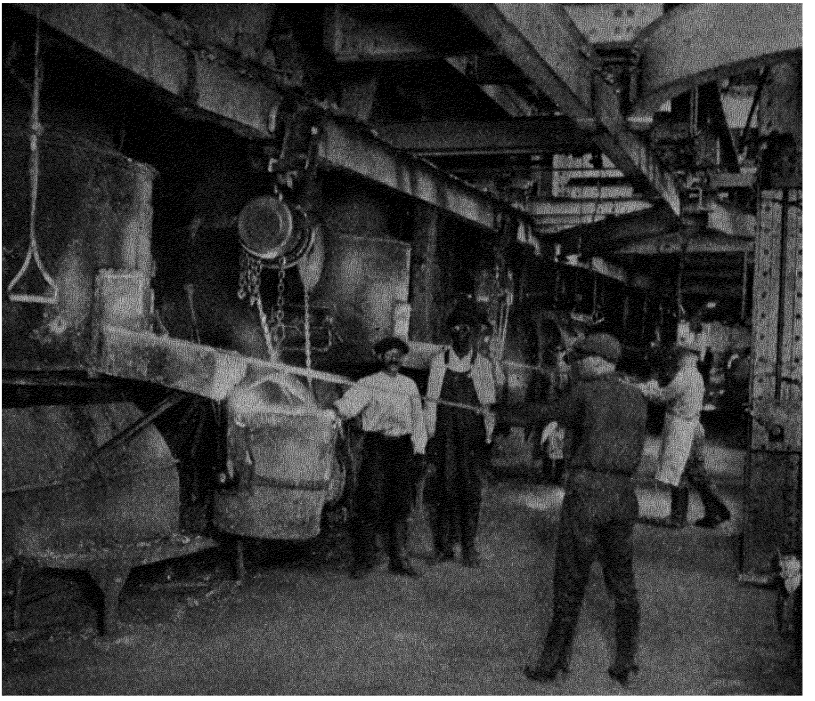


Photo by Brown Brothers

DRAWING MOLTEN METAL FOR MOLDS

This illustrates the kind of work done by some iron and steel workers.

SAMPLE 5. JOBHOLDERS IN A STEEL-MILL BLAST-FURNACE ROOM [1]

Occupation	*Average full-time weekly earnings, 1922*
Stockers	$35.49
Bottom-fillers	24.44
Top-fillers	26.02
Larry men	29.96
Larry men's helpers	26.40
Skip operators	30.20
Blowers	49.00
Blowing-engineers	35.49

[1] U. S. Department of Labor, Bureau of Labor Statistics, *Bulletin No. 353.*

Occupation	*Average full-time weekly earnings, 1922*
Blowing-engineers' assistants	$31.08
Stove tenders	30.08
Keepers	31.47
Keepers' helpers	26.16
Iron-handlers and loaders	21.67
Pig-machine men	27.73
Cinder men	27.76
Laborers	21.69

SAMPLE 6. JOBHOLDERS IN A STEEL-RAIL MILL [1]

Occupation	*Average full-time weekly earnings, 1922* [2]
Charging-machine operators	$31.43
Reheaters	37.00
Reheaters' helpers	31.87
Roll engineers	36.10
Rollers	65.91
Rollers' helpers	48.43
Table lever men	35.86
Table men	26.47
Guide setters	40.59
Hot-saw men	28.36
Hot-saw men's helpers	23.43
Hotbed lever men	24.82
Hotbed men	23.12
Straighteners' helpers	30.00
Chippers	37.55
Drillers and punchers	30.08
Cold-saw men	22.14
Cold-saw men's helpers	22.89
Inspectors	26.99
Laborers	22.82

[1] U. S. Department of Labor, Bureau of Labor Statistics, *Bulletin No. 353*, pp. 116–19.

[2] We should be reminded that no list of rates of pay can be exactly correct for more than a short time. Rates of pay for the same period usually vary somewhat from one part of the country to another.

SAMPLE 7. WHAT THE JOBS IN AN AUTOMOBILE FACTORY CALL FOR [1]

Occupation and sex	*Average full-time weekly earnings, 1922*
Apprentices, male	$20.21
Assemblers, axle and frame, male	33.45
Assemblers, chassis, male	32.48
Assemblers, final, male	33.82
Assemblers, final, female	30.52
Assemblers, motor, male	33.03
Assemblers, motor, female	25.47
Bench hands, machine shop, male	33.47
Bench hands, machine shop, female	27.10
Blacksmiths, skilled, male	40.54
Blacksmiths, general, male	34.62
Body builders, male	36.41
Boring-mill operators, male	35.22
Drill-press operators, male	31.96
Drill-press operators, female	22.99
Gear-cutter operators, male	34.07
Grinding-machine operators, male	35.47
Grinding-machine operators, female	30.28
Hardeners, male	34.97
Helpers, male	26.95
Helpers, female	16.95
Inspectors, male	30.45
Inspectors, female	18.03
Laborers, male	24.86
Laborers, female	19.46
Lathe operators, male	34.13
Lathe operators, female	24.07
Machinists, male	35.78
Milling-machine operators, male	32.94
Milling-machine operators, female	19.98
Painters, general, male	37.17
Paint sprayers, male	36.56
Planer and shaper operators, male	36.40

[1] U. S. Department of Labor, Bureau of Labor Statistics, *Bulletin No. 348*, pp. 2–3.

In some industries there are trade unions of the workers, which unions play an active part in fixing wage rates and other conditions of work. Trade unions will be met with in more advanced study.

Occupation and sex	*Average full-time weekly earnings, 1922*
Polishers and buffers, male	$38.08
Punch-press operators, male	35.31
Sand blasters, male	31.29
Screw-machine operators, male	34.56
Screw-machine operators, female	19.95
Sewing-machine operators, male	36.65
Sewing-machine operators, female	22.32
Sheet-metal workers, skilled, male	39.53
Sheet-metal workers, general, male	32.92
Testers, final and road, male	30.80
Testers, motor, male	32.43
Toolmakers, male	38.47
Top builders, male	39.55
Top builders, female	24.26
Trim-bench hands, male	29.40
Trim-bench hands, female	22.14
Varnishers, stripers, and letterers, male	47.26
Varnish rubbers, male	44.27
Other skilled employees, male	35.15
Other skilled employees, female	33.34
Other employees, male	32.13
Other employees, female	23.15
All occupations, male	33.19
All occupations, female	22.05
All occupations, male and female	$32.92

SAMPLE 8. WORKERS IN A WOOLEN CLOTHING MILL [1]

Occupation and sex	*Average full-time earnings per week*
Wool sorters, male	$42.19
Wool sorters, female	43.25
Wool-washer tenders, male	27.09
Picker tenders, male	25.64
Card tenders, male	25.12
Card tenders, female	21.11

[1] U. S. Department of Labor, Bureau of Labor Statistics, *Bulletin No. 289*, p. 14.

Occupation and sex	*Average full-time earnings per week*
Card strippers, male	$27.28
Gill-box tenders, male	23.56
Gill-box tenders, female	20.64
Comber tenders, male	26.99
Comber tenders, female	23.28
Drawing-frame tenders, male	24.05
Drawing-frame tenders, female	21.84
Spinners, mule, male	39.72
Spinners, frame, male	26.78
Spinners, frame, female	23.76
Doffers, male	17.11
Twister tenders, female	22.94
Spooler tenders, female	22.12
Dresser tenders, male	37.52
Drawers-in, female	28.85
Loom fixers, male	44.72
Cloth inspectors, male	36.62
Cloth inspectors, female	24.34
Burlers, female	21.97
Menders, female	28.59
Perchers, male	33.30
Perchers, female	23.31
Fullers, male	28.72
Washer tenders, cloth, male	27.99
Dryer tenders, cloth, male	26.67
Truckers	24.43
Truckers, female	17.99
Dye-house laborers, male	27.24
Other employees, male	28.29
Other employees, female	20.69

In many lines of work there are skilled trades. — In most of the examples that we have looked at above, we have noticed jobs that would be found only in those industries. For example, we should not find a wool sorter in a steel mill, or a steel roller on a farm. In some kinds of work, however, very definite trades exist. These trades are almost as well defined as the old crafts of medieval manufacturing. We find such trades in use, not only in one factory or in

manufacturing one kind of goods, but sometimes in very many. This is particularly true of the metal trades shown in the table below. In this table are shown also a number of other crafts which are well developed skilled trades.

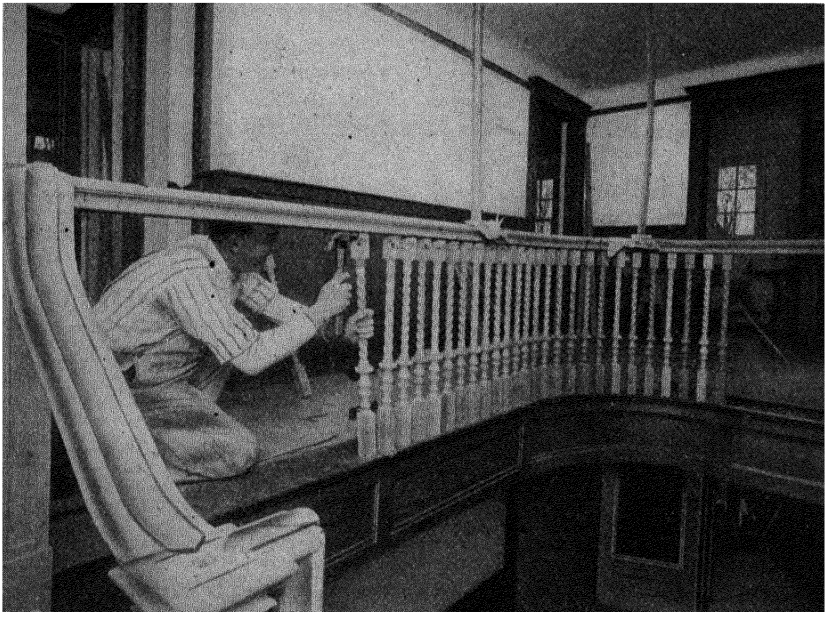


Photo by Brown Brothers

A Carpenter at Work

Average Union Rate of Wages per Hour in Specified Trades in the United States [1]

Bakers	$0.921
Building Trades	
Asbestos workers	$1.005
Bricklayers	1.321
Sewer, tunnel, and caisson	1.534
Building laborers	.728

[1] From Bulletins of Bureau of Labor Statistics.

Building Trades

Carpenters	$1.084
Millwrights	1.164
Parquetry floor layers	1.262
Wharf and bridge	.994
Cement finishers	1.113
Helpers	.805
Composition roofers	.977
Helpers	.695
Elevator constructors	1.115
Helpers	.806
Engineers, portable and hoisting	1.141
Glaziers	1.041
Hod carriers	.788
Inside wiremen	1.079
Fixture hangers	1.065
Lathers	
Piece work	7.720
Time work	1.188
Marble setters	1.188
Helpers	.873
Mosaic and terrazzo workers	.978
Painters	1.108
Fresco	1.125
Sign	1.330
Plasterers	1.306
Laborers	.872
Plumbers and gas fitters	1.151
Plumbers' laborers	.879
Sheet-metal workers	1.065
Ship carpenters	.935
Slate and tile roofers	1.224
Steam fitters	1.052
Helpers	.751
Stone masons	1.297
Structural-iron workers	1.109
Finishers	1.086
Finishers' helpers	.838
Tile layers	1.140
Helpers	.798
Average for building trades	**$1.068**

[1] Per thousand laths.

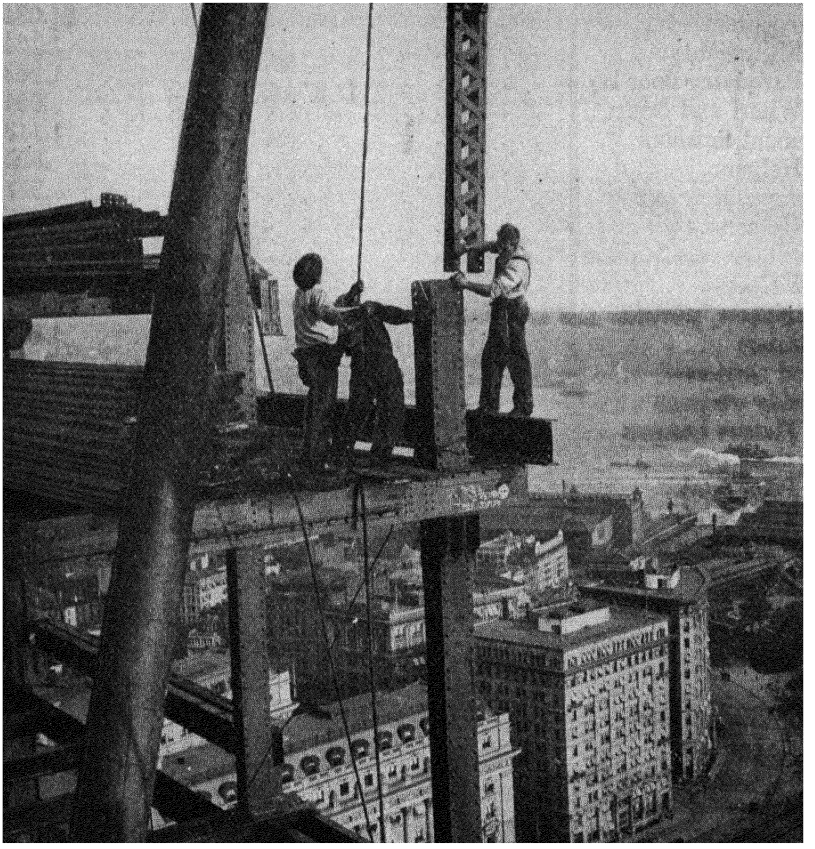


Photo by Brown Brothers

STRUCTURAL IRON WORKERS ON A HIGH BUILDING
These men have been called the "cowboys of the skies."

Chauffeurs and Teamsters and Drivers

Chauffeurs	$0.574
Teamsters and drivers	.590
Average for chauffeurs and teamsters and drivers	$0.583

Freight Handlers

Longshoremen	$0.722

Granite and Stone Trades

Granite cutters	$1.089
Stonecutters	1.151
Average for granite and stone trades	$1.119

Metal Trades

Blacksmiths, manufacturing and jobbing shops	$0.997
Helpers	.853
Boilermakers, manufacturing and jobbing shops	.812
Helpers	.606
Coppersmiths	.966
Core makers	.848
Machinists, manufacturing and jobbing shops	.823
Helpers	.650
Metal polishers and buffers	.934
Molders, iron	.843
Pattern makers	1.028
Average for metal trades	$0.839

Millwork

Carpenters	$0.935
Glaziers	1.030
Painters, hardwood finishers	1.068
Average for millwork	$0.956

Printing and Publishing (Book and Job)

Bindery women	$0.507
Bookbinders	.907
Compositors	1.024
Electrotypers	
Batterymen and builders	.818
Finishers and molders	1.193
Machine operators	
Piece work (per thousand ems)	.150
Time work	1.062
Machine tenders	1.088
Machinist operators	1.028
Photo-engravers	1.043
Press assistants and feeders	.781
Pressmen	
Cylinder	1.052
Platen	.859
Average for printing and publishing (book and job)	$0.926

Printing and Publishing
(Newspaper)

Compositors	
Day work	$1.013
Night work	1.051
Machine operators, day work	
Piece work (per thousand ems)	.139
Time work	1.031
Machine operators, night work	
Piece work (per thousand ems)	.160
Time work	1.130
Machine tenders (machinists)	
Day work	1.064
Night work	1.179
Machinist operators	
Day work	1.007
Night work	1.040
Photo-engravers	
Day work	1.085
Night work	1.289
Pressmen, web presses	
Day work	.871
Night work	.987
Stereotypers	
Day work	.922
Night work	1.082
Average for printing and publishing (newspaper)	1.047
Grand average for all time-work trades herein covered	$0.952

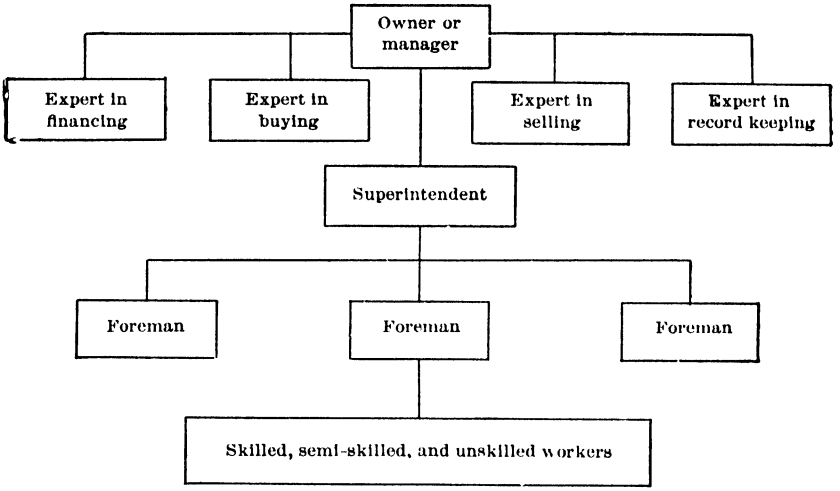
How to Enter the Work of Producing Goods[1]

In factories and mines and all other producing industries where a large number of men and women are employed, there are these grades of workers:

1. Owners and managers, aided by experts in buying, financing, selling, and the other tasks
2. Superintendents and foremen

[1] Before proceeding to study the methods of entering the work of making goods, if time permits, as may be true in a year course, samples 4 to 8 may well be made the basis for outside reading and projects.

3. Skilled workers
4. Semi-skilled workers
5. Unskilled workers



CLASSES OF PERSONNEL IN LARGE PRODUCING INDUSTRIES

Because of what has been said in preceding chapters, and what will be said in succeeding chapters, about such tasks as buying, financing, and selling, we may here consider only the superintendents and bosses and the various kinds of production workers.

Becoming a superintendent or foreman. — Superintendents and foremen get their places as a result of experience in the kinds of work they direct. If a man working in a factory shows ability to do his work well and to handle other men, his chance of promotion is good. There is little chance of one's starting in production work as a director of others. We may pass on, therefore, to the way in which one secures jobs as a worker.

Unskilled and semi-skilled work. — Unskilled workers are those who have no training and who work at jobs that require

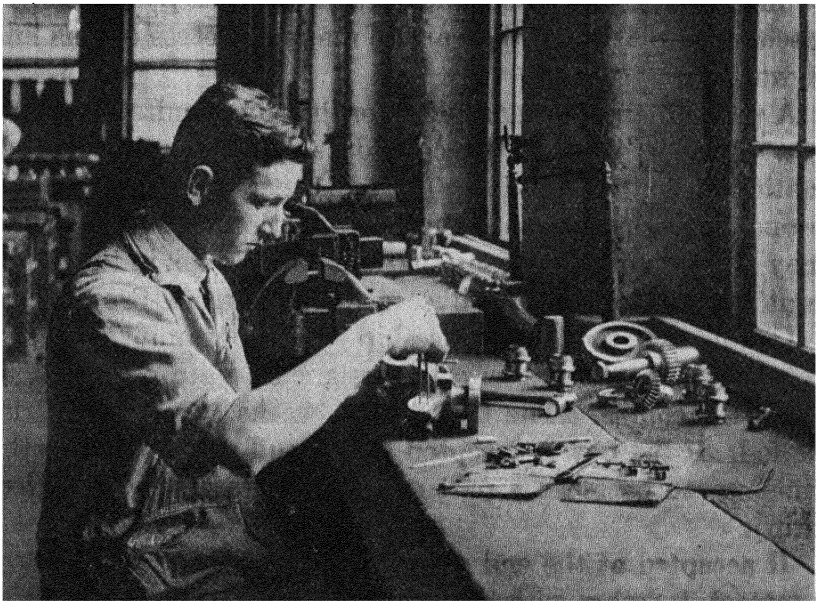
mere strength or only simple routine actions. Most such workers secure their jobs by making applications at the gates or employment offices of factories, mines, and other places where men are employed. Sometimes owners or managers advertise in newspapers that unskilled workers are wanted, and often one may learn of such jobs through friends or through employment agencies.

The difference between unskilled work and semi-skilled work is sometimes slight. A semi-skilled worker may not know a trade, but he may, from experience, know how to operate a machine or perform a number of simple operations properly. Many of the workers listed in samples 6, 7, and 8 above are semi-skilled. Semi-skilled workers find their places in much the same way as do unskilled workers.

The skilled trades. — Learning a skilled trade such as that of a molder, machinist, or carpenter is a much slower process. It may be well worth while. A skilled trade such as that of machinist can be used in many more businesses than knowledge of a job such as sewing-machine operator or gill-box tender. Something of trades may be learned in trade schools or in vocational courses. Usually, however, the road to the skilled trades is through apprenticeship, in some ways much like the old medieval apprenticeship. Of course the training for trades varies. To get an idea of apprenticeship, we cannot do better than to look at the following example of apprenticeship as it is employed by one manufacturing company for the important trade of tool-making.[1] The men so trained are able to use all the machines employed in making the tools and other fixtures connected with machines in modern manufacturing. They are called machinists.

[1] This statement is based on the booklet *Apprenticeship*, published by the Brown and Sharpe Manufacturing Company.

Apprenticeship system of the Brown and Sharpe Manufacturing Company. — The Brown and Sharpe Manufacturing Company of Providence, R. I., which makes machinery and tools, trains apprentices in six trades — machinist's trade, drafting, pattern-making, molding, core-making, and blacksmithing. They place the greatest emphasis on



Courtesy of Brown and Sharpe Mfg. Company

AN APPRENTICE WORKING AT HIS BENCH

the machinist's trade, however, for it is the foundation of their business. For this reason we have chosen the apprenticeship for this trade as our example.

Boys eligible for machinist apprenticeship. — To be eligible for a machinist apprenticeship a boy must be not less than sixteen or more than eighteen years old. He must have had a good common school education, equivalent to

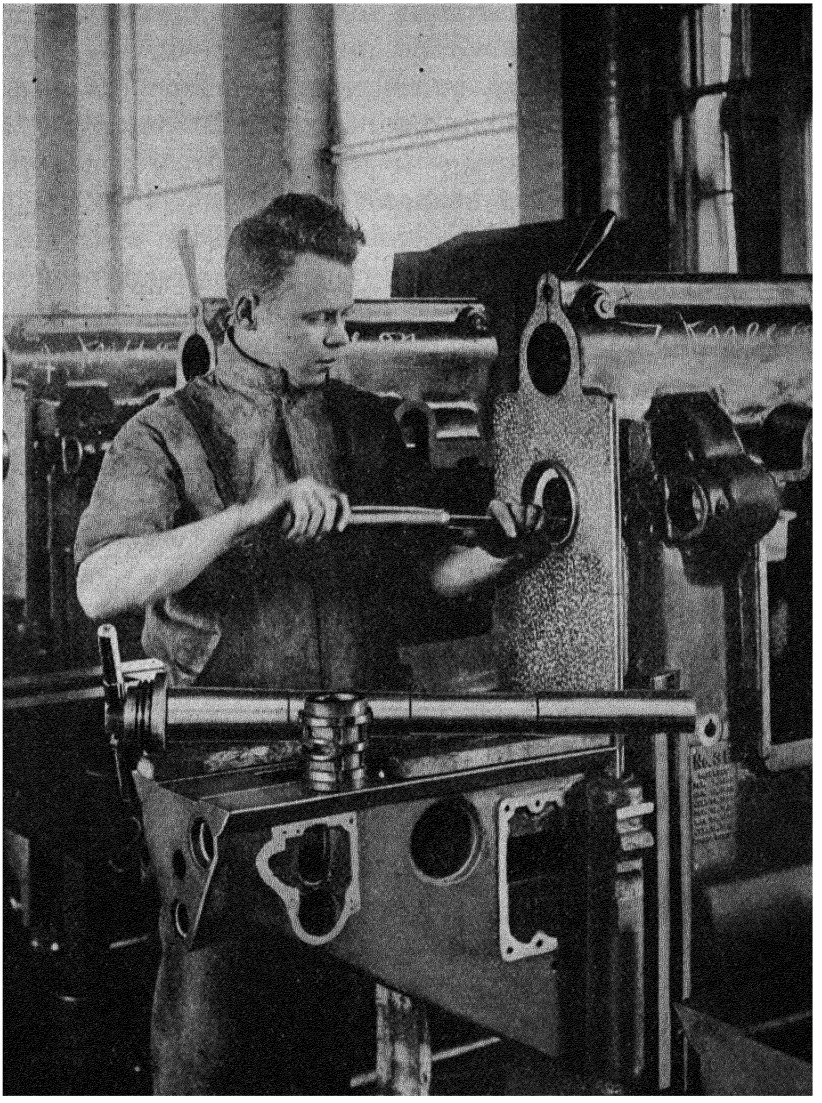
graduation from the grammar schools of Providence, and a sufficient degree of physical development to fit him for the trade. Only boys of good habits, whose sight and hearing are unimpaired, are accepted. Boys addicted to the use of cigarettes are not favored as apprentices, nor are boys who are simply " tired of school " and looking for a job in order to escape school work. It is important that boys should be mechanically inclined and have a natural perception of mechanical matters if they are to make a success of this line of work.

A preliminary examination is ordinarily required to show how much knowledge the candidate has of simple mathematics, including fractions, decimals, percentage, ratio and proportion, square root, and mensuration. Arrangements may be made for these examinations to be taken in the applicant's home town, if he lives a distance from Providence.

Candidates for apprenticeship whose examination and references are satisfactory are assigned a date on which to begin the course. The first twelve weeks constitute a trial period. If the boy is accepted at the end of this period, the time served becomes a part of the first year of apprenticeship.

If accepted at the end of the trial period, the boy signs a contract, together with his parent or guardian and an official of the company, indenturing himself to the company for a term of four years.

Work given to the machinist apprentice. — In order to learn the machinist's trade, it is necessary for a boy to be transferred from one department to another so that he may learn every step of the work done on a given piece of work. The boy starts with the simpler operations and is gradually advanced to work requiring greater skill. Some of the lines of work which the machinist apprentices take up are



Courtesy of Brown and Sharpe Mfg. Company

AN APPRENTICE APPLYING HIS TRAINING

centering, lathe work, drilling by the use of jigs, milling, fitting, assembling, screw-cutting, grinding, scraping, planing, gear-cutting, repair work, screw-machine operating, and tool-making. Definite periods are spent on each class of work, and transfers to the different departments are made in a regular and systematic order.

The school conducted in connection with the machinists' apprenticeship gives instruction in machine-shop mathematics, including linear and angular measurement, screw threads and gearing, calculating feeds and speeds of machinery, indexing, and in drafting, including jig and fixture work, cams, mechanisms. These subjects are all directly related to the work of the shop. The lessons are in the form of lesson sheets on which the work is done by the apprentices and which become their property at the completion of their apprenticeship, so that they can make use of them in their later work. Problems are approached from a standpoint somewhat different from the usual one. Without the use of textbooks, and without the learning of rules and formulas, problems are presented as they would arise in the shop, except that they are in regular sequence as to subject and difficulty. The boys are not taught algebra, geometry, and trigonometry, as such, but are instructed in the application of the principles of these subjects to the practical problems of the shop. The whole course is directed toward cultivating the reasoning powers and the power of observation, rather than toward memorizing rules. The machinist apprentices devote two hours per week to school work during the first two years of their apprenticeship, and four hours per week during the last two years. While an apprentice the boy is brought in contact with different officials of the company and given an opportunity for an exchange of views and for mutually helpful sugges-

tions. In this way the boy's progress may be noted and his ability developed along the lines for which he shows a particular aptitude. After he has completed his course he is advanced according to his ability.

Rates of machinist apprentice pay. — At the successful completion of the course the graduate is paid the sum of $100 by the company in consideration of faithful service. Apprentices are paid for each hour of actual service (not including time allowed for recreation or time when work is suspended) the following wages: for the first year not less than 19 cents; for the second year not less than 21 cents; for the third year not less than 24 cents; and for the fourth year not less than 28 cents. If the company terminates the apprenticeship during the trial period, it pays the apprentice for the time worked at the rate of pay in effect for the first year. It is possible for the apprentice to increase his earnings, however, in two ways: First, during part of the apprenticeship much of the work can be contract or piece work — that is, the apprentice is paid by the number of pieces he makes instead of by the amount of time he works. If he works fast and carefully, therefore, he may increase his earnings in this way. And second, by doing excellent work in school and at the bench he may have his wages increased to a higher rate per hour than the regular rates.

Lines of advancement. — Many of the important positions within this company are filled by past apprentices. Several department foremen and many sub-foremen are former apprentices, and responsible positions in the superintendent's department, the engineering and drafting departments, and the sales department are held by men trained in the apprentice courses. Many graduates are employed as skilled mechanics and toolmakers, and many more hold positions of responsibility elsewhere in the machine industry.

Molder's apprenticeship agreement. — Following is the form of agreement entered into between the boy, his father or guardian, and the company:

AGREEMENT made this.....day of.....A.D. 1926, between the BROWN & SHARPE MANUFACTURING COMPANY, a corporation established in the City of Providence, in the State of Rhode Island, party of the first part;.....(Name of Apprentice).....of .....(Residence of Apprentice).....party of the second part; and.....(Father or Guardian of Apprentice).....of..... (Residence)..... party of the third part.

WHEREAS the party of the second part is desirous of becoming an apprentice to the party of the first part, for the purpose of acquiring the art or trade of machinist,

NOW THIS AGREEMENT WITNESSETH:

That the party of the first part, in consideration of the covenants herein contained on the part of the party of the third part, hereby accepts the party of the second part as an apprentice in the art or trade of machinist, subject to and in accordance with the "Terms of Apprenticeship" which are given on the reverse of this agreement and made part hereof.

The party of the second part, in consideration of such acceptance, hereby agrees to become the apprentice of the party of the first part in the machinists art or trade, in accordance with the said "Terms of Apprenticeship," and to faithfully conform to the provisions thereof.

The party of the third part, in consideration of the covenants on the part of the party of the first part herein contained, for himself, his heirs, executors, and administrators, covenants with the party of the first part that he will pay the party of the first part, as compensation for receiving the party of the second part as an apprentice, the sum of twenty-five dollars ($25.00) — said sum to be paid at the expiration of the term of trial referred to in said "Terms of Apprenticeship."

The party of the third part, for himself, his heirs, executors, and administrators, covenants and agrees, to and with the party of the first part, that the party of the second part shall well and truly conform to and abide by all the provisions of said "Terms of Apprenticeship" and of this agreement.

The party of the first part covenants and agrees, in case the party of the second part shall serve the full term of said apprenticeship (including the making of lost time) as provided in said "Terms of Apprenticeship"

and shall in all respects comply with the provisions of said "Terms of Apprenticeship," to pay to the party of the second part, at the termination of said term of apprenticeship, in consideration of such faithful service, the sum of one hundred dollars ($100.00).

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals (the party of the first part by its duly authorized for that purpose), the day and year first above written.

Executed in the presence of { .....
.....
.....
.....

This is to certify that..... ..(Name of Apprentice)..... has served his full term of apprenticeship according to the above agreement.

BROWN & SHARPE MFG. CO.

Date..... Signed.....

QUESTIONS AND PROJECTS

1. A great part of the people of the world must be at work turning materials into finished goods if people are to have much of what they want. Why is this true? Do you think the people who make things are now a larger or a smaller part of the total population than in medieval times? What kinds of work are done by people who do not make things?
2. Why is there less specialization of work on a farm than in a factory?
3. Ask several members of your class to report, from their own experience or from reading, what some of the important jobs on a farm are and what work on a farm is like. From their report or from your own experience and reading, put down what seem to you the desirable things about farm work; the undesirable things.
4. Do for lumbering what you did in question 3 for farming.
5. Do for fishing what you did in question 3 for farming.
6. Do for mining what you did in question 3 for farming.
7. Do for factory work what you did in question 3 for farming.
8. Do for any one skilled trade what you did in question 3 for farming.
9. In an army there are privates and officers; in a factory there are workmen and those who direct them. Why does it seem to be necessary to have "bosses"?
10. Ask someone who has worked in a factory or a mine how he secured his job. Report to the class.
11. It is often said that the unskilled worker cannot sell his services excepting at the place of employment. What do you think this statement means?

12. Much knowledge formerly possessed by the craftsman has gone into machines. Explain. How has this affected trades? Jobs requiring no skill? Only a little skill?

13. Specialization has broken many trades into small bits of work which almost anyone can do. Explain.

14. Specialization has made it easier to get a job. Explain.

15. Specialization has made it harder to keep a job. Explain.

16. What are some of the skilled trades which are practiced in your town or city?

17. Have some member of your class inquire of a machinist or bricklayer or carpenter or molder and learn from him how his trade may be learned in your own town.

18. Have some member of your class find out from one of the larger manufacturers in the metal trades if there are apprentice schools in your town. If so, have one of the students report on them.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER XIII

THE BUSINESS MAN'S TASK OF SELLING GOODS

Why the Business Man Must Sell Goods

We often say that storekeepers or owners of factories must sell goods "to make money." In earlier chapters we showed how a manufacturer used his own money or funds borrowed from a bank, bought raw materials, hired workers, and produced some sort of manufactured goods — perhaps chairs, or automobiles, or shoes, or soap. In making these goods, however, he spent money, and unless the finished goods were sold at more than they cost him he did not make a profit. That, of course, is why business men want to sell their wares; they hope to secure the cost of making the goods and to have a profit left.

The business man who is running a store is just as anxious to make profits as the one running a factory or a farm; but he makes profits in a different way. The storekeeper buys large quantities of goods already made, instead of raw materials to be made into goods. He then places them in his store where it is easy for customers to come and see them and to choose what they wish.

Since profit is made only when sales are made, it is no wonder that business men look upon selling their goods as a very important task. It is doubtful if there is any other part of their work which they think so important as selling. They are always anxious to find people who can sell their goods at a price high enough to assure a profit.

How the Business Man Sells Goods

We have all seen the grocer " weigh up " a pound of sugar, count out a dozen eggs, or cut off a pound of cheese. We have seen him wrap the goods and hand them to the customer, or pack the goods in boxes to be delivered at the customer's house. But have we ever questioned why the customer came into this store instead of some other? Why did the seller, perhaps, agree to deliver the goods at the house of the buyer? Where did the grocer buy the sugar, eggs, and cheese that he sold? Why did not the grocer's customer buy them where the grocer bought them?

We can find the answers to some of these questions and at the same time understand better how goods are sold if we look carefully at the work of selling a commodity with which we are all familiar.

The experience of Henry Wilson. — The experience of Henry Wilson in running a flour mill and selling flour will furnish a good example. Henry Wilson, after leaving high school, worked in a grocery store. Shortly after he was twenty-one years old, he received word from a lawyer in Minneapolis that an uncle who had operated a small flour mill in that city had died after a long illness and left the plant to him. Henry went to Minneapolis and decided to operate the flour mill and sell its products himself.

He found that the mill was capable of producing much more flour than was being sold. At one time its output had been sold widely; but his uncle, in ill health, had allowed the sales to fall off. The product of the mill, which was now running at half capacity, was being bought by two large bakeries in Minneapolis. Henry soon decided that an effort should be made to sell more flour. Being young and

with no experience in manufacturing and selling, it is not strange that he made some mistakes.

Remembering his experiences in the grocery store, Henry decided that he would undertake to sell the increased product directly to the people who used it. He knew, of course, that the important users were housewives and the bakers in every city. He began a tour of the housewives in Minnesota. Nearly everyone agreed to buy some flour from him, but none took a large supply. He soon realized that it would take him a long time to sell even a few carloads of flour in this way. In the meantime his expenses for traveling became large. Furthermore, he began to receive telegrams from the men whom he had left in charge of the mill telling him that he was needed in Minneapolis to buy wheat, to borrow money at the bank, to hire new employees — to do all of the tasks that it is necessary for the business man to carry on. (See Chapter VI.) Henry therefore returned to Minneapolis.

He next considered selling flour from his mill in carload lots to owners of such stores as the one he had formerly worked in, but he concluded that calling on the storekeepers would prove almost as undesirable as calling on the housewives, because of the time required. He therefore hired fifteen men, some of whom had formerly worked for his uncle. Each was assigned one middle western state. Each man traveled in the state given him, calling on retail storekeepers and bakers and selling Wilson Flour.

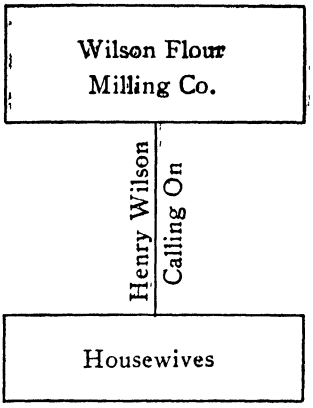
In many cases it was not necessary for the salesmen to go to the retail storekeepers. There are in business a number of concerns known as *wholesalers of groceries*. These wholesalers are willing to buy in large quantities to sell in turn to the retail storekeepers. It was decided to try selling to wholesalers only in certain states. Although the sales to

the wholesalers were made at a lower price than sales to retailers, it was believed that the saving in salaries and traveling expenses of the salesmen — for the number was reduced from fifteen to seven — made up for the price difference. After the new method had been in operation for a short time, three charts were made showing the plans which the Wilson Flour Milling Company had considered or used in selling. The charts looked like those on the opposite page.

Advertising became necessary. — Every year for the first five years in which Henry Wilson conducted his milling business, he sold more flour than he had the year previously, and he made more money each year. It was in the sixth year he noticed that less of his flour was being sold. He asked his salesmen why. They told him that it was harder than before to get retail and wholesale grocers to buy Wilson Flour. This was not because Wilson Flour was poorer or because the price was higher; it was due to the fact that housewives were coming into the stores asking for Sunbeam Flour, which was made by another company. As long as Sunbeam Flour was asked for, the grocers wished to carry it in stock and, of course, did not buy as much Wilson Flour as before.

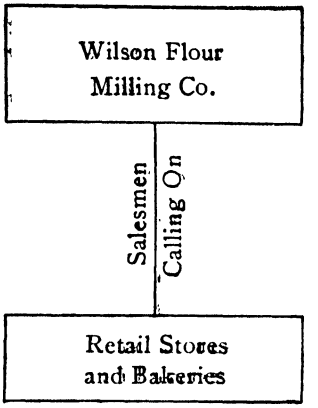
Henry Wilson decided it would be necessary to talk to the housewives after all. But he had learned that he could not do it by going to them himself. He saw that he must talk to them through magazines and newspapers and tell them why he believed that they should buy Wilson Flour.

He consulted an *advertising agency*. (An advertising agency consists generally of a group of men who make it their business to help manufacturers and others select the best magazines or other media in which to advertise, and who help in writing the things which shall be said in the advertisements and in doing other work connected with



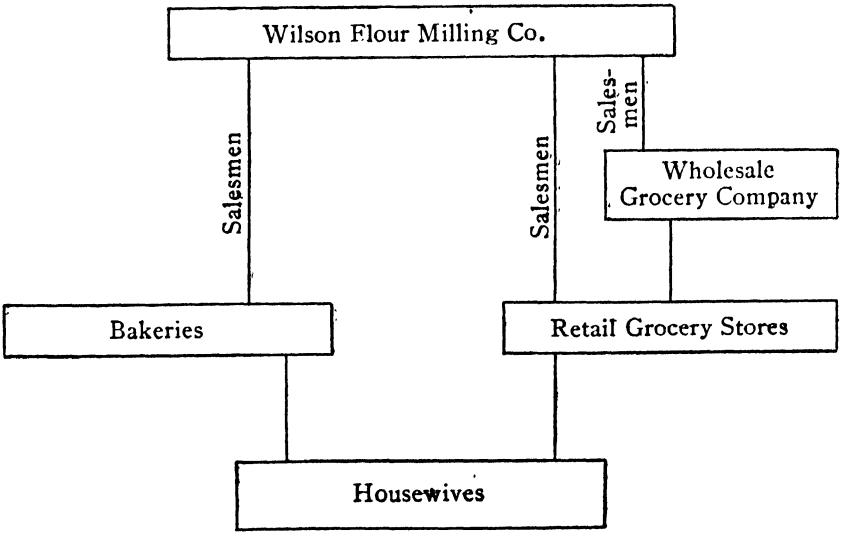
PLAN I

THE WAY HENRY WILSON FIRST SOLD FLOUR



PLAN II

THE SECOND METHOD CONSIDERED



PLAN III

METHOD FINALLY USED TO SELL FLOUR

THE THREE SELLING CHARTS OF THE WILSON FLOUR MILLING COMPANY

advertising.) It was decided to run a full-page advertisement in each issue of the *Thursday Night News* during the next year. This magazine, it was known, went to thousands of homes. In addition to this it was decided to have advertisements each month in three magazines read largely by housewives. The ones selected were *The Housewife's Friend*, *Keeping House*, and *The Kitchen Economist.* Advertisements somewhat like the one at the left appeared in each issue of these magazines during the next year.



AN EXAMPLE OF MAGAZINE ADVERTISING

Advertising that appealed to grocers. — The Wilson Flour Milling Company did not stop with placing advertisements in papers read by housewives. They placed advertisements also in magazines such as the *National Grocer*, which are read by men running grocery stores.

Before the advertisements appeared in the housewives' journals, letters were sent to wholesalers and retailers telling them of the advertising that was planned. The salesmen showed the dealers illustrations of the advertising that was to be done and pointed out that this advertising would create a great demand for Wilson Flour. As a result, grocers increased their orders.

The Wilson Flour Milling Company supplied retail grocers with a number of recipe books. These books contained

excellent recipes for all sorts of good things to eat, the making of which called for Wilson Flour. The books were for free distribution to housewives who asked for them. Many did ask for them after reading the advertisements which said they could be obtained free of charge.

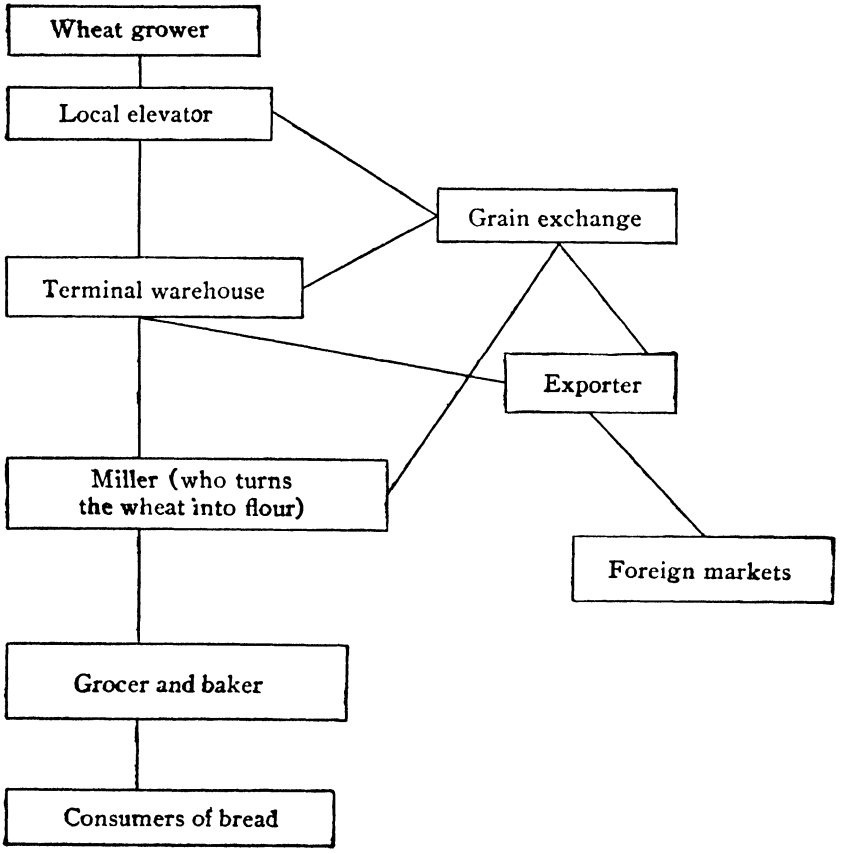
Whenever a grocer would order as much as half a carload of Wilson Flour, the milling company would do other things to help him sell it. Such grocers, for example, were provided with large signs which they could place in their windows. These signs read:

> WE SELL WILSON FLOUR
>
> Get Your Free Recipe Book Here To-day

They also provided these grocers with bright green pencils to give to boys and girls in the neighborhood. On these pencils was printed in red "Ask your mother to make cookies with Wilson Flour." Hundreds of white cloth caps upon which was printed "Wilson Flour Bakes the Cake" were also given to grocers for small boys who came in to the store. As a result of these devices, sales of Wilson Flour greatly increased.

Henry Wilson's experience illustrates selling tasks. — The experience of Henry Wilson in selling Wilson Flour illustrates for us many of the tasks that need to be performed by a business man in carrying on his work of selling. Many manufacturers find it advantageous to sell their goods to other merchants, usually wholesalers or retailers, who in turn sell them to other merchants or users. The following charts show, respectively, how growers of wheat, manufacturers of films, makers of stoves, and producers of eggs sell their products through others.

Selling requires other work. — The case of Henry Wilson illustrates not only the need of making connections with other merchants, but also the other tasks of selling. Manufacturers and merchants alike must decide whether it will

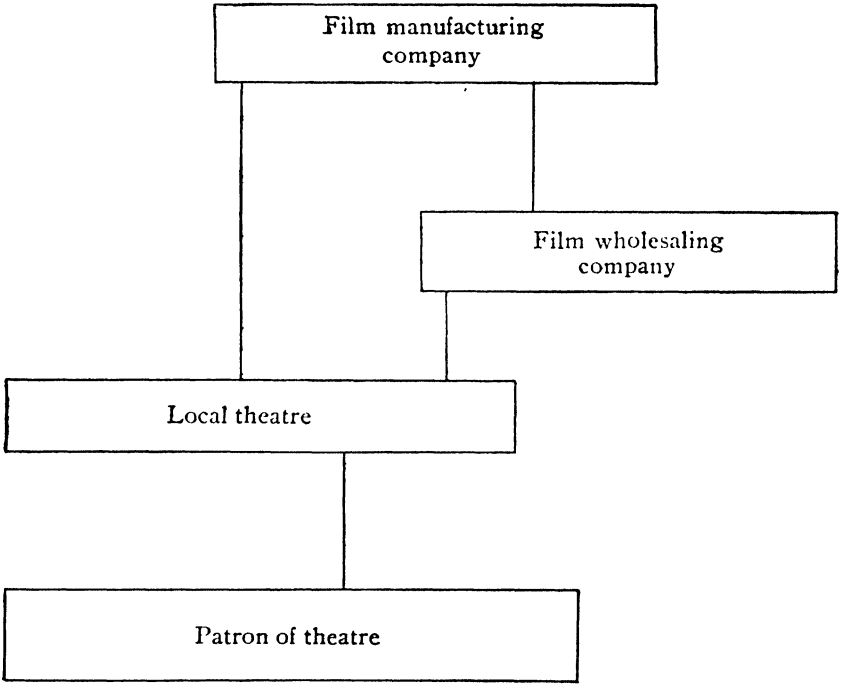


How Wheat Travels from the Grower to the User

pay to advertise. If they believe it will, they must select the best newspapers, magazines, or other media. Nearly every seller will need some salespeople either to travel or,

as in the case of a store, to work behind the counter. These salespeople must be chosen and trained for their work.

If the business man decides it will pay to help others sell his goods, as Henry Wilson helped the retailers who sold his



How Photoplays Are Marketed

flour, he will need to plan the best and most economical ways of getting results.

Selling is one of the most interesting and strenuous tasks of the business man.

QUESTIONS AND PROJECTS

1. Why are storekeepers or factory owners anxious to sell goods?
2. A manufacturer says that to make money he must sell goods for more than they cost him. Make a list of the things which you think go into a manufacturer's costs.

3. A merchant makes the same statement. Make a list of the things which you think a shoe merchant would have to count as costs.

4. A man once said: "A storekeeper should not have any profit, for he does not make anything. He sells me just what he bought." Discuss this statement.

5. We rely on competition to see that a storekeeper does not make too much profit. Look up the word "competition" if you do not know its meaning. Can you explain this statement?

6. Make a list of five articles that you might buy in a grocery store. Find out from the grocer where he buys these articles. See if you can trace them back to the manufacturer. Have some member of the class do the same for two articles in a drug store; a drygoods store; a meat market; a fruit store.

7. List the advantages and the disadvantages for a manufacturer in selling to users; to retailers; to wholesalers.

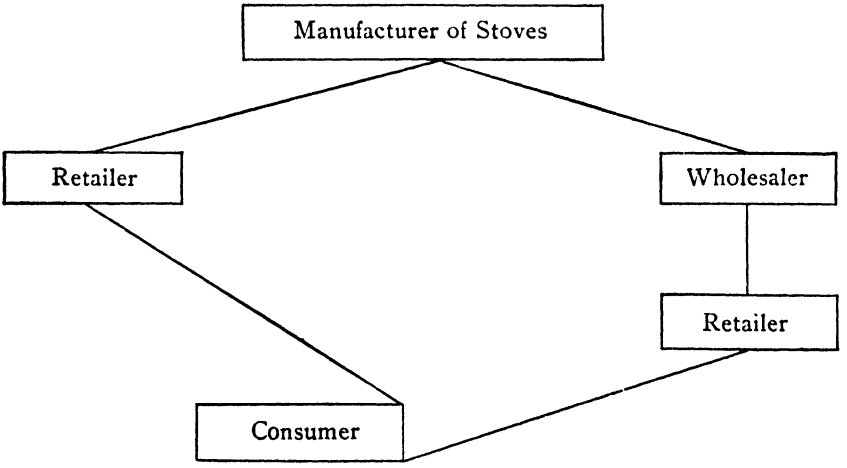
8. Show why a manufacturer uses advertising.

9. Clip five advertisements of merchants from your local newspaper and bring them to class. Show just what the purpose of each is. Clip five advertisements from a magazine and bring them to class.

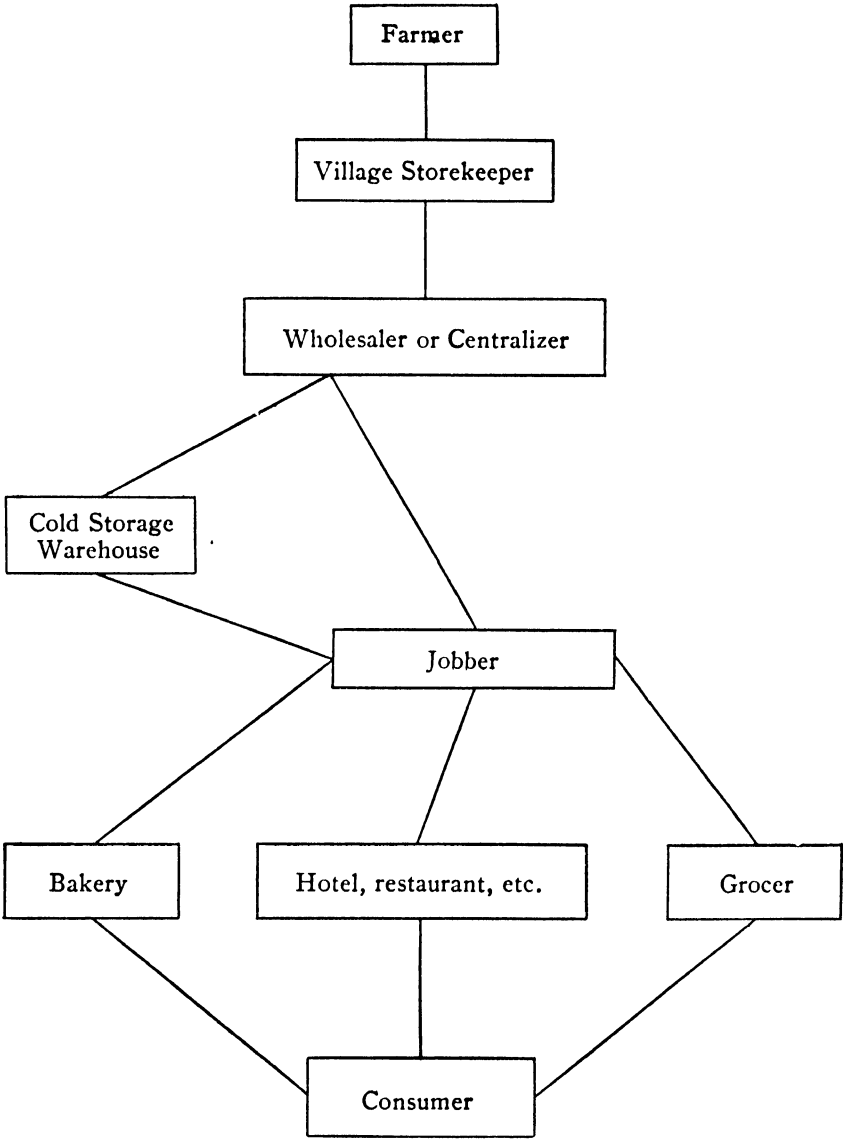
10. If you were a merchant in your own town, would it be better for you to advertise in the *Saturday Evening Post* or in a local newspaper?

11. Why would a manufacturer of shoes put advertisements in magazines read by shoe merchants?

12. Make a list of as many things as possible that a manufacturer of stoves might do to call attention to his product.



HOW A STOVE MANUFACTURER SELLS HIS OUTPUT



THE TRAVELS OF AN EGG IN THE PROCESS OF MARKETING

13. Could a craftsman in the medieval days have advertised his goods to all the people in the country? Would he have wished to do so? Why, or why not?

14. Could a medieval merchant have advertised his wares to all the people in England? What are some of the ways in which a modern merchant can advertise that could not have been used by a medieval merchant?

15. Make a list of several kinds of work that one might find in helping manufacturers or merchants to sell goods.

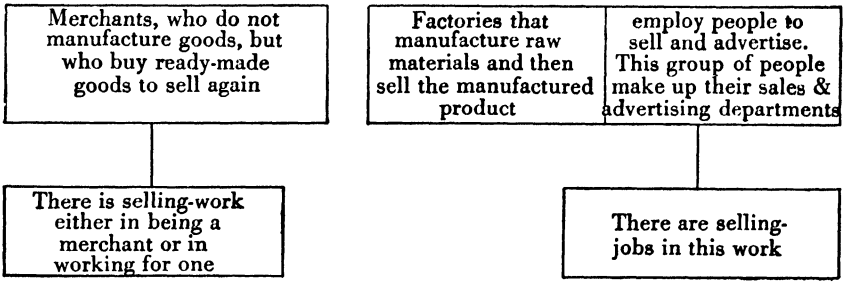
SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER XIV

JOBS IN SELLING

In the preceding chapter we learned the chief tasks of a business man in selling goods. That chapter gave us a broad view of selling. It showed us that there are two main ways in which one may make a living in selling. One of these is to be a merchant. The other is to aid a maker of goods or a merchant in selling goods. The following chart shows where jobs in selling are to be found:



OPPORTUNITIES IN SALESMANSHIP

THE SELLING-WORK OF A MERCHANT

If one decides to be a merchant, he has a wide choice in the *kinds of goods* that he will handle. He may wish to work with shoes, groceries, clothing, hardware, drugs, furniture, or any one of many kinds of goods. He also has a choice as to the *kind of merchant* he will be. That is, he may choose to be a wholesaler, a retailer, a sales agent, a broker, an auctioneer, or possibly some other kind of merchant. We shall discuss all those mentioned; but the first two of these classes are much more important than the others.

Wholesalers. — Wholesalers or "jobbers" as they are often called — the two terms mean the same thing in most lines of business — are those merchants who usually buy from makers of goods, such as manufacturers or farmers, and resell the goods to retail stores. We saw in the last chapter the work of the wholesaler in buying flour from Henry Wilson and reselling it to grocers and bakers. There are wholesalers in many fields. There are wholesalers of groceries, hardware, fruit, vegetables, butter, eggs, shoes, drugs, and many other products.

Retailers. — Retailers are the storekeepers who sell goods to *users*. The United States census for 1920 shows that there were not far from 1,500,000 retail dealers in the United States, nearly 80,000 of whom were women. In retailing as in wholesaling, one may choose to sell almost any kind of goods. We are all familiar with the retail grocer, druggist, butcher, shoe man, and clothing dealer; but we should remember that there are also many other retailers. For example, sellers of bonds, insurance, and real estate are often retailers. (Look at the illustration on page 133.)

Retail stores are of many sizes as well as of many kinds. We need only be reminded of this, as in our study of occupations in buying we became familiar with mail-order houses, department stores, and chain stores, as well as the small store of the ordinary dealer.

Sales agents. — These are an interesting kind of merchant. Not everyone is familiar with them. One of the commonest kinds of sales agent is the manufacturer's sales agent. The manufacturer's sales agent is a man or woman who carries on selling work for one manufacturer or several manufacturers. Such a person does not work for the manufacturer as a salesman does, but is in business for himself. He does not keep a store, but usually has an office of his own and is pro-

vided with sample goods which he shows to possible buyers. Often he travels through many states or even over the entire country to show samples of the manufactures he represents. The United States census for 1920 shows there were over 41,000 sales agents in the United States, over 1,500 of whom were women.

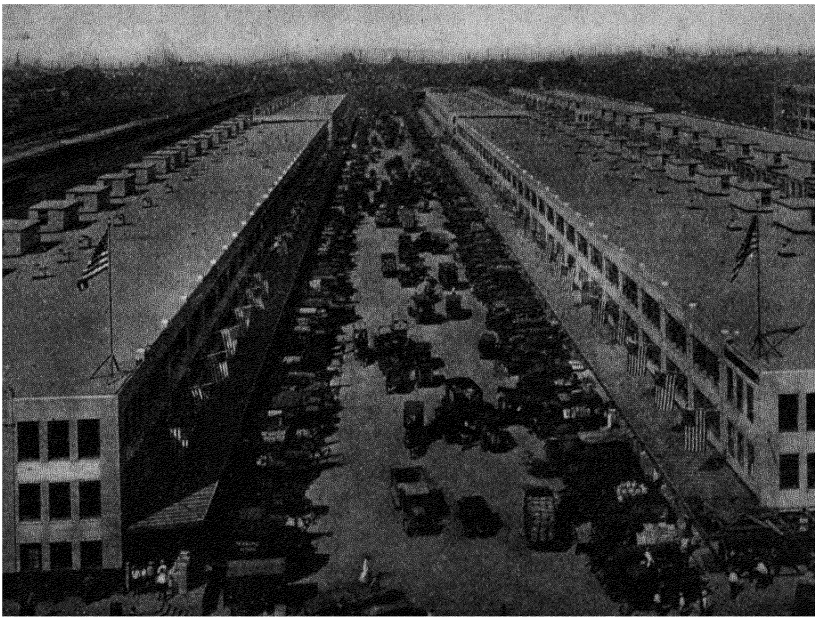


Photo by Brown Brothers

CHICAGO PRODUCE MARKET

Here come the fruit and vegetables that feed the great city of Chicago. The important persons here are wholesale merchants of fruits and vegetables, and commission men.

The manufacturer's sales agent must, of course, know the goods he is selling. One of the best ways to get into this business is to work as a salesman for a manufacturer. In this way one will learn something of goods and buyers and of how goods are sold.

A kind of sales agent much like the manufacturer's sales agent is the *insurance agent.* Insurance agents often work for only one company. In larger cities, however, they usually represent several companies and sell different kinds of insurance, such as fire, accident, and life insurance. The



Courtesy of Robert H. Moulton

BROKERS BUYING GRAIN AT ONE OF THE CASH GRAIN TABLES OF THE CHICAGO BOARD OF TRADE

These bags contain samples of grain taken from cars which have arrived in Chicago. Inspection of the samples renders unnecessary inspection of the cars of grain. Many of these men are brokers selling for country elevators, or buying for millers or other consumers.

business of selling insurance requires chiefly ability to sell and knowledge of the thing sold. Very little or no money is required. In 1920 there were more than 5,000 women and nearly 115,000 men working as insurance agents.

Brokers and commission men. — In one sense *brokers* and *commission men* are not merchants at all. That is, they are not merchants if we think of a merchant as one who buys goods and re-sells them. Brokers and commission men do their work in bringing together a buyer and a seller. For this they charge a price called a "commission." In our study of how the business man secures money, we saw how financial brokers bring together buyers and sellers of stocks and bonds. (See page 133.) There are also brokers and commission men dealing in many other things, such as sugar, grain, coffee, live stock, and real estate. The last United States census finds that more than 150,000 men and 5,000 women are in some kind of brokerage or commission work.

Auctioneers. — About five thousand people in the United States are auctioneers. Auctioneers are employed to sell goods for others at public sale to the highest bidder. Usually auctioneers are used to dispose of a farmer's equipment when he is leaving the farm, or to sell out a stock of goods for a merchant who has become bankrupt or is retiring. In some cities there are large daily auctions of fruit. The openings in this occupation, however, are comparatively few.

Occupations in Selling for Others

No matter what kind of merchant or manufacturer one is, there are many kinds of tasks in getting goods sold. All of these open occupations. Many of them we saw illustrated in our little story of Henry Wilson. Tasks which might be discussed under selling include advertising, supervision of salesmen, correspondence, delivery of goods sold, and clerical work connected with selling. Clerical work and correspondence are important in selling as they are in every other task of business men, but we will discuss them in Chapter XVI. Delivery of goods is covered in the chapter on Transporta-

tion (Chapter XV). At this place, therefore, we shall talk only about advertising and salesmen and the jobs that are found in these fields.

Fields of work in advertising. — Work in advertising has opened many occupations. These include —

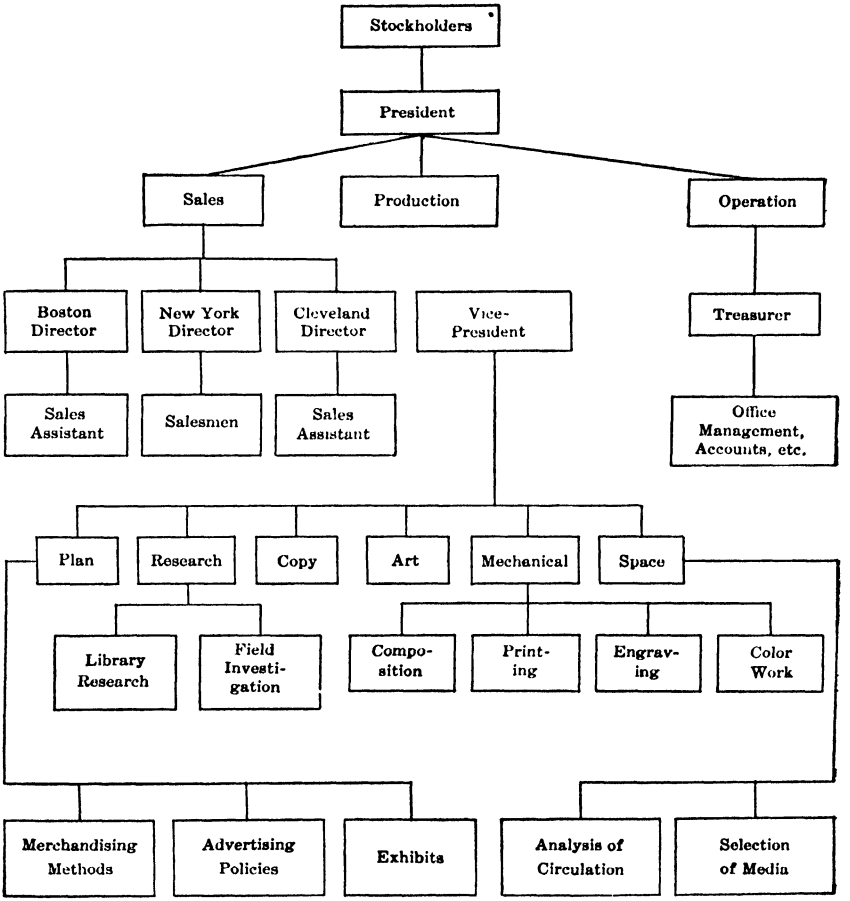
1. Work in advertising agencies
2. Work in advertising departments of a business
3. Work for advertising media
4. Work for advertising craftsmen



AN ADVERTISING AGENCY'S ADVERTISEMENT

Look in your newspaper for advertisements of various kinds of sellers.

Advertising agencies. — Businesses that do nothing but prepare and distribute advertisements for other businesses



ORGANIZATION OF AN ADVERTISING AGENCY[1]

are called "advertising agencies." This chart shows the extent and variety of their work.

Since advertising agencies do so many kinds of work in

[1] S. R. Hall, *The Advertising Handbook* (McGraw-Hill Book Company), p. 70. Adapted by permission.

helping business men to sell, they offer many kinds of occupations. To begin with, persons are employed to sell each agency's services to advertisers. This work is not different from the work of any other salesman. Then people who can write well about goods that are to be advertised are employed to "write copy." As the "copy" often requires illustrations, advertising agencies employ artists. The "copy" and illustrations later appear in newspapers and magazines or on billboards, car cards, or other media. Each advertising agency must also have a "buyer" who buys space in newspapers and other media.

Qualifications needed for this kind of work. — Work in an advertising agency requires qualifications that depend upon the type of work to be done. To write copy, one needs most of all a thorough ability to use English. The art work requires special training in drawing and designing. Selling the agency's services requires the qualities needed in any selling work, and all possible knowledge about how goods are sold and about the work of the agency. Buying space in media demands a knowledge of the kinds and uses of these media which can come only from considerable experience in advertising.

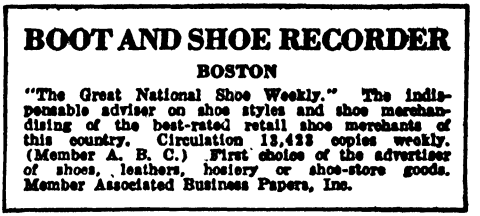


ONE ADVERTISING AGENCY'S DESIGN
In advertising art there is demand for the greatest resourcefulness and originality.

Advertising occupations in the business house. — Not every business man who needs to advertise uses an agency. If he does not, he must do for himself the work that an agency would otherwise do. This means that the same occupations that would be open in an agency (excepting selling

the services of the agency) will be found in the advertising departments of businesses that do their own advertising. In charge of such a department is an executive generally known as the *advertising manager*.

Work for advertising media and for advertising craftsmen. — Everyone has seen advertisements in newspapers and magazines and on walls and billboards. The owners of such media are anxious to sell space to advertisers. They employ salesmen and use advertising and any other sales methods to gain their end. There are, therefore, all kinds of selling occupations offered by advertising media.


BOOT AND SHOE RECORDER

BOSTON

"The Great National Shoe Weekly." The indispensable adviser on shoe styles and shoe merchandising of the best-rated retail shoe merchants of this country. Circulation 13,423 copies weekly. (Member A. B. C.) First choice of the advertiser of shoes, leathers, hosiery or shoe-store goods. Member Associated Business Papers, Inc.

THE ADVERTISEMENT OF A TRADE JOURNAL

Shoe manufacturers are invited to advertise their goods in the trade journal, "Boot and Shoe Recorder."

Since most advertising is done through printing and illustrating, there are a number of businesses that specialize in the craft work necessary to put thoughts on paper. Printing is one of the most important of these crafts. But to transfer pictures and drawings to paper there are a number of other crafts, such as engraving and electrotyping, which are very important. Many men have found that work at these crafts has led to other important work in advertising and selling. In 1920 the census showed that there were over 59,000 people (over 57,000 of whom were men) engaged in printing and engraving and related industries in the United States. Besides this number, there were 91,839 laborers and semi-skilled operatives engaged in printing and engraving work (43,672 of these were women). These figures give some idea of the number of people who earn their living by the crafts employed in advertising.

By no means all of these people are concerned with advertising alone; but, directly or indirectly, a large part of the development of opportunity in printing and related work has come from advertising.

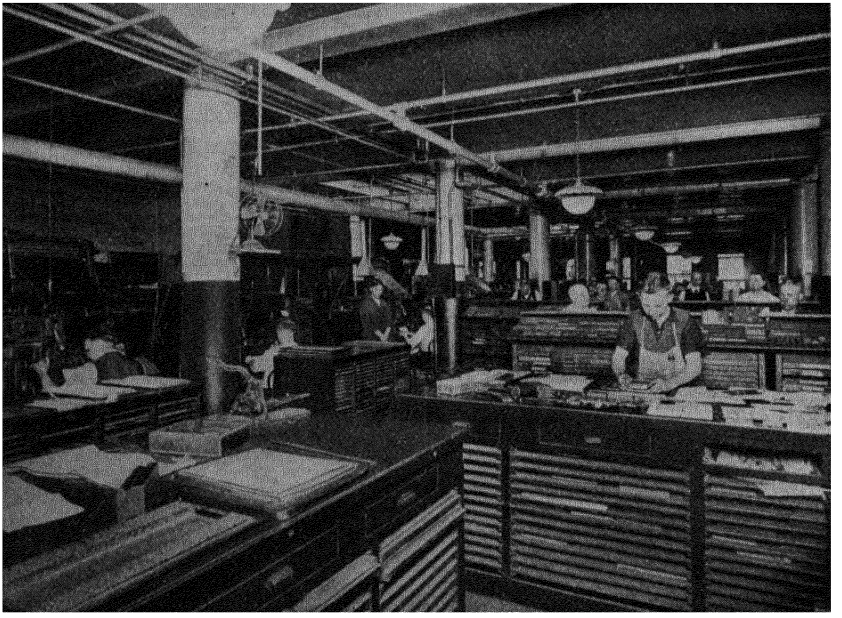


Photo by Brown Brothers

COMPOSING ROOM IN A PRINTING PLANT

At the left men are operating type-setting machines. At the right, a man is arranging type by hand.

Salesmen and jobs in selling. — Advertising alone cannot usually be relied upon to sell goods. Actual sales are usually made by salespeople — men or women, boys or girls. Perhaps all persons who sell goods can be put into two classes — house and traveling salespeople. House salespeople are those who stay at the factory, store, or office of the business, receive customers, and attempt to sell them goods. The



"Sheldon High School *vs.* Harvard High School" to be printed here in thirty-point Bodoni Bold type

"City Ball Park" to be printed here in eighteen-point Bodoni type

"Everybody out to support the Team" to be printed here in fourteen-point Bodoni Bold Italics

"Saturday, Nov. 14, 2:30 P. M." to be printed here in nine-point Cheltenham type

"Tickets 25¢" to be printed here in eight-point Cheltenham type

13″

20″

A Plan or "Dummy" for a Football Poster

When such a plan is received by the printer, the picture must be reproduced by an engraver, the copy set up in type according to directions, the proof of type and drawing examined for errors, and the whole printed.

most common example of such salespeople are those we meet every day in department stores, grocery stores, drygoods stores, and meat markets. Wholesalers also have house salesmen to offer goods to customers who come in from other parts of the city or from other cities. Some salespeople in factories, retail stores, or wholesale houses do their selling mostly over the telephone. Such salespeople are sometimes called *telephone solicitors.*

What traveling salespeople do. — Traveling salespeople are the men and women — they are much more often men than women — who are employed by manufacturers, wholesalers, or others to travel about the country showing samples of the company's goods and taking orders from customers. Sometimes in large cities these traveling salesmen are kept very busy just calling on the customers in the city where their employer is located. They are then usually called city salesmen. The census shows that there were 179,320 traveling salespeople in the United States in 1920; of these, 2,806 were women.

Salesmen who travel must do many things. They are expected to tell the customers whether prices are likely to be higher or lower, how soon deliveries can be made, whether new patterns or models will soon be offered. Very often, too, salesmen must be able to show just what can be done with the article which they are selling. For example, a man who sells adding machines should be able to demonstrate the many uses of such machines. If one is selling automobiles, he must be able to demonstrate the automobile. If he is selling complicated machinery, he needs to understand it to explain its uses and its values. Of course his main job is to sell the goods of his company. Everything else contributes to that end.

Some salespeople are not expected to sell. — Some men

who are on the sales forces of large companies are not expected to sell goods at all. They are expected merely to make it easier for salesmen who follow them to secure orders. A good example of this is the expert in belting employed by one manufacturer of machine belts. This expert gets permission to go through a factory and study the different machines. He then carefully draws up a plan for furnishing all the machine belts needed. This plan is taken by a man who may not know much about belts but who knows a great deal about how to induce people to buy. He attempts to get the owners of the factory to buy the belts which have been suggested by the belting expert. For the first kind of sales work, a knowledge of machinery, factory methods, and mechanical engineering is of more importance than ability to sell.

Sales executives. — Salesmen who know enough about how to handle other men and how to plan work for them become *sales executives.* Nearly every business that sells goods has a *sales manager* and *assistant sales managers* to plan the work of the salesmen. Sales managers are usually men who have a good education and who have had experience as salesmen. Very often experience alone serves them well.

Qualities necessary for salesmanship. — Many sales managers have described the qualities required to be a good traveling salesman. In general they agree that a salesman should possess —

1. As much education as possible, for he needs to meet all sorts of people.
2. Energy and industry, for he must work alone and while " the boss " is far away.
3. Good health, for life on trains and in hotels is hard.
4. Ability to talk well, for he must persuade.

5. Patience, for customers are not always considerate of him.

Sales work in retail stores by house salespeople. — In thinking about retail stores, remember that there are different kinds and sizes. Selling in them differs in some ways, but is alike in other ways in all of them. Retail stores offer many openings for work. In 1920 there were 1,125,782 retail salespeople in our country; of these, 356,321 were women.

A few years ago young workers nearly always entered stores from grammar school; now the tendency is to prefer high-school graduates. It is believed that greater maturity and better education make for greater efficiency and justify higher wages. Merchants see that a smaller group of people, carefully selected and well trained along the lines of their work, are a much better business investment than a larger untrained group upon a low wage scale.[1]

Nearly all persons who have studied retail selling agree that for selling in stores one should have tact, self-control, good taste in dress and appearance, courtesy, patience, good manners, understanding of the methods used in the store, and a thorough knowledge of the goods which are being sold.

What a salesperson in a retail store needs to know is thus described:

> The salesman must know his stock as to kind and variety of merchandise, its quality and values, and its position on the shelves or in the department, as well as what is in reserve or on order. He should be able to answer customers' questions on such points as grade, quality, style, finish, durability, popularity, size, quantity, and different makes and brands, with the characteristics of each.
>
> It is also necessary that he soon become thoroughly familiar with the system of sales checks peculiar to his store in order that he may properly

[1] Federal Board of Vocational Education, *Bulletin No. 22*, "Retail Selling," p. 16.

handle different kinds of sales, such as charged, sent C.O.D., charged to one address and sent to another, and shopping on a transfer; also that he know when it is necessary to have his floorman's O.K. on irregular transactions, such as special deliveries, goods charged and sent on approval, exchanges, refunds, discounts, etc.

It is necessary and desirable that he know the store sufficiently well to be able to direct patrons and answer their questions. To do this he must know the location of departments and merchandise sections, of special features such as the tearoom, the children's playroom, the foreign department which provides the services of interpreters, goods which are being prominently featured in other departments, and the special sales which are advertised.

The competent salesman must understand how to approach the customer — how to be courteous and deferential without overdoing it. He must also know what kind and how much of his stock to show. In certain departments, such as the silk or dress goods, he must have the technique of handling material. He must know how to show it so that the customer will see its best qualities. Every variety of merchandise has its own peculiar technical knowledge which must be acquired by the expert salesperson.

It is necessary that the salesman keep his counter space in order and report to the buyer in regard to the movement of the stock. In addition to the above, if he is selling yard goods he must know how much it takes to make certain articles and must be rapid and accurate in the use of elementary processes of arithmetic, particularly multiplication and fractions. He must take dictation of proper names and addresses rapidly, write them plainly, and spell them correctly. The wage is from $10 a week up, plus commissions and P.M.'s.[1] (P.M.'s are a form of commission.)

Another study of work in department stores shows that different knowledge is necessary for selling different kinds of goods:

The girl who sells handkerchiefs must have a knowledge of linen, lawn, cotton, mercerized cotton, shamrock, and light silks. She should know the combination of fibers and be able to tell from the appearance and feeling just what is the combination in a particular handkerchief. For example, she should know that in certain high-priced handkerchiefs the thread running one way is linen and that running the other shamrock. She should know that this makes a more sheer and a softer-looking hand-

[1] Iris Prouty O'Leary, "Department Store Occupations," *Cleveland Survey*, p. 60.

kerchief than pure linen, but is not so durable. She should know that French linens, because of their greater brilliancy, are more desirable than Irish linens. She should know the difference between domestic and foreign goods, between hand and machine embroidering, between punched and pulled hems, between real and Armenian lace, and between either of these and imitations. She should know which colors are fast and which are likely to fade, so that she can tell the customer about the care needed in laundering.

Most persons are not in a hurry when buying handkerchiefs, so the girl must have the skill to give many points as to value in beauty and wearing qualities, and to show goods in detail. She should like details and be perfectly familiar with the workmanship on handkerchiefs. The work does not require measuring or estimating fractional parts, so computations are easy. . . .

The *salesperson who sells gloves* should know the leathers and fabrics used, the care of gloves, and how to fit all kinds. The knowledge of fabrics should cover silk, cotton, lisle, and chamoisettes; that of leather should cover lamb leathers such as capeskins, mochas, chamois, and dogskins, and kid leathers such as suède. She should know enough about gloves to make the customer understand that care must be exercised in washing a doeskin glove because it is the process of manufacture and not the leather itself which has made it washable. She should know the various parts of a glove and the different methods of seaming, such as prix seam, piqué, and round seam, and the customary usages and peculiar merits of each. If she understands the manufacture of gloves she can explain the difference in durability, softness, and purpose of each style of glove and can give the customer much acceptable information about their proper care. A saleswoman must know how to use the stretcher and powder, and . . . she should know the best position for the customer to assume while being fitted.

The *salesperson who sells jewelry* should have a knowledge of silver, because much jewelry is made of silver. She must know what is meant by gold-filled, gold-rolled, and gold-front jewelry. She should be able to show interesting things about different pieces of jewelry, as, for example, the desirability of a chain composed of soldered links as compared with one having unsoldered links. She should have accurate knowledge of the materials used in buckles, pins, bracelets, hair ornaments, fancy purses, and beads. Jewelry is a part of dress and so is affected by style, to which the salesperson should give attention.[1]

[1] Leverett S. Lyon, *Education for Business* (University of Chicago Press, 1923), pp. 197–200. Adapted from *Minneapolis Vocational Education Survey*, pp. 408–17. United States Bureau of Labor, *Bulletin No. 199.*

Some things about selling can be learned in school. — These descriptions of the work required of salespeople show us that many things can be learned in school and that many other things can be learned only at work.

We have seen, for example, that the people must know a good deal about the goods that they are trying to sell. But there are thousands of kinds of goods, and since few people know before they leave school just what they may sell, it is better to wait until one is handling the goods to learn details about them. This is especially true if the store in which one works has a training plan or school, as many stores now have. Of course, the work is also made simpler if studied while at work, because then one needs to study only the goods with which he is dealing.

There are many things about selling, however — and they are the more important things for one who is ambitious to rise to the better-paid positions — that can be learned better in school than afterward. When one works in a store, he is so busy doing the specialized work of selling that he has little opportunity to notice what the manager or owner is doing. On the other hand, the manager or owner has no time, even if he is willing, to explain his plans to his salespeople. And so it is with the salesman who is traveling for a manufacturer or a wholesaler. He, like the retail salesperson, might like to know how his employer buys his goods, how he knows the best places to send his salesmen, how he decides what salesmen should be paid, and other matters that the manager must decide. But he cannot learn these things easily while he is at work. In some high schools, however, and in many colleges, there are courses in *selling* or *marketing* that discuss these matters and that give students a chance to learn how best to prepare for the better selling-jobs.

There are also special schools which teach men and espe-

cially women how to become teachers of salespeople in stores. New York University has such a school. The Prince School of Boston is another. Many high schools now have courses in retail selling that give one what he needs to know to be a good salesperson. Often these courses are carried on with the student spending half of his time in the store and half in school. This usually makes it possible to learn the work more satisfactorily and to earn at the same time.

School courses that teach selling. — One can see how desirable it is for all who do selling work to know as much as possible, not only about selling, but about buying and manufacturing. It will be worth while to look for other courses in your high school that will give you more knowledge about the whole field of *marketing*. If one wishes to become a business man or to fit himself into the selling work of some business man, such courses will be most helpful. Colleges and universities in their schools of business carry such work even further.

Some promotions from retail selling. — Selling, if well done, is always very good experience for anyone, because it helps teach one how to deal with people pleasantly. Some good opportunities lie ahead for those who successfully work in a store. These may be buying or selling positions in the store. Another opening is that of traveling salesman for a wholesaler or manufacturer of groceries, drugs, or hardware. Men who have worked in stores often know just how to sell goods to retailers in these lines. They are hired as traveling salesmen. The sales manager of one large meat-packing house in Chicago says that their best salesmen come from retail stores.

Some junior positions. — In this chapter we have said a great deal about work that lies, at best, a few years ahead of most boys and girls of beginning high-school age. To con-

clude our study of jobs in selling, let us look at some opportunities for beginners in grocery stores and in department stores where younger people may work.

Case No. 1

Retail Grocery Stores and Their Opportunities for Juniors[1]

I. The Divisions of the Retail Grocery Store

1. *The office.* In this department are found the accountants, bookkeepers, stenographers, interdepartment telephone operators, cashiers, the store executive, and often many other employees who specialize in some field such as buying.

2. *The receiving department.* This department employs three kinds of workers:

a. The truckers, who are engaged in moving goods from freight cars or trucks into the storerooms;
b. The checkers, who keep account of the quantity and quality of the goods received; and
c. The receiving clerks, who superintend the reception of new stock.

3. *The stock department.* This is found only in the larger stores. It is a part of the store where goods are weighed, wrapped, and prepared for call from the order department or the sales department.

4. *The order department.* This department puts up the orders that are to be delivered by wagon or truck. In small stores the goods come directly from the shelves. In the larger stores they may come from the stock department.

5. *The delivery department.* This department is concerned with taking goods to customers. In large stores it makes use of many wagons and trucks.

6. *The sales department.* This is the department where customers are served. In this department you and I buy our goods.

II. Junior Jobs in the Retail Grocery Store

1. *Grocery boy.* He is generally needed in small stores. He may be asked to clean windows, to put stock on the shelves, to make deliveries, and to do almost every other kind of work. He is seldom employed

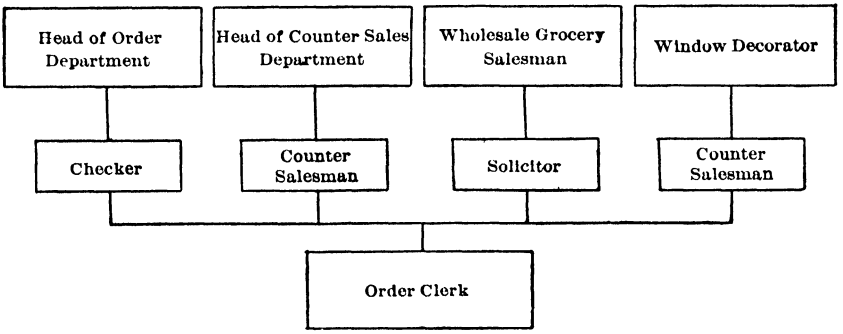
[1] R. E. Berry, "Work of Juniors in Retail Grocery Stores," *Part-Time Education Series No. 11, Bulletin No. 9* (University of California, 1922). Adapted by permission.

when less than fourteen years of age. He learns something about almost every part of the business.

2. *Stock clerk.* He must usually be sixteen years old or more. His duty is to keep track of stock in the stockroom and see that empty shelves are filled.

3. *Weigher.* He weighs and packs various kinds of commodities.

4. *Requisition and order clerk.* He must be sixteen years old or more. He must secure from the proper department goods called for on orders coming from the cashier's office. He must be able to pack an order and prepare it for delivery, and must know the various routes for delivery.



PROMOTIONAL OPPORTUNITIES OF ORDER CLERK
This chart is to be read from the bottom upward.

CASE NO. 2

OCCUPATIONS FOR JUNIORS IN DEPARTMENT STORES [1]

1. *Wrapper and inspector.* His chief duties are to wrap packages and to inspect merchandise for imperfections or wrong goods. Eighth-grade education or better is required. He may be advanced to cashier, marker, office clerk, or salesperson, and from that to head of stock, assistant buyer, or buyer.

2. *Stock boy or clerk.* His chief duties are to care for stock in the department, to keep it in good appearance and in proper place, to see that the proper amount of stock is available, and to check incoming merchandise. He must have an eighth-grade education or better. He may be promoted to head of stock, assistant buyer, buyer, or marker.

[1] "Department Store Occupations for Juniors," *Part-Time Education Series No. 3, Bulletin No. 2* (University of California, 1920). Adapted by permission.

3. *Marker.* His main duties are marking price-tags and placing them on merchandise. He should be sixteen years of age or older and should have at least a sixth-grade education. He may be advanced to head marker or salesperson. From salesperson he may work up through head of stock to buyer.

4. *Messenger.* His main tasks are to deliver telegrams, notes, telephone messages, and other communications. He should be fourteen years old or older. He may be promoted to wrapper or marker and then to such positions as those jobs offer.

QUESTIONS AND PROJECTS

1. Make a diagram showing the various tasks of a business man. (Refer to Chapter VI if necessary.) Show how making goods, purchasing, and financing have a relation to selling.

2. Show how the diagram on the first page of this chapter explains where the different jobs in selling are to be found.

3. Name five businesses in your town or city, each of which buys or sells a different kind of goods.

4. Can you give illustrations from your own town or city of different types of merchants who handle the same kinds of goods? Example: A wholesaler and a retailer of groceries.

5. Explain the difference between wholesalers and retailers. Name five wholesalers and five retailers in your city.

6. What desirable things do you see in the work of a sales agent?

7. Explain why it might pay for a sales agent to represent more than one company.

8. A storekeeper must have a store; a broker may get along with a small office. Do you think this is true? Does it mean that it might be easier to start in business as a broker than as a storekeeper?

9. Look in the classified telephone directory of your town or city under the heading "Brokers." What different kinds of brokers are there listed?

10. Look in the classified telephone directory under "Commission Merchants." What types of goods do commission merchants handle for the most part?

11. Look in the classified telephone directory of your town or city under "Auctioneers." Are there any in your town?

12. Is it true that one might work at selling by being any one of these types of merchants? How might he work for one of these merchants?

13. Write down this statement: "To sell his goods, a merchant must do these things." Make a list of the things that he must do. Refer to the history of Henry Wilson in the preceding chapter, if necessary.

14. Are there any advertising agencies in your town? Use the telephone directory if necessary. Have one member of your class visit an advertising agency and report on the work it does.

15. Suppose you wish to advertise for a position. Shall you need to write an advertisement to appear in the newspaper? To decide what paper or papers to put the advertisement in? To decide how often to run it? Any other questions?

16. If there is a newspaper in your town, it no doubt employs men and women to sell space to advertisers. Notice some of the advertisements in your paper and explain how the newspaper makes money by selling this space.

17. What is meant by advertising craftsmen?

18. Can you see any reasons why you might like to be a traveling salesman? What are the difficult features of such a job? What does a traveling salesman do?

19. What are sales executives?

20. What are the qualifications necessary for working in a retail store?

21. Why do you think that in most of the larger stores it is now believed that boys and girls who have had a high-school education do better work?

22. Make a list of the things which it is said a salesperson should know to sell gloves. What ones of these do you think can be learned best in school? What ones best while at work?

23. Do the same for the statement made about selling jewelry.

24. One study of what is called "personality in salesmanship" includes the following list:

I. Personal appearance
   1. General impression
   2. Clothes
   3. Feet and footwear
   4. Carriage — standing and walking
   5. Hair
   6. Teeth
   7. Eyes
   8. Hands and nails
   9. Facial expression
   10. Attitude of mind manifested outwardly

II. Mode of living
   1. Diet and digestion
   2. Exercise
   3. Sleep
   4. Ventilation

5. Housing
6. Nervous control
7. Recreation
8. Relation of work and play
9. Public hygiene

III. Manners

1. Businesslike bearing and conduct
2. Courtesy
3. Sincerity
4. Thoughtfulness
5. Respect for others

IV. Voice

1. Pitch — tone — inflection
2. Proper breathing
3. Laughter
4. Choice of words
5. Pronunciation
6. Vocabulary
7. Sentence construction
8. Slang
9. Use of telephone

Look at each of these topics and explain what you think would be desirable in each of the matters mentioned.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER XV

THE BUSINESS MAN'S TASK OF TRANSPORTING GOODS AND JOBS IN TRANSPORTATION

The Task of Transportation

From the viewpoint of a business man, such as a manufacturer or a wholesaler, the task of transportation consists of planning the way in which goods will travel from or to him. When they go from him, he must get the goods ready to be shipped. He must also consider the best routes for incoming goods. From the viewpoint of transportation companies, such as railroads and express companies, the task of transportation means the actual carrying of the goods from one point to another. The places where opportunities for work in transportation are found may therefore be shown by the diagram on the opposite page.

A study of a manufacturer's task of transportation will give a clear idea of the problems involved, and so for the present we will view it from this standpoint.

If means of transportation were as limited as they were in the days of the covered wagon and the pack mule, the transportation problem would not be very complex. True, transportation would be difficult, but it would be a simpler matter to know what to do. As conditions now are, transportation has come to be such a complicated task that most large manufacturers have a special department to take care of this end of the business. It is usually called the traffic department.

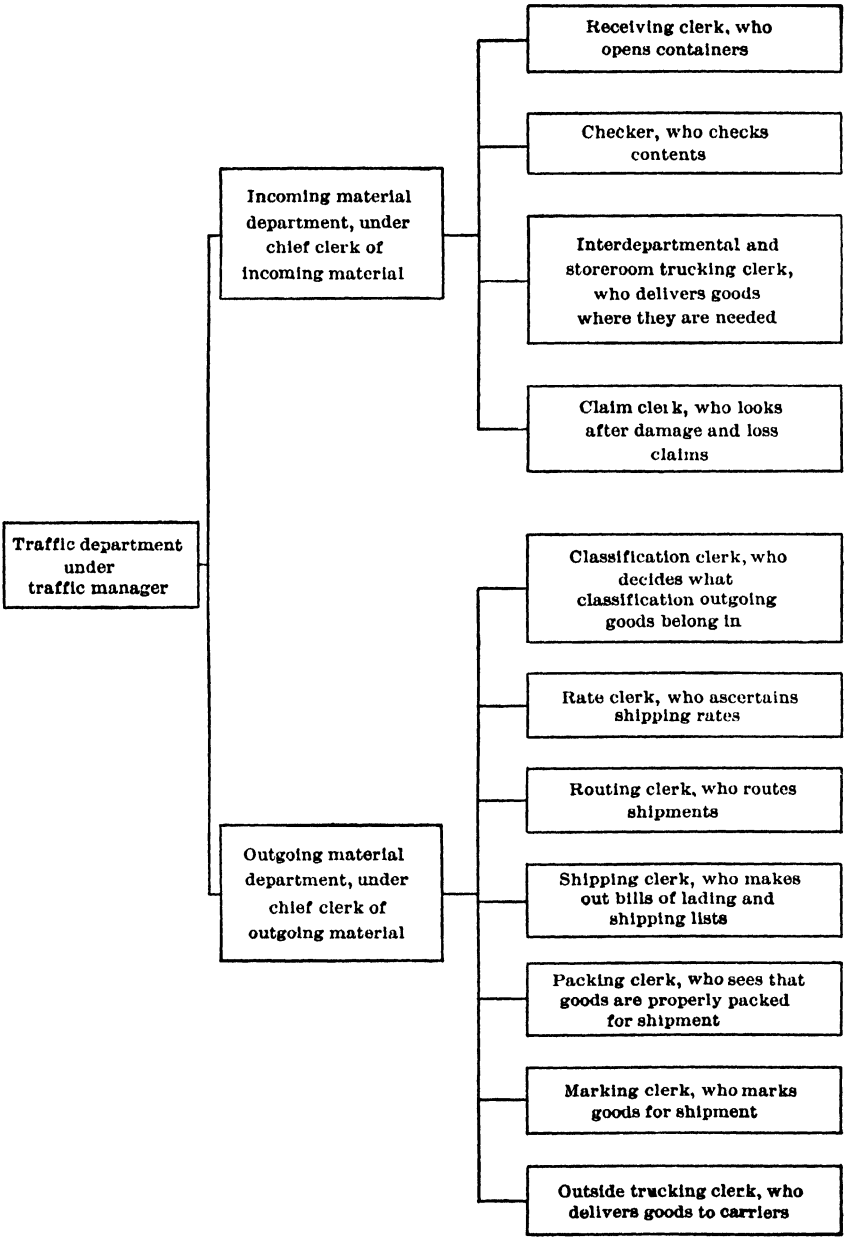
WHERE TRANSPORTATION TASKS AND JOBS MAY BE FOUND

There are jobs in all businesses that buy goods which must be delivered to them, and that sell goods which they must deliver to others. Examples are retail stores of all kinds, and factories.	There are jobs in businesses that specialize in carrying goods for other people. Examples are railroads, express companies, trucking companies, and parcel delivery companies.	There are jobs in associations that give advice and service on transportation problems to all who apply. Examples are chambers of commerce and freight-forwarding agencies.
There are jobs in transportation within these businesses, for incoming goods must be checked and properly stored, outgoing goods must be packed and routed, and transportation service must be bought.	There are many kinds of jobs in transportation work within these businesses.	There are a few jobs for traffic experts in this sort of work.

THE WORK OF A TRAFFIC DEPARTMENT

As we saw earlier, in our study of buying (Chapter X), the traffic department sometimes is a division of the purchasing department. In large organizations, however, the traffic department itself is separately organized.

The head of the traffic department is called the *traffic manager.* It is his job to see that goods arrive where they are wanted at the proper time and to keep the cost of shipping as low as possible. It is not so easy for the traffic manager to do these two things as it is to tell about them. He needs a great deal of information and training.



ORGANIZATION OF A TRAFFIC DEPARTMENT

In the first place, the man at the head of the traffic department must be familiar with the raw materials that go into his company's goods. Often when these materials are bought from small shippers who are not familiar with the best ways of shipping, he must prepare detailed shipping instructions for them.

The traffic manager should also be able to advise the purchasing agent concerning the best and cheapest way for having goods shipped in from a distance; and he can help the sales manager by telling him the cost of shipping goods to various points. From such information the sales manager may judge whether or not it will pay to try to sell in certain localities. For a large business with a number of branch plants or warehouses, information regarding shipping costs is of importance in locating these branches or warehouses.

The chief duties of the traffic manager, however, are in the work of making shipments. His duties may be divided as follows:

1. **Choosing the proper carriers.** — The traffic manager often has many carriers willing to take his goods. Some things may be sent by water or rail, by regular or fast freight, by express, by motor truck, or by mail. To choose wisely it is necessary that he —

a. Know and compare rates and routes of shipment. — The traffic man must know or have at hand the rate or cost of shipment of all the carriers. He must compare the shipping cost by rail with that by water, by express, by parcel post, and by truck. In selecting the carrier, however, he must consider the speed and the nature of the service rendered as well as the cost. For instance, he must balance fast rail service against slower, although lower priced, water service.

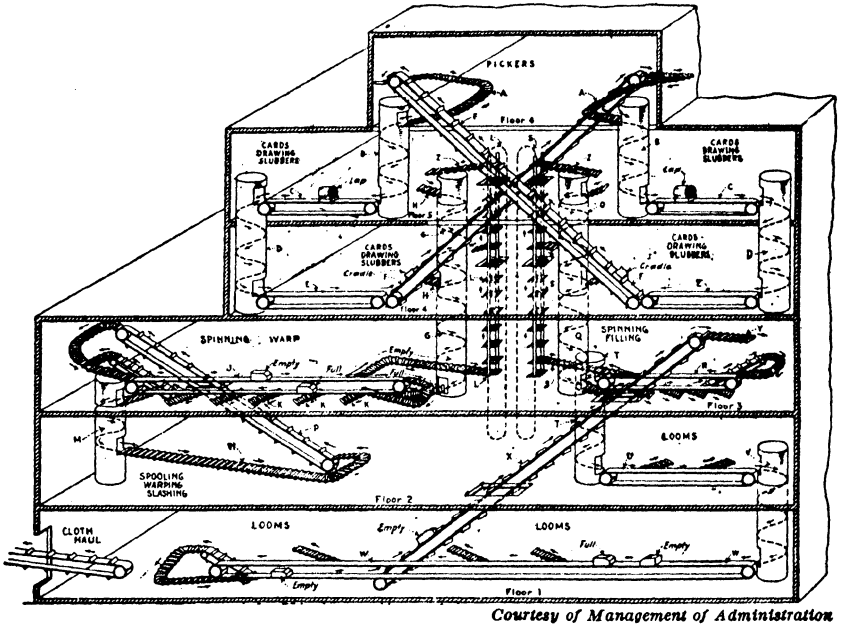
b. Know classifications of commodities shipped. — The same rate does not apply to all goods sent by railway freight. Different classes of goods and different commodities bear different freight rates. The traffic manager must know the effect upon classifications caused by different methods of packing and crating. And since rates and classifications are subject to change, he must be careful to see that his rate schedules and classification lists are kept up-to-date. The traffic manager must be familiar with all the ins and outs of classification. He must also know which of his goods can be shipped cheaper if sent in carload lots instead of in smaller shipments (known as less-than-carload lots).

c. Know risks of different carriers. — In deciding upon a carrier, he must consider the safety offered. Are goods sent by parcel post more often lost or damaged than those sent by express? Do freight claims more often arise out of shipments sent by one railway than out of shipments sent by another?

2. **The preparation of goods for the carrier.** — *a. Checking goods for shipment.* Naturally, the first care is that the proper goods be shipped. To be sure that nothing is omitted, a careful check must be made upon each person who handles the goods while they are being prepared for shipment. Later the charges of the carriers are received. This is another reason why exact check must be kept upon the goods sent, for the charges of transportation are based upon what goods are sent, and the charges are paid when the traffic manager approves the bills.

b. Packing. — The packing must protect the goods and conform to the requirements of the carrier by which the goods are being sent. Good packing insures the safe arrival of the merchandise and often prevents the necessity for damage claims against the carrier.

c. Marking goods and making out shipping papers for them. — Unless correctly marked, the goods will not reach their destination. The carriers have rules and regulations prescribing how goods should be marked, and these should be followed exactly. Likewise, great care is needed in the preparation of the bill of lading and shipping list covering



Courtesy of Management of Administration

THE CONVEYOR SYSTEM OF A COTTON MILL

Every manufacturer has a problem of transportation within his plant. This diagram shows us the conveyors, chutes, and elevators used in the transportation of materials in one factory.

each shipment. Since the shipping list is used to check the shipment in transit and at its destination, it is imperative that this list describe the shipment exactly.

d. Trucking. — Goods must often be hauled between the railroad freight yards and the company's place of business, especially if sent in less-than-carload lots. The traffic

manager must decide whether to have a trucking company do his hauling or whether the company itself should do it. If he decides on the latter, he must decide whether motor trucks or horse-drawn vehicles are the more economical.

3. **The handling of claims for losses.** — Claims against carriers frequently arise. These are likely to be because of

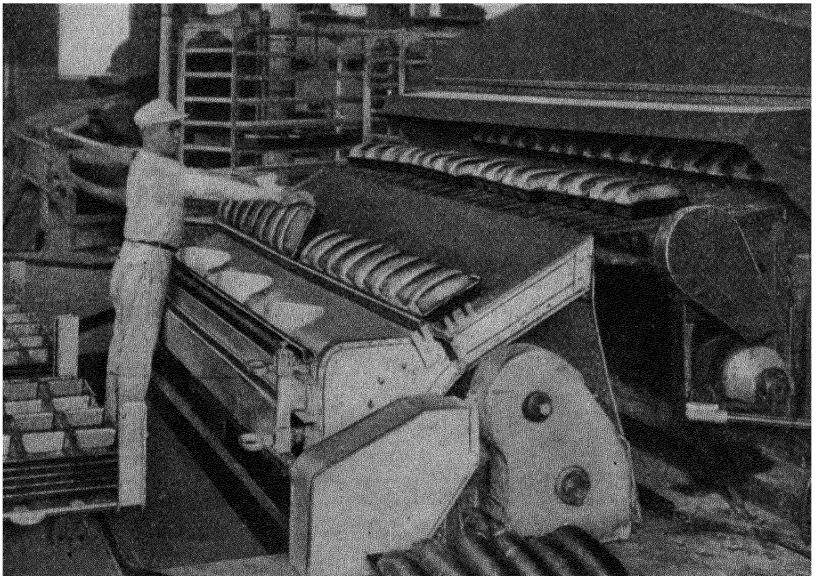


Photo by Brown Brothers

TRANSPORTATION IN A MODERN BAKERY

Loaves of bread arrive on a mechanical conveyor from the great oven at the rate of 5,000 per hour.

goods lost or damaged in transit, or because of overcharges made through error in figuring or in classifying goods. In order to collect on such claims, certain papers must be filled out properly and promptly. The traffic manager may be in charge of this work, although sometimes it is given to others, such as a legal or claim department.

4. **Keeping information.** — The traffic manager's success will in part depend upon his ability to organize information so that it will be available when needed. It would be impossible for him to remember all that is necessary. He must, therefore, see that records are kept. For this purpose he plans the work of clerks, about whom we shall study in Chapter XVI.

Jobs in Transportation

Let us now look at some specific jobs in transportation work.

Traffic experts. — There are three ways in which the business world employs the traffic expert. One is in a business as *traffic manager*. We need not discuss this again.

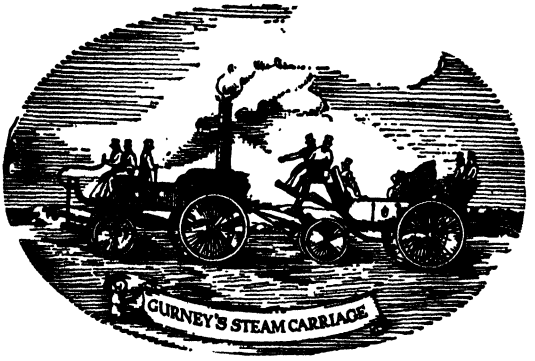
A second way is as *traffic advisor*. — In many cities chambers of commerce, merchants' associations, and similar organizations employ such advisors to assist local shippers. The work of the traffic bureau of the Merchants Association of New York shows us the wide range of duties of such an advisor. This bureau, which is a group of experts, handles such matters as rate adjustments; freight classifications; rules and regulations dealing with the receipt, transportation, delivery, and storage of freight; car service; and fares and service pertaining to passenger traffic. In addition, it helps members to in-



Courtesy of General Motors Company

Sketches from the History of Transportation

terpret shipping laws and the rulings of the Interstate Commerce Commission (a government commission which devotes its time to transportation problems); to prepare bills of lading; and to adjust claims. In the year 1921 the bureau was asked to answer over 1,600 questions.



A third way a traffic expert may earn a living is by establishing himself in business as a *freight forwarder*. Many businesses that do not employ their own traffic experts use the freight forwarder.

The shipper packs and marks the shipment and then consigns it to the freight forwarder. At the warehouse of the forwarder it is assembled with other goods being sent to the same destination. By assembling less-than-carload lots of freight and reforwarding it in carload lots, the forwarder usually gets quicker service and lower rates on the goods shipped. He never owns the property he handles. He merely receives and forwards goods for others, for which he is paid by the owners of the goods. He handles both domestic and foreign shipments.

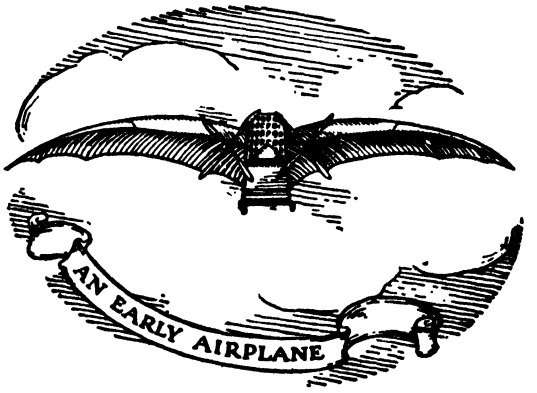


The freight forwarder saves the shipper the trouble of

looking up rates, making out shipping documents, and searching for the best routes over which to send his goods.

Preparing to be a traffic expert. — Traffic experts are recruited from lower positions in railroad freight departments and from shipping departments of large businesses. Actual contact with the work of shipping is essential for mastery of the many details involved. Aside from experience, a man must have a good memory and a keen interest in rates, classifications, rules, regulations, and procedures involved in shipping. More often men who begin shipping in business houses later become traffic managers, while those who begin by working in a railroad freight department more frequently later become traffic advisors and freight forwarders.





Preceding such work, or along with it, there is great help in school courses. Anyone can see the value of geography, arithmetic, and a study of railroads. Some colleges and a few high schools give courses in traffic, as do some evening and correspondence schools.

CHARLES RIPPIN TO ASSUME SECRETARIAL DUTIES MONDAY

Traffic Commissioner of Merchants Exchange Becomes Secretary and Traffic Commissioner

Charles Rippin, traffic commissioner for the Merchants Exchange, who has been appointed secretary and traffic commissioner, will assume his new duties Monday. He succeeds Eugene Smith as secretary, the latter having asked to be relieved of the secretarial duties on account of his health. Smith will become building manager. E. P. Costello will be made assistant traffic commissioner.

Rippin, prior to his connection with the exchange in 1912, was general agent of the Missouri Pacific Railroad at St. Louis and at Memphis, Tenn., and was for many years connected with the Mobile and Ohio Railroad and the Seaboard Air Line. He has also served as president of the National Industrial Traffic League for the past two years and is at the present time chairman of the Traffic Committee of the Mississippi Valley Association.

This newspaper statement tells us the history of one traffic advisor.

Working for transporters. — Although much work is required of a shipper, the main work of transportation is done by the transporters — the carriers. Naturally, therefore, most of the jobs in transportation are in working for transporters, such as railroad, express, electric railway, and steamship companies. A discussion of jobs with a railroad will illustrate *all* carriers very well. Moreover, of all carriers

the railroads are by far the largest employers. In 1920 there were over three million people doing transportation work in the United States, and almost half of these were employed by steam railroads.

An idea of railroad organization may be gained by looking over the chart on page 276.[1]

A RAILROAD CAREER
for the
AMERICAN BOY

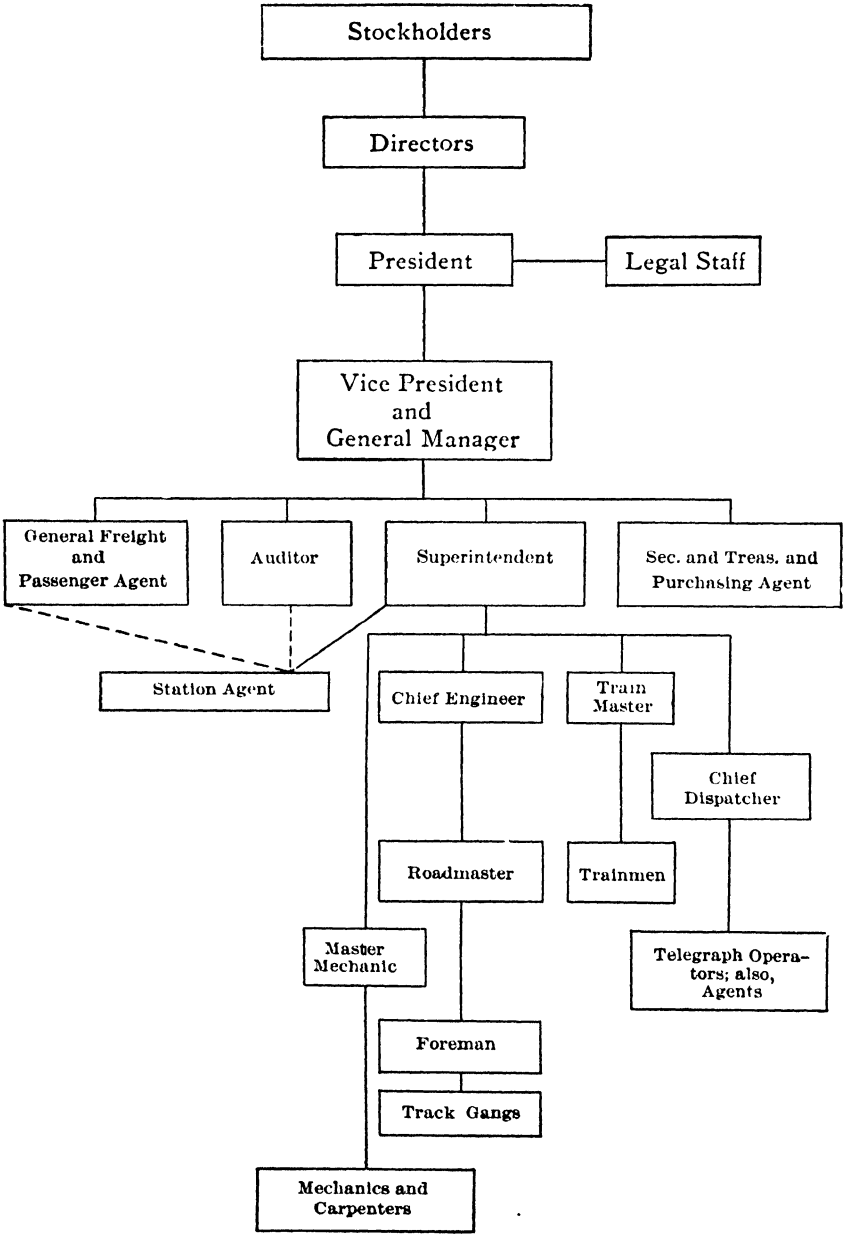
The railroad business is a business of action and movement. What boy is not fascinated by the monster engines, the handsome passenger trains, the long, sinuous freight trains? Railroading is nothing if not romantic.

The railroad business produces self-made men. Nearly one half of the officers of the United States railroads entered the business before their eighteenth year. Practically all of the executives started at the bottom. The field is still open for the right kind of men. Fascination and romance are there; opportunity is there — opportunity for advancement and for service to one's fellowmen.

This is what Mr. C. R. Gray, President of the Union Pacific System, has to say about opportunities in railroading.

Much railroad work is like work in any other business. — When we look carefully at the tasks of a railroad company, we see that it must undertake almost every task that any other business performs. It is true that it emphasizes the work of transporting, but notice! It must sell its services, and

[1] After Morris, *Railroad Administration* (D. Appleton and Company, 1910), p. 36.



ORGANIZATION OF ONE SMALL RAILROAD

to do this it has a department called a traffic department. The men who work at selling the road's services have such titles as freight traffic agent, passenger traffic agent, advertising agent, and development agent. The railroad must construct and maintain its right-of-way, purchase materials, secure funds, and keep records. This thought is very well explained in the following statement made by Mr. John G. Walber, Vice-President of the New York Central lines:

There is hardly any branch of employment in the entire industrial field which has not its counterpart in the railroad service, comprehending the highest type of technical training and experience in financial accounting, legal, and engineering fields. In the Purchasing Department we also have the entire field of buying and selling, there being over 80,000 items of material and supplies in our inventories. We also have Tax and Insurance Departments corresponding to industries.

The only distinctive types of employment on the railroad are the positions of locomotive engineers, firemen, conductors, and trainmen.

In a sense railroad telegraphers are distinctive, although a portion of the duties of commercial telegraphers correspond with the duties of railroad telegraphers, but the railroad telegrapher has distinctive duties in that he has to be made familiar with the requirements of train service operation.

Maintainers in the Signal Department are also almost peculiar to the railroad service, although in companies manufacturing signaling appliances there are certain positions which correspond with those on the railroads.

In the Maintenance of Equipment Department we have the general run of mechanics, carpenters, masons, bricklayers, plumbers, pipe- and steam-fitters, blacksmiths, and electricians, with their associated unskilled helpers and laborers. In the Track Department we have carpenters, masons, track laborers, etc.

In the clerical departments we have every branch of clerical work, from the highly skilled financial accounting to the ordinary checking of freight and baggage.

Educational requirements will vary in the various occupations.

Lines of advancement are generally confined to the branch of the service in which an employee enters, but, with the intelligent performance of duties, development of capacities for greater responsibility, ability to get along with other men, opportunities for promotion are not restricted.[1]

[1] From a letter to the author.

Mr. Carl R. Gray, President of the Union Pacific system, in speaking of opportunities in railroading, says:

> Railroading embraces nearly every field of human activity; it employs lawyers, accountants, traffic solicitors, industrial solicitors, surgeons, medical specialists of various kinds, civil, mechanical, and electrical engineers, geologists, trainmen, enginemen and switchmen, section men, machinists, boiler-makers, painters, carpenters, silversmiths, brass-polishers, and many other trades and professions.[1]

The United States Railroad Labor Board has made a study of the kinds of work in railroading. It found that within each class of service there were many classes of work.[2] For example:

Service	Number of Distinctive Classes of Work
Attendance service	26
Clerical and office administrative service	27
Dining-car, restaurant, and kitchen service	19
Engine and equipment operation service	31
Floating equipment service	62
Inspectional service	34
Investigational and instructional service	10
Labor service	50
Police service	6
Professional service	23
Skilled trades service	103
Sub-professional service	7
Supervisory skilled trades and labor service	43
Traffic service	10
Train and engine service	29
Train dispatching, telegraph, and station agent service	20
	500

Any person who is interested in railroad work will do well to write to the United States Railroad Labor Board, Wash-

[1] From a letter to the author.

[2] U. S. Railroad Labor Board, *Rules for Reporting Information on Railroad Employees, with Classification and Index* (May, 1921), p. 6.

ington, D. C., asking for its published information concerning railroad employees. Anyone who writes will receive a booklet giving some information about each job.

The duties of the superintendent. — The superintendent of the road has great responsibilities. He is in charge of four departments of the railway service and is responsible for the work of —

1. The master mechanic and the mechanics and carpenters working under him. The master mechanic and his crew must see that the locomotives and trains are kept in perfect running order. In order to do this, every kind of expert mechanical help is employed; and many, many "helpers," or men just learning to be machinists, electricians, and boilermakers, are needed to aid the experts in their repair work.

2. The chief engineer and the civil engineers, surveyors, draftsmen, roadmasters, foremen, and track gangs of unskilled laborers working under him.

3. The train master and the locomotive engineers and firemen, train dispatchers, telegraph operators, freight and passenger conductors, and brakemen employed by him.

4. The chief dispatcher and the whole corps of telegraph operators working under him.

These four branches of the service are vital to the success of the road. They are responsible for the actual operation of the trains, the repair of the cars, locomotives, and tracks, and sometimes for the building of new cars and locomotives. They are responsible also for the telegraph communication which keeps the trains running on schedule and obviates the confusion that would result in serious wrecks.[1]

[1] Ray Morris, *Railroad Organization* (D. Appleton and Company, 1910), pp. 31–45

Wages in railroad work. — Railroad work offers a real opportunity for capable people. Salaries of officers range from $3,000 to $50,000, and even more, yearly. The Vice-President of the New York Central Railroad makes the following statement about wages:

Many classes of employees are paid hourly rates and their monthly earnings, of course, depend upon the hours worked. These hourly rates range as follows:

Laborers	37½ to 50 cents per hour
Helpers (generally)	50 to 55 cents per hour
Apprentices	starting from 32 cents per hour and increasing until they reach the rate for the skilled worker, after four years' experience
Clerical positions	range from $90 to $300 per month
Messengers and junior clerks	range from $40 to $60 per month

For mechanics, there is quite a diversity of rates, depending upon the departments in which employed.

In the engine and train service the wages fluctuate according to whether they are paid for passenger, through freight, local freight, or yard service. These are generally quite complicated schedules; and in the road service, earnings are made up of rates per mile, time on duty, days worked per month, etc.[1]

The pay of engineers and firemen and other men in the road service depends upon the number of miles traveled and the length of time on duty. They are usually guaranteed a minimum wage, however. For instance, the New York Central Railroad guarantees a wage of $7.00 for engineers and $5.25 for firemen for every day worked.

The specific average daily pay in effect in a recent year for typical railroad positions is given below:[2]

[1] From a letter to the author.

[2] U. S. Railroad Labor Board, *Wage Series Report No. 4.*

Supervisory Forces

Class of Employees	Average Daily Wage
Yardmasters	$8.95
Yardmasters' assistants	8.00
Train dispatchers	9.08
Train directors	6.56

Maintenance-of-Way and Unskilled Laborers

Section 1:	
Bridge and building gang foremen	6.36
Section 2:	
Maintenance-of-way inspectors	6.54
Portable steam equipment operators	5.38
Gang foremen (extra gang and work-train laborers)	4.81
Gang foremen (bridge and building, signal, and telegraph laborers)	6.02
Section 3:	
Gang and section foremen	4.64
Section 4:	
Bridge and building carpenters	4.74
Bridge and building ironworkers	5.59
Bridge and building painters	4.76
Masons, bricklayers, plasterers, and plumbers	5.62
Section 5:	
Skilled trades helpers	3.87
Regular apprentices	3.27
Section 6:	
Laborers (extra gang and work-train)	2.95
Track and roadway section laborers	2.83
Maintenance-of-way laborers (other than track and roadway) and gardeners and farmers	2.90
Common laborers (shops, enginehouses, etc.)	3.15
Section 7:	
Portable steam equipment operator helpers	3.73
Pumping equipment operators	2.54
Bridge operator and helpers	3.49
Crossing and bridge flagmen and gatemen	2.45
Section 8:	
Laborers (shops, enginehouses, power plants, and stores)	3.15
Section 9:	
Gang foremen laborers (shops, enginehouses, power plants, and stores)	4.63

Shop Employees

Class of Employees	Average Daily Wage
Gang and other foremen	
Hourly	7.19
Monthly	
Machinists	5.94
Boilermakers	5.96
Blacksmiths	6.03
Sheet-metal workers	5.95
Electrical workers	5.74
Car men	5.41
Molders	6.41
Helpers, all crafts	4.03
Helper apprentices	4.18
Regular apprentices	2.82
Car cleaners	3.14

Engine-Service Employees

Freight engineers and motormen, through	7.22
Freight engineers and motormen, local	7.43
Freight firemen and helpers, through	5.39
Freight firemen and helpers, local	5.45
Yard engineers and motormen	6.67
Yard firemen and helpers	5.11
Hostlers	5.22
Hostler helpers	4.39

Train-Service Employees

Freight conductors, through	5.91
Freight conductors, local	6.37
Freight brakemen and flagmen, through	4.59
Freight brakemen and flagmen, local	4.95
Yard foremen	6.34
Yard helpers	5.87
Switch tenders	4.41

Stationary Engineers, Firemen, etc.

Section 1: Stationary engineers (steam)	5.18
Section 2: Stationary firemen and oilers (steam and electrical plants)	4.31
Section 3: Coal passers and water tenders (steam station boiler room)	3.70

Training for railroad work and lines of advancement. — Since railroad work is of so many kinds, it must be clear that the preparation for it is equally varied. Of course, the higher executive positions demand long experience with a railroad. A good general education is also usually helpful, although in the past railroad presidents and other officers have in a majority of cases worked up from the ranks. Of advancement in railroad work, Mr. Walber, Vice-President of the New York Central Railroad, says:

> Advancement is open to any young man who is willing to study after he leaves school. To advance in the railroad service, a man can never cease being a student, and the particular advantage of any academic training is in learning how to study and exercise the mind.

Engineering training, of which more is said in Chapter XIX, is very helpful in railroad work. Civil, mechanical, electrical, and construction engineers are all needed and often are advanced into officers' positions.

There are a number of universities now that give special training in the important phases of railroad work. Columbia University, Harvard University, and the state universities of Ohio, Illinois, Minnesota, and California are among these. A letter to any of them would bring information about the work offered. These universities have equipment suited for their work. One, for example, has a building especially constructed for the testing of locomotives.

Many railroad companies also conduct schools of training. In one such school " regular " and " special " students are trained. Regular students need only a public school education for admittance, but the special students must be college graduates. The training begins with shop work — planing, machine work, blacksmithing, boiler work. The shop work is followed by instruction in building all kinds of cars, from

sleeping cars to hand cars, and then the student spends three months as fireman on the road. The final year of training (there are three years in all) is spent in the business departments and the testing room where chemists test the steel alloy used in building the locomotives.

QUESTIONS AND PROJECTS

1. Why has the work of transporting goods become so much greater since the days of the medieval craftsman?

2. Using some factory in your town as an example, show that there must be transportation both *to and from* the factory.

3. Using some store in your town as an example, show that the storekeeper has problems of outgoing and incoming shipments.

4. Using some store in your town as an illustration, show the methods used in transporting goods from the store to customers.

5. Make a list of as many kinds of transportation as possible.

6. Suppose that you lived in New York and wished to send a shipment of goods to San Francisco. Make a list of the things that you should consider in deciding how the goods should be shipped.

7. Suppose that you were working in a grocery store in your town and were in charge of preparing the goods for delivery. Would you need to—

a. Check the goods before they went on the wagons?

b. See that they were packed properly?

c. See that they were addressed so that they would reach the proper buyers?

d. Have them placed on the trucks or wagons?

Does the work of shipping for a manufacturer include all of these tasks? Illustrate.

8. When goods are ordered from a grocery store for your home, is there sometimes a complaint that not all of the goods are delivered? What sort of men does a manufacturer employ to help him make claims for loss?

9. Make a list of all the kinds of information of which a traffic manager might want to keep a record.

10. Can you explain why it might be useful for a group of merchants to join together in hiring a traffic advisor?

11. Explain why a freight forwarder is more useful in certain cities than in others.

12. Why is it that traffic experts are usually men who have spent some years in railroad work?

13. Look at the statement made by Mr. Gray, of the Union Pacific

Railroad, concerning kinds of railroad work. Can you show some kind of work that a railroad would have for each of the specialized workers he mentions?

14. What does Mr. Walber, of the New York Central, say are the kinds of occupations on railroads that are not to be found in factories?

15. Notice the kinds of railroad work listed by the United States Railway Labor Board. Does a railroad furnish a good example of specialization? As good an example as a farm? As a factory? As a mine?

16. What are the main tasks of the superintendent of a railroad?

17. Figure out what wages per month can be earned by railroad laborers, helpers, and apprentices according to the figures given in this section. Assume that these men work nine hours a day, six days a week. Compare these wages with those of clerks and junior clerks and with those of freight engineers.

18. Can you see any reason why railroads should establish schools to aid apprentices in learning more about work in their shops and on their railroad lines?

19. Have some member of your class write a letter to one of the universities mentioned in this section and ask for a catalogue describing the courses offered there in transportation work.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER XVI

THE BUSINESS MAN'S TASK OF COMMUNICATION AND JOBS IN COMMUNICATION

How Communication Gives Rise to Jobs

We have now learned something of all the major tasks of the business man. We have seen how he goes into business, buys, sells, makes goods, uses helpers, and finances his operations. How difficult it would be to do any of these things well without information! Indeed, if he did not act with information, his work would be blind and accidental. Of course, this is no more true of the business man than it is of any of us. We all depend upon information.

Why the need for information has increased. — When we were studying Chapter V we saw many happenings which greatly increased the business man's need for collecting information. We saw, for example, that businesses grew from small to large scale. This made it impossible for a business man to observe and remember everything that was happening in his business. It made it necessary that he employ people to keep records of happenings. We saw how the discovery and settlement of new parts of the earth made it possible for the business man to sell his goods in distant markets. How different from the days of the guild, when a craftsman sold only in his own town to his own neighbors! When his market became a wide market, the business man found it necessary to gather information from great distances,

to learn about buyers far removed from him, and to communicate with them.

The business man must know all he can about other people and other businesses. He needs to send information about himself to others, and he needs to keep recorded, where he can refer to it, a great deal of information about his own business. These tasks taken together may be thought of as the business man's *task of communicating.*

A few methods of communication are important in any business. — There are many ways in which we can communicate with one another. We can do it by signs, by gestures, by words, by written symbols, and in other ways. Aside from ordinary speech, the business man chiefly makes use of the following means:

1. Records and files: these take the form of records in books, and of files of letters, telegrams, and other documents sent and received. He can refer to these records to refresh his memory on things that he has done.

2. Letters, telegrams and radiograms, to reach people outside of his own business.

3. Written statements (called memoranda), to communicate with others in the business.

4. The telephone, for communicating with others within the business and with those outside of the business.

5. In addition to these means, he uses newspapers, trade journals, radio, and many other advertising media for telling possible customers about his goods and himself. We do not need to discuss advertising, because in our chapter on selling (Chapter XIV) we talked about it and the jobs that grow out of it.

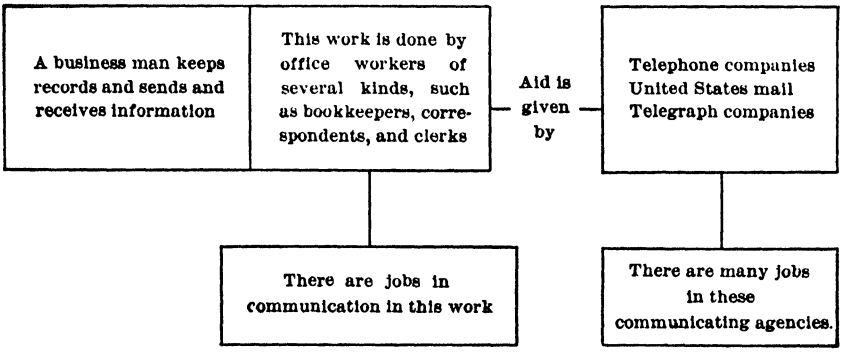
Many of the communication workers are called clerks. — In most large businesses the work of keeping records, writing letters, and using the telephone has been divided into

specialized tasks. No matter what department one may work in, the work is likely to be called clerical work, and the workers, clerks. In studying buying, selling, transporting, and other tasks of the business man, we saw that much help was given in each department by clerks. In almost every business these clerks work together in a part of the business called the office or the general office. Their work is often called office work.

Communicating agencies help. — In studying other tasks of the business man, we have seen how outside agencies help him. We saw, for example, how banks aid him to secure money, and how railroad companies help him to transport his goods. In the same way, outside agencies help him with communication. Important among these agencies are the mail service and the telephone and telegraph companies. Therefore, in considering jobs in communication we may be sure that there are *opportunities within any business* and also *in working for communicating agencies.*

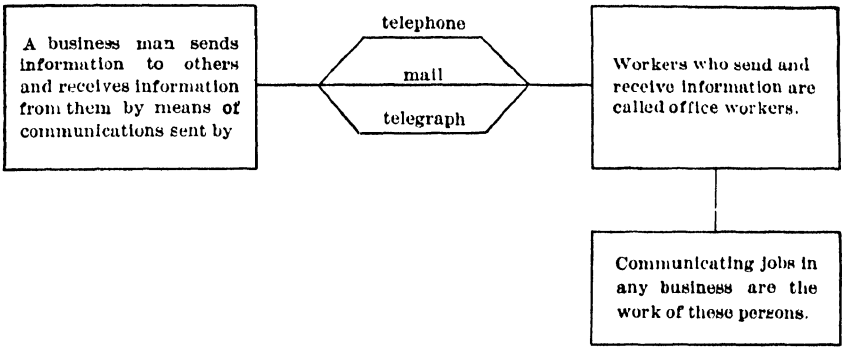
The following diagrams show how the task of communicating gives rise to —

1. Jobs in communicating within a business
2. Jobs in communicating agencies

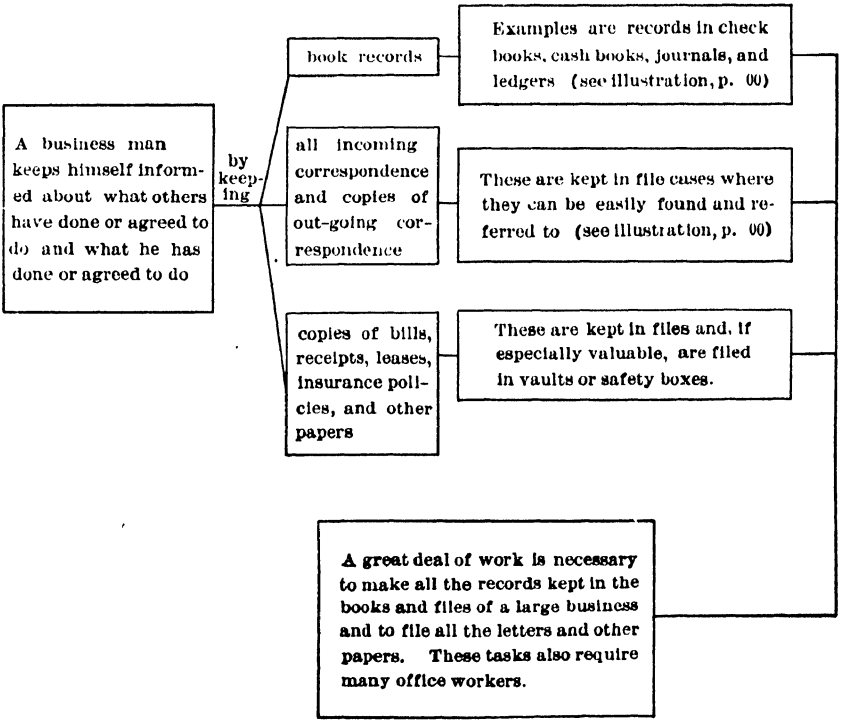


OPPORTUNITIES FOR COMMUNICATION WORK

Jobs in Communication



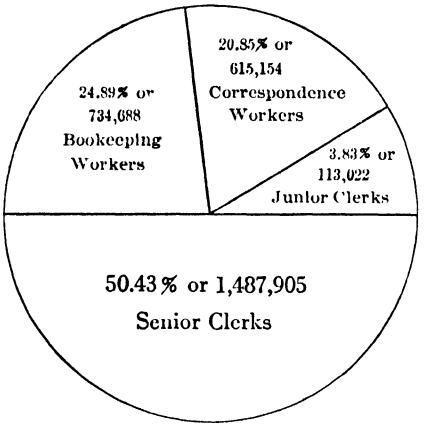
How Business Gives Rise to One Kind of Communicating Jobs



How Another Set of Jobs in Communication Arises

Communication Jobs within a Business

There are some three million persons engaged in office work in the United States. These people work in many specialized jobs. A number of studies of these jobs have been made and, while there is much overlapping, it is found that the work given to persons under eighteen years of age is somewhat different from that done by those eighteen years old and older. In offices and schools alike, we hear the former spoken of as the work of *juniors;* the latter, as the work of *senior* office workers. Of course such a division is not clearly cut, but because the terms are used so often it is useful in our study to classify office work in the following way:



Number and Division of Workers in the United State under Eighteen Years of Age

I. Office work for those under eighteen years of age
   1. Junior clerical work

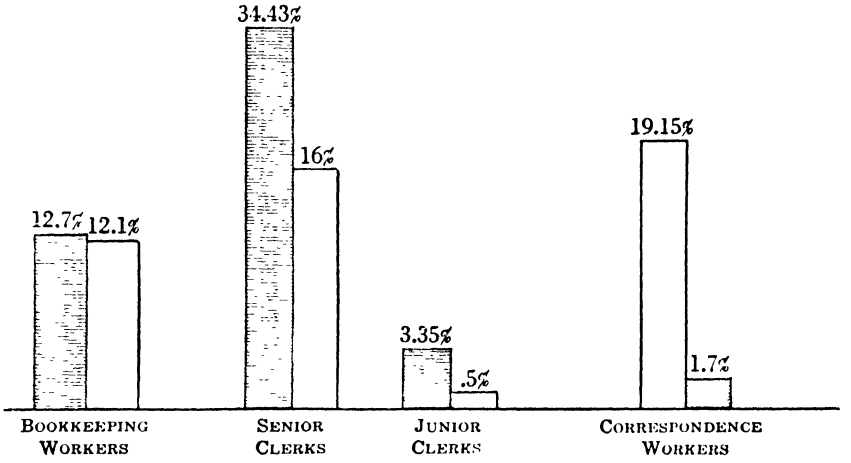
II. Office work for those eighteen years of age or over
   1. Correspondence work
   2. Bookkeeping work
   3. Senior clerical work

Besides these, there are machine operators who help in some or all of the work.

The diagram above shows the number and the part of the whole that are engaged in each kind of work.

It is interesting to note that about half (47.75%) of these workers are women. The percentage of men and women

engaged in each of the four classes in the chart above is shown by the one below:



NUMBERS OF OFFICE WORKERS BY CLASS

The dark columns represent men and boys, and the light columns, women and girls.

The many different kinds of junior clerks. — A few years ago a survey of junior office occupations in sixteen states was made for the national government. This survey showed the kinds of office work open to boys and girls under eighteen in many kinds of enterprises. The table on page 292 shows the results of this survey.[1]

Duties, training, and promotion for junior workers. — The same division of the national government that made the study to find out what office positions there were for junior workers made a study to find out also the duties of such workers, the training needed, and the promotions which they might expect. The results of the study of some of these jobs are shown on page 293.

[1] Adapted from *A Survey of Junior Commercial Occupations in Sixteen States*, Federal Board for Vocational Education.

DISTRIBUTION OF JUNIOR WORKERS BY POSITIONS AND BUSINESSES

POSITIONS	Retail	Wholesale	Commission	Manufacturing	Transportation and Telegraph	Public Utilities	Government	Financial and Insurance	Professional	Theatrical	Publishing and Printing	Hotel	Foreign Trade	Total
Messenger	236	51	9	134	115	145	30	100	34	0	14	0	2	870
General clerk	163	36	9	82	47	27	5	58	12	0	6	0	2	447
Cashier	50	6	0	1	0	1	9	1	1	2	0	0	0	71
Timekeeper	1	3	0	16	2	2	0	0	0	0	1	0	0	25
Shipping clerk	27	18	0	9	1	0	0	0	0	0	1	0	0	56
Receiving clerk	7	4	0	3	0	1	0	0	0	0	0	0	0	15
Stock clerk	106	31	0	27	11	6	0	1	0	0	0	0	0	182
Switchboard operator	9	0	0	10	4	218	0	2	1	0	2	0	0	246
File clerk	53	43	3	30	63	17	3	16	2	0	4	0	0	234
Mail clerk	32	29	2	13	12	10	50	16	2	0	5	0	0	171
Bundle-wrapper	152	23	0	16	0	2	0	0	0	0	1	0	0	194
Delivery-wagon driver	85	11	0	6	0	3	5	0	0	0	1	0	0	111
Typist	9	8	2	13	3	17	3	1	11	0	6	0	0	73
Stenographer	22	16	1	19	4	3	1	3	16	0	3	0	0	88
Dictaphone operator	1	1	0	1	0	0	0	0	0	0	0	0	0	3
Bookkeeper	10	2	0	6	0	7	0	5	3	0	0	0	0	33
Entry clerk	6	1	1	0	2	0	0	2	0	0	4	0	0	16
Ledger clerk	3	2	0	9	2	0	0	0	1	0	0	0	0	17
Cost clerk	0	1	0	1	0	0	0	0	0	0	0	0	0	2
Billing clerk	11	5	0	4	1	7	0	1	0	0	0	0	0	29
Salesman (retail store)	342	1	0	1	0	0	0	0	0	0	0	0	0	344
Bookkeeping machine operator	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Calculating machine operator	10	1	0	6	3	0	1	7	0	0	0	0	0	28
Duplicating machine operator	1	2	0	9	2	6	0	0	2	0	0	0	0	22
Addressograph oper.	2	3	1	3	1	0	0	1	1	0	0	0	0	12
Misce. machine operator	15	0	0	4	0	0	4	0	0	0	0	0	0	23
Statement clerk	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Collector	4	0	0	0	0	3	0	0	0	0	0	0	0	7
Miscellaneous	87	26	31	42	1	25	1	3	6	0	13	10	0	245
Totals	1,444	324	59	466	274	500	112	219	92	2	61	10	4	3,567

JUNIOR COMMERCIAL OCCUPATIONS — WORK DONE MOSTLY BY BOYS AND GIRLS UNDER EIGHTEEN YEARS OF AGE. MOST OF THESE POSITIONS ARE CLERICAL IN TYPE.

JOB	DUTIES
Messengers or office boys	*a.* Deliver messages *b.* Run errands of various kinds *c.* Fill ink wells and look after other details around the office *d.* Answer telephone *e.* Run office machines *f.* Make themselves generally useful in assisting other members of the office staff
Messengers, including minor office boys and girls, mail clerks, special deliveries, etc., millinery mfg., alteration room, shoppers	*a.* Run errands *b.* Collect time cards *c.* Distribute mail and interdepartmental messages *d.* Deliver telegrams and special deliveries *e.* Buy railroad tickets *f.* Carry cash, bundles, transfers, etc. *g.* Trace orders or packages *h.* Take advertising to departments *i.* Errands for service desks where refunds and exchanges are cared for *j.* Collect sales checks, vouchers, tissue-books, etc. *k.* Distribute supplies
General clerks	*a.* Merchandise and service clerical work for buyers and floor managers *b.* Help on pay roll, time records, etc. *c.* Write letters, make out rate cards, file records, do some copying and typing *d.* Help manager care for new employees *e.* Address envelopes; distribute bulletins, advertising copy, superintendent's orders, etc. *f.* Answer telephone *g.* Look up charges, etc. *h.* Sort checks, make records of sale

Job	Duties
General Clerks [*Continued*]	*i.* Check up merchandise in receiving and stock rooms *j.* C.O.D. and other delivery records Example: *Floor manager's clerical assistant* — Assists floor managers in duties of lighting, ventilation, elevators, inspector's desks, telephones, appearance of sections, signs, supplies, emergencies, time records, lunch periods, attendance records, pay envelopes, employment requisitions, after-hours permits, shopping permits, store system, shipping instructions, cash registers, delivery schedules, adjustments, meetings, notices, and services *k.* Sort and arrange vouchers *l.* Prepare deposits and make them *m.* Copy contracts *n.* File letters and papers *o.* Typewrite from copy *p.* Trace way-bills (R.R.) *q.* Handle mail — in and out *r.* Open and arrange mail *s.* Meet callers and learn wants *t.* Make notes and memoranda *u.* Check orders *v.* Make out bills
Bundle-wrappers, cashiers, examiners	*a.* Examination of sales checks for form, items, legibility, agreement as to kind, number, price and total, correct address, floor manager's O.K. *b.* Stamp checks with rubber stamp, fold checks to insure care of merchandise *c.* Care of wrapping, desk-dusting, ordering supplies, as paste, paper, twine, etc. *d.* Wrap bundles *e.* Receive money, count back change *f.* Check up errors, etc.

Job	Duties
Bundle-wrappers, cashiers, examiners [*Continued*]	*g.* Work on tubes in desk or in tube room *h.* File orders on which part payment has been made
Timekeepers	*a.* Keep time-record of employees *b.* Make out pay roll *c.* Check absences of employees
Shipping clerks	*a.* Prepare goods for shipping *b.* Check orders against invoices and shipping receipts *c.* Check goods to see that all goods called for are in the shipment *d.* Mark goods for shipment *e.* Weigh shipments *f.* Prepare freight bills *g.* Look up routes *h.* Record shipments made *i.* Mail shipment papers
Receiving clerks	*a.* Unpack goods received *b.* Check merchandise received against invoice *c.* Note condition of shipment when received *d.* Check up returned goods and notify proper department *e.* Are responsible for goods until removed from receiving room to storeroom or departments *f.* Receipt for freight and express received
Stock clerks	*a.* Receive merchandise and store it until required *b.* Check it with buyer's order and invoices *c.* Keep stock records *d.* Deliver new stock to departments as needed, upon requisitions of department heads

Job	Duties
Stock clerks [*Continued*]	*e.* Mark goods for identification *f.* Fill orders for shipment direct from stock *g.* Issue sample merchandise to salesman upon requisition and keep record of such items for the bookkeeping department *h.* Keep records of returned goods when returned to stock *i.* Prepare inventory from stock records and check with merchandise as required *j.* Keep stockroom files *k.* Notify buyers or department heads when stock needs replenishing *l.* Care of stock (varies in different departments and types of stores) *m.* Put on tags — marking *n.* Keep stock records *o.* Assist salespeople, heads of stock, assistant buyers, and buyers *p.* Care of returned merchandise, exchanges, etc. *q.* Occasionally sell merchandise *r.* Arrange show cases and department display *s.* Assist in taking inventory *t.* Write letters and orders *u.* Answer telephone, make appointments, etc. *v.* Disburse merchandise and supplies
Switchboard operators	Care for all incoming and outgoing calls, receive telegrams, etc., operate signal system for executives and protective officers
File clerks	*a.* File letters, vouchers, reports, etc., for future reference *b.* Prepare folders for special use *c.* Plan filing-systems for special purposes

Job	Duties
File clerks [*Continued*]	*d.* Get from files material required *e.* Classify all material to be filed for easy reference *f.* Keep index-card file and cross-reference files *g.* Transfer old material to "dead files"
Mail clerks	*a.* Sort incoming mail *b.* Distribute it *c.* Collect outgoing mail *d.* Prepare it for mailing *e.* Handle special-delivery mail in and out *f.* Handle registered mail in and out *g.* Dispatch outgoing mail *h.* Deliver carbons and originals to file department
Typists	*a.* Copy form letters *b.* Type circulars *c.* Typewrite card records *d.* Type bills and statements *e.* Cut stencils *f.* Type specifications, etc. *g.* Type contracts *h.* Address envelopes *i.* Type order-forms
Stenographers	*a.* Take dictation *b.* Transcribe it *c.* Make carbon copies *d.* File correspondence or prepare it for files *e.* Look after all details connected with getting out the daily mail
Dictating machine operators	*a.* Transcribe from the dictaphone or ediphone *b.* Handle details connected with getting out the daily mail

Job	Duties
Assistant bookkeepers	*a.* Make routine records in connection with a complete set of books under direction *b.* Keep a simple set of office records for a small business *c.* Record-work in retail store, such as grocery or market *d.* Record and post sales
Entry clerks	*a.* Enter orders on billheads *b.* Prepare credit memoranda *c.* Enter and check car numbers *d.* Make entries in bank books *e.* Enter charges in day book
Ledger clerks	*a.* Post entries in the ledger
Cost clerks	*a.* Make production records and assist in figuring costs
Billing clerks	*a.* Bill on the typewriter or special billing machine *b.* Verify invoices prepared *c.* Route bills for mailing or entry
Salespersons (junior)	*a.* Sell merchandise of various kinds — novelties, dry goods, groceries, drugs, five- and ten-cent articles, etc. *b.* Arrange and display stock *c.* Keep stock in salable condition *d.* Make out sales-checks and other store forms *e.* Use cash register, also O.K. telephone *f.* Take orders by telephone and through mail *g.* Give information and direct customers *h.* Occasionally mark goods, take inventory, figure discounts *i.* Wrap packages *j.* Give service to customers

Job	Duties
Bookkeeping machine operators	*a.* Bank work (1) Check-teller work (2) Statement work *b.* Commercial office (1) Post sales-ledger (2) Post purchase-ledger
Calculating machine operators	*a.* Figure and check invoices, outgoing and incoming *b.* Figure and check pay rolls *c.* Figure and check inventories *d.* Figure and check books in the auditing department *e.* Figure profits and losses *f.* Figure discounts and interest *g.* Figure income-tax reports
Duplicating machine operators and addressograph machine operators	*a.* Operate the mimeograph *b.* Operate the multigraph *c.* Operate other duplicators according to local requirements *d.* Keep record of material run, file stencils and copies of all material duplicated *e.* Operate addressograph, seal and stamp envelopes
Statement clerks	Prepare and mail statements of personal accounts
Collectors	*a.* Call on customers to collect accounts *b.* Receive cash and deliver receipted bills *c.* Report collections to the office *d.* Report on those who fail to pay
Miscellaneous	*a.* Delivery room assistants: Make route sheets and sort packages *b.* File clerks: File, look up papers when called for, etc. *c.* Office workers: Operate billing machines, calculating machines, duplicating machines; serve as typists and as check-sorters in auditing

Job	Duties
Miscellaneous [*Continued*]	*d.* Switchboard operators: Care for all incoming and outgoing calls, receive telegrams, etc., operate signal system for executives and protective officers *e.* Elevator operators: Call floors, give merchandise location, answer customers' questions *f.* Machinist's assistants: Help chief engineers or electricians *g.* Timekeeper's assistants: Collect time cards, make out reports, etc. *h.* Window trimmer's assistants: Get out merchandise, forms, and fixtures; clean, polish, etc. *i.* Mail order shoppers: Fill orders, send out packages, etc.

Kinds of office work done by older workers. — Office workers who are over eighteen years of age have been classed as those doing stenographic work, bookkeeping work, and the work of recording clerks. In large offices, one would find such divisions of these main heads as the following:

Stenographic	Bookkeeping	Record Keeping
Stenographer	Accountant	Bill clerk
Dictaphone operator	Bookkeeper	Stock clerk
Ediphone operator	Bookkeeping cashier	Shipping clerk
Stenotypist	Entry clerk	File clerk
Secretary	Ledger clerk	Cost clerk
	Journal clerk	Collector
		Invoice clerk
		Order clerk
		Price clerk
		Pay roll clerk
		Statistical clerk
		Stores
		Time clerk
		Voucher clerk
		General clerk

What the stenographer does.[1] — The stenographer, by means of abbreviations and letter- and word-symbols (shorthand), records speech. This is called " taking dictation." Later she transcribes her shorthand notes, writing them out in full in typewriting. Some stenographers employ a machine, such as the stenotype, in place of shorthand, for taking dictation. A good stenographer must be able to take rapid dictation, to read her shorthand notes readily and accurately, and to typewrite neatly and quickly. There are many kinds of shorthand work. Some stenographic positions require taking and transcribing short letters all day long, while others offer more variety. For instance, the number of letters that a stenographer in a law office writes may be quite small. But she will be kept busy taking and transcribing legal documents such as deeds, leases, mortgages, and court papers. The greater the variety of work, the surer the stenographer must be of her shorthand, for memory cannot so greatly aid her.

In some offices and stores, especially small ones, the stenographer is required to do many things besides shorthand and typewriting. Some must know enough about bookkeeping to keep a simple set of books; while others must receive visitors, answer the telephone, weigh and stamp packages and letters, and file all the letters and records of the office. In a retail store the stenographer may have to keep the cost book, typewrite the monthly bills of all the customers, take charge of the C.O.D. money returned on delivered packages, and keep the daily ledger.

General education required. — The relation between education and success in stenography is positive. There are many gradations in stenographic work, from addressing

[1] Cf. Leverett S. Lyon, *Education for Business* (University of Chicago Press, 1922), pp. 189–197.

envelopes to the difficult work in banks and railroads. Success in the former type of position does not demand high-school training, but for promotion to more responsible work and for a high degree of success in such work, a high-school education is essential. College education is also used to great advantage by some stenographers.

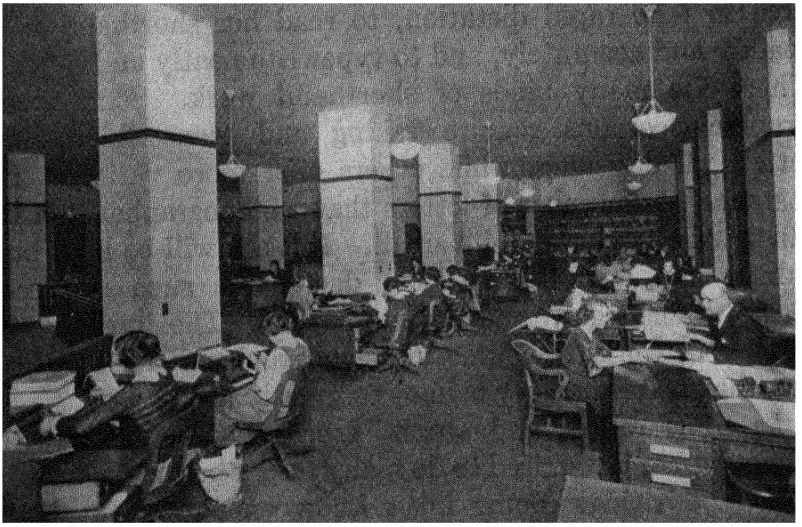


Photo by Brown Brothers

CORRESPONDENCE DEPARTMENT OF A LARGE OFFICE

At the right a stenographer is taking dictation. At the left women are transcribing from notes.

Promotion. — The most significant aspect of promotion is the differentiation between opportunities for boys and girls. It may be safely said that women usually continue to be stenographers, and their promotion consists of increased wages, most often obtained by moving from one position to another that is better. For young men, the stenographic position may be a stepping-stone, leading to continuous advancement, the exact character of which depends upon

the type of establishment. There have been striking instances where women, also, have worked up from stenographers to positions as executive secretaries in charge of large offices and responsible work.

Source and selection of stenographers. — A great many stenographic positions are filled by boys and girls just out of high school or business college. Some business men, however, prefer experienced people and are willing to pay more for them. As a rule the best positions are not advertised, but are filled by persons personally known to the employers. Inexperienced people are paid from seven to twelve or possibly fifteen dollars a week. Experienced stenographers often command from twenty-five to fifty dollars a week, and stenographers who can take court proceedings and public lectures make even more.

Special kinds of "stenographic" work. — Of course, everyone who writes letters does not do all the work of the stenographer. Very often in large business houses special clerks called *dictators* are employed, who do nothing but dictate letters for stenographers or typists to write. A dictator must be familiar with the records of his department and with the business policy of his firm, so that he may be able to answer all inquiries that come to his desk. Also, there are many typists who do not take dictation as stenographers do. Instead, the person who dictates the letter dictates to a machine called a "dictaphone" or an "ediphone," and this machine records the dictation somewhat as songs and music are recorded on phonograph records. Such machines will repeat to the typist what the dictator has said. She types the letter from this dictation. The work of the stenographer, however, furnishes a better example of correspondence work than either of these, for it includes more duties and is more generally known than the others.

Letter arrives in mail room.

↓

It is opened and stamped with date received by *opener* and

↓

routed to proper department by *mail router*, who gives it to

↓

messenger for delivery to that department.

↓

Next it is assigned to a particular *correspondent* for answer.

↓

The *correspondent* dictates reply to *stenographer*.

↓

Stenographer transcribes letter and returns it, with addressed envelope, to correspondent's desk.

↓

Correspondent signs letter.

↓

Messenger takes signed letter, with envelope, to *office boy*,

↓

who folds letter, places it in envelope, and passes it to

↓

weigher, who weighs letter and passes it to

↓

marker, who notes the amount of postage needed and passes it to

↓

stamper, who places stamps on envelope and passes it to

↓

checker, who examines address for errors and passes letter to

↓

sealer, who closes the letter and sends it to

↓

mail room, where it is put in a mail bag and sent to post-office by automobile truck.

WHAT HAPPENS TO A LETTER IN ONE LARGE OFFICE

This story of a letter and its answer is a good illustration of clerical specialization in a large-scale business. In a small office all of the tasks described here might be performed by one person.

Bookkeeping work. — Certain information that is needed in running a business is recorded in books made for that purpose. Such recording is called *bookkeeping. Planning the records* which need to be kept is often called *accounting.* For certain reasons, which you will learn much more about when you take a course in bookkeeping and accounting, different kinds of books are used. Some of these are the day book, the cash book, and the ledger.

In large offices the work is divided among many clerks. A bookkeeper's work in a retail store would include keeping the store ledger, the journal, the day book for charge sales, the general cash book, and the ledger. In addition, the bookkeeper makes out statements to customers each month and directs the collection of unpaid bills; makes monthly summaries of receipts by departments, pays firm bills (manager signs all checks), takes charge of letters and filing, considers questions of credit (if the manager and assistant are absent), receives payment of bills at cash window and makes change, receives and adjusts complaints about charges, banks cash and checks, and keeps the bank books.

Special knowledge required. — Aside from a thorough working knowledge of bookkeeping, the bookkeeper must know the commodities which the company sells or manufactures. A knowledge of transportation and how to obtain accurate information about rates will help every bookkeeper who pays bills on freight and express. How to bank, how to compute interest and discount, and all the details of office work should be known by the bookkeeper.

Success in bookkeeping and accounting is aided by skill in penmanship and in operating an adding machine.

General education required. — What has been said above concerning the general education needed by the stenographer applies for the most part to the bookkeeper. If

highly expert, the bookkeeper can fill a position whether a high-school graduate or not. Higher education does much to develop habits of thinking, and may give information needed for the most difficult bookkeeping and accounting problems. The position of bookkeeper is often filled by promoting one of the assistants. The position of head bookkeeper, treasurer, or secretary of the company is sometimes filled by promoting a bookkeeper, and there is more possibility of such advancement for men than for women. A great many bookkeepers, however, remain in the same position for many years. To advance to such a position as treasurer, purchasing agent, or secretary of a company, the bookkeeper should have more than an eighth-grade education.

The position of bookkeeper is seldom filled in any establishment by taking a new worker from a school. The subordinate positions of ledger clerk or assistant bookkeepers may be filled by inexperienced graduates of business courses, but advanced positions or general bookkeepers require experience as well as special training.[1]

The work of recording clerks. — The work of older clerks, like that of the younger ones, is highly specialized. Notice the different kinds on pages 293 to 300. Notice also how large a proportion of all office workers are clerks.

Here is a description of the work of a few senior clerks. This clerical work is similar to that done by junior clerks. See if you can fit the work of the clerk into one or another of the business man's tasks that we have studied.

The bill clerk prepares invoices (bills for goods), usually on a typewriter or billing machine. This work sometimes involves rechecking figures.

[1] Adapted in part from "Bulletin of the Indiana State Board of Education," *Indiana Survey Series No. 3.*

Stock clerks keep records of all materials that come into and go out of the stock room. Stock is usually issued in accordance with signed requisitions which are checked against the department.

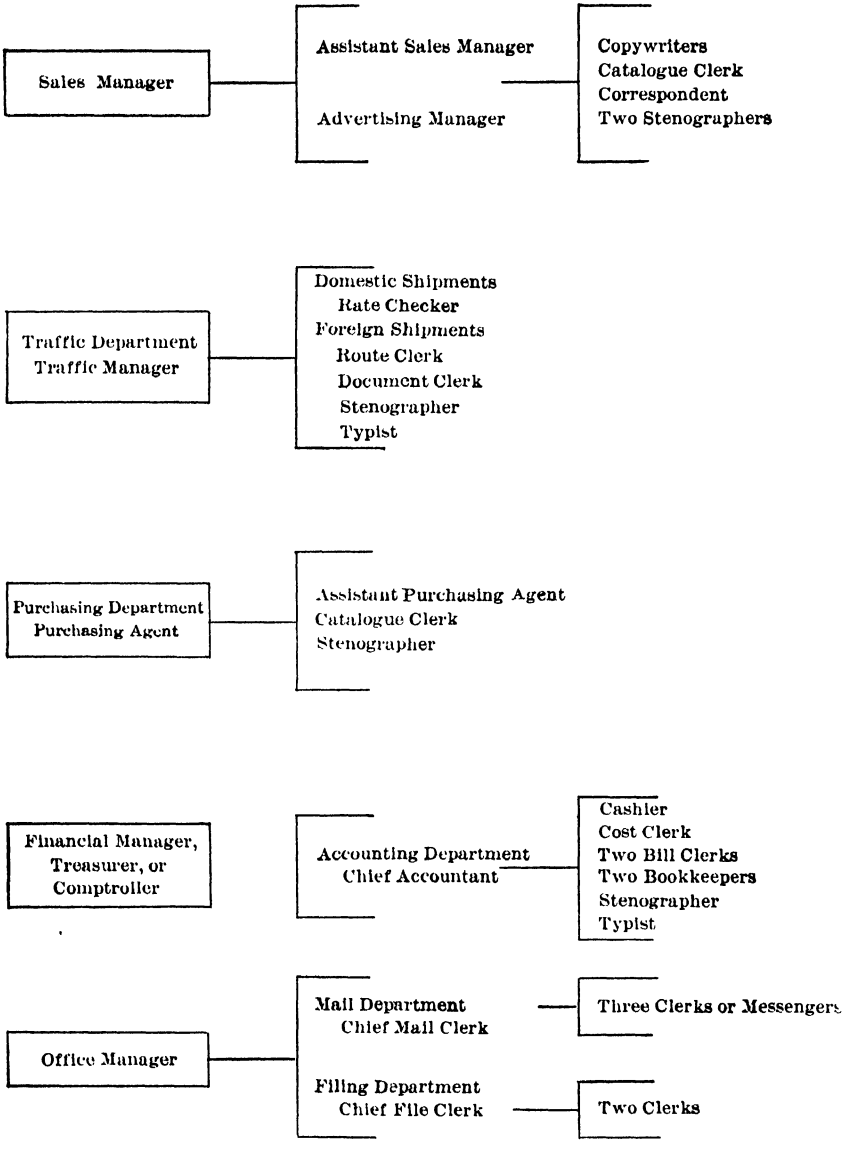
The shipping clerk works in the office and the warehouse, checking and supervising outgoing material. The receiving clerk is in charge of incoming material, checking it against the invoice for quality, quantity, and condition.

The file clerk is employed to file away all correspondence, orders, contracts, and papers of the firm. It is the file clerk's duty to keep the orders correctly filed and to find such material as is needed for reference by the other clerks.

The time clerk or timekeeper summarizes the time for all departments, computing the wage for each worker. In some factories the cost clerk is also timekeeper.

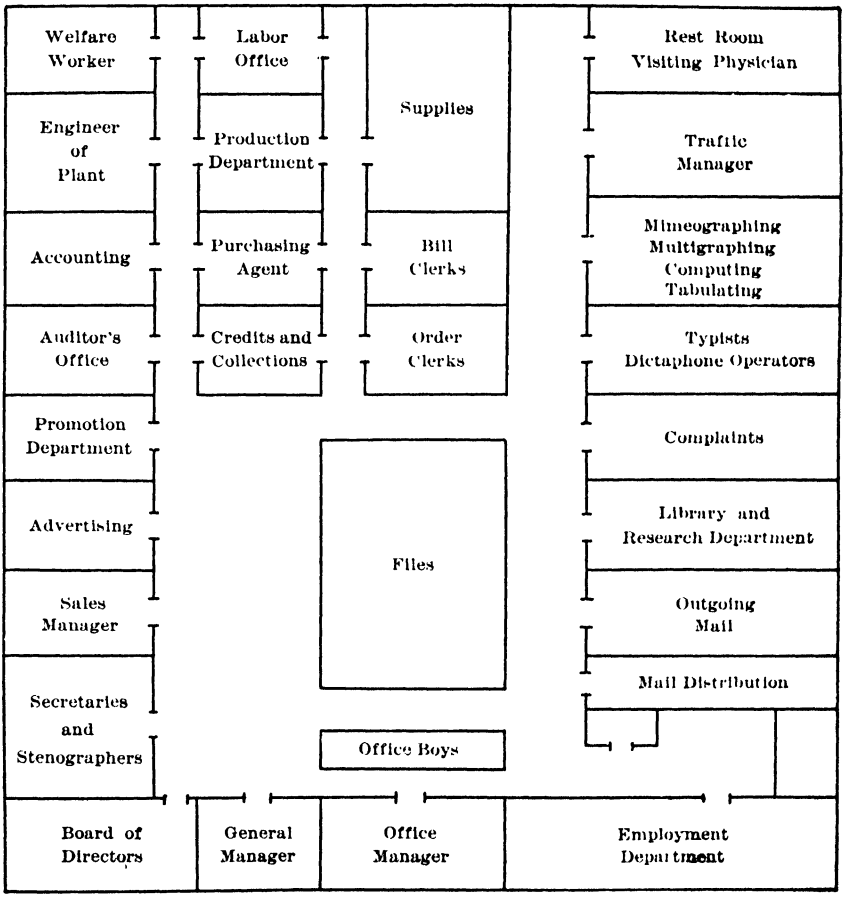
Statistical and cost clerks are experts engaged in analyzing the production costs of all departments in order to determine what parts of the business are most profitable and what parts are least profitable, the proportionate cost of labor, raw materials, and overhead expense.

Executive positions that may grow out of communicating or office work. — The statement is often made that there is not much chance in office work for advancement to worthwhile positions. Although in the majority of cases this statement is true, it would not be fair to leave this subject without saying a word about the exceptional cases where routine work leads to highly paid executive positions. We have seen that the head bookkeeper may become an officer of the firm for which he works. A competent stenographer who is capable of assuming responsibility may become the private secretary of an executive of the company or may be made head stenographer and given charge of many other stenographers. In the latter case her work becomes super-



PLAN OF OFFICE WORKERS FOR A HARDWARE MANUFACTURING COMPANY

visory in nature, and often she has no time for anything else than dividing work among the stenographers under her.



LAYOUT OF THE OFFICE OF A LARGE MANUFACTURING PLANT [1]

This diagram shows the arrangement of the compartments or rooms occupied by the various executives and office workers.

In other words, she has become an executive, responsible for the work of others, and has left the class of routine workers.

[1] Used by permission from E. W. Weaver, *Building a Career* (Association Press, New York).

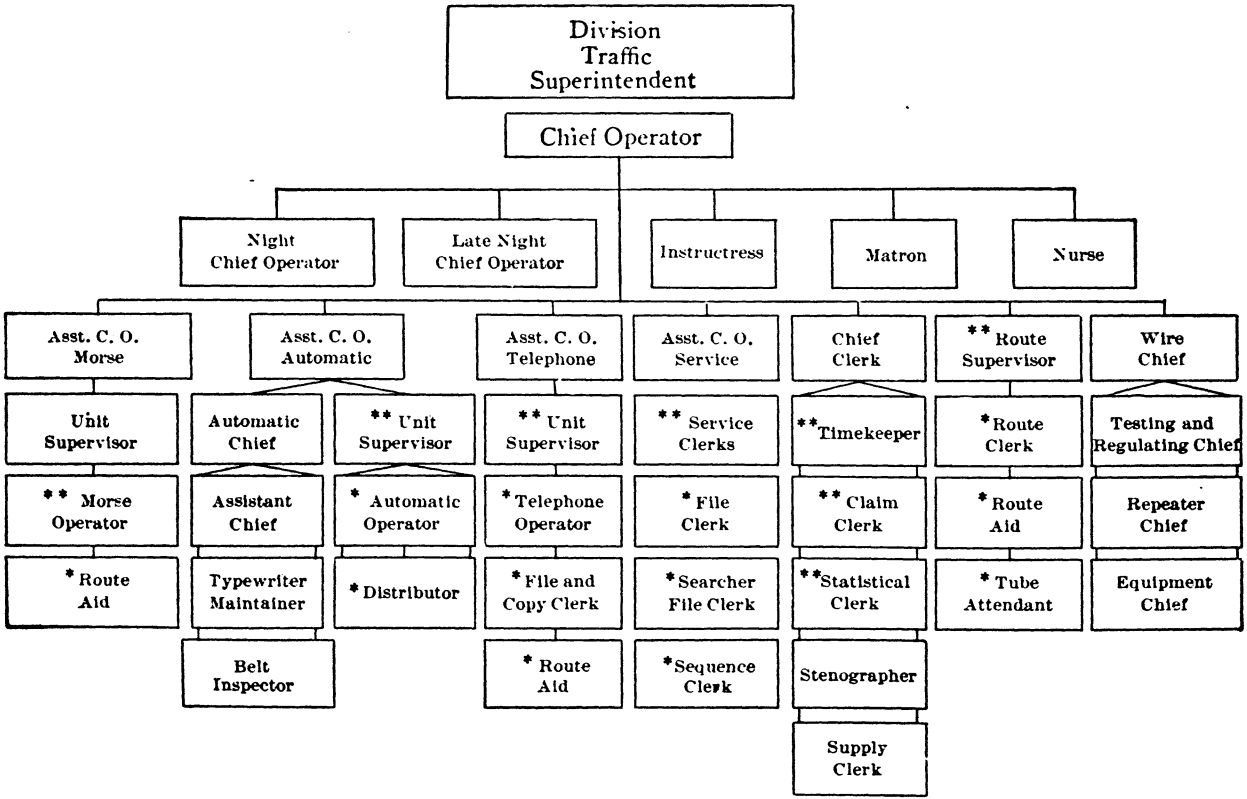
Routine clerks who have been with a firm for many years, and who have acquired a knowledge of the various kinds of work to be done, are sometimes promoted to positions as *chief clerks.* A chief clerk may be head of the mailroom, chief file clerk, chief stock clerk, etc. His duty then is to see that the clerks under him perform their work well and to be responsible for the general conduct of the clerical work of his office or department.

Communicating Jobs within Communicating Agencies

By referring again to the chart on page 289, we find that the business man is aided in his communicating by the mail, the telephone companies, and the telegraph companies. One of these agencies, the mail, we shall reserve for discussion under jobs in working for the government. The other two we shall talk about briefly now.

Communicating jobs in telephone companies. — The work of a telephone company is organized into several divisions or departments. The *accounting, financial,* and *legal divisions* are not unlike similar departments of any business. The *commercial subdivision of operation* is merely the name that the telephone companies use for their sales department. The *plant* division does not differ from any plant in its functions, although some of the detailed jobs, such as " installation and removal of telephone instruments and private branch exchange switchboards," are peculiar to telephone work. These jobs, however, are merely specialized *producing* jobs, such as we read about in the chapters on producing goods (Chapters XI and XII).

The *traffic* division, shown in the chart on the opposite page, exists only in telephone companies. This division is concerned with making it possible for you and me and all other telephone users in the United States to talk over the



ORGANIZATION OF TRAFFIC DEPARTMENT OF TELEPHONE COMPANY [1]

Positions marked with one star (*) are open to juniors. Positions marked with two stars (**) are open to juniors by promotion.

Used by permission from R. E. Berry, University of California, *Part Time Education Series, Bulletin No. 7.*

telephone. This could not be without the girls at the telephone switchboards. The census for 1920 shows that there are 190,160 telephone operators in the United States.

How to become a telephone operator. — An inexperienced person may become a telephone operator. She should be at least seventeen years old and preferably not over twenty-five; and at least a grade-school education is desirable. Application for a position should be made at the nearest telephone office. Before an applicant is accepted by one of the large companies, her eyes, ears, heart, lungs, and throat are examined. Good eyesight is necessary, since efficient work depends on being able to find the called numbers accurately. Good hearing is necessary, and a pleasant speaking voice is very desirable. Upon entering the employ of the company, the beginner may expect to spend two weeks in the company's training school, for which she receives pay. She learns by chart and by lecture how to handle a switchboard and how to meet the various demands that are bound to be made upon her. Then she has practice on a training-school switchboard, where it is possible to set up all the classes of telephone calls which it is necessary for an operator to handle.

What a telephone operator does. — Among the transmitting offices of the Bell system, nearly forty-six million conversations are carried on every day. Before a conversation between any two telephone stations can be held, an electrical circuit must be established between them. It is the job of the telephone operator to see that such connection is made and, after the conversation has been completed, broken again. One of the signals of the operator's switchboard begins to glow the instant a subscriber removes his receiver from the hook. The operator immediately inserts the answering plug into the jack of the calling line, operates

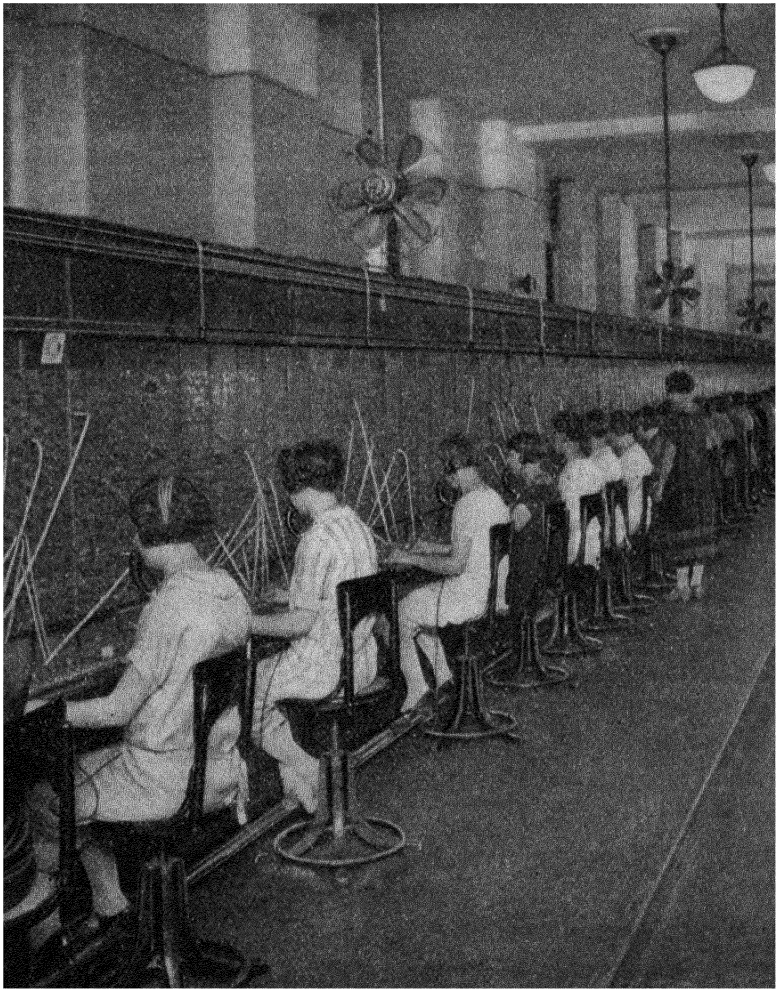


Photo by Brown Brothers

GIRLS AT WORK IN A TELEPHONE EXCHANGE

her listening key, and requests the calling party's order with the familiar words " Number, please."

Besides regular local operators, there are toll operators who handle long-distance connections. These calls are often very complicated. For instance, the work of operating a transcontinental long-distance call involves from ten to sixteen or even more operators. A call from Augusta, Maine, to Catalina Island must be switched at Portland, New York, Chicago, San Francisco, and Los Angeles, and the operating methods must be carefully worked out and the operators themselves must be skilled in order that there may be perfect coöperation on such a call.

Wages in telephone work. — In telephone work, as in other fields, wages vary from time to time. In a recent year the starting wage was $12.00 a week. Increases in pay are given at frequent intervals, and there are many higher positions to which ambitious girls are promoted as fast as they are qualified. Telephone service is so linked with the life of the community that it must go on day and night, Sundays and holidays. The working day for the individual operator is only eight hours, however, and if she is occasionally asked to work over time she is paid extra. There are no dull seasons in telephone operating, and there is no laying off of employees. If a girl moves from one city to another, she can be transferred to the Bell company operating in the city to which she moves; and she will be entitled, in the new location, to all of the rights and privileges to which she had been entitled in the city from which she came.

Chances for future advancement. — The maximum wage of operators is reached six years after entering the service. But an operator may go higher than this, for she may be promoted to supervisor, at an increase in salary, and then to

assistant chief operator, evening chief operator, and chief operator. All of these positions carry added responsibility and consequent increases in salary. Telephone service often leads to positions with other businesses. Many business executives like to employ girls with experience in the telephone service. In particular, they employ them to operate private telephone systems. In this private branch exchange work, the operator has opportunity to meet interesting people and to do various kinds of work. In her spare moments she often has opportunities to try her hand at clerical tasks and thus may work up to a very responsible position in business.[1]

Communicating jobs in telegraph companies. — In telegraph companies, as in telephone companies and railroad companies, there are many kinds of work to be done. Only a few tasks are peculiar to the telegraph office, however. Construction of lines and buildings, purchasing material, getting finances for the company, keeping records, and selling the company's services are the same here as elsewhere.

In the " traffic " division, however, we find telegraph operations going on, and here there are some jobs that are different from those anywhere else. Notice the chart on page 311.

Work as a Morse operator. — The type of telegraph work that will need explanation is the work of the operators of the telegraph instruments. The men and women who actually send the telegraph messages are called *Morse operators.* The telegraph companies require that they be eighteen years old at least, and prefer that they be over twenty-five. Both men and women are employed at this work, although men are more numerous. The larger companies have training

[1] Adapted in part from *Indianapolis Vocational Information Series, No. 1,* "Opportunities for Women in the Telephone Service" (Indianapolis Chamber of Commerce and Indiana University Press).

schools in which they teach operating in six months. Steadiness and alertness are needed, and high-school graduates are favored. An eighth-grade education is essential.

The hours of work are usually eight a day. The larger companies have a regular system for advancing wages during the first two years, after which further advancement depends

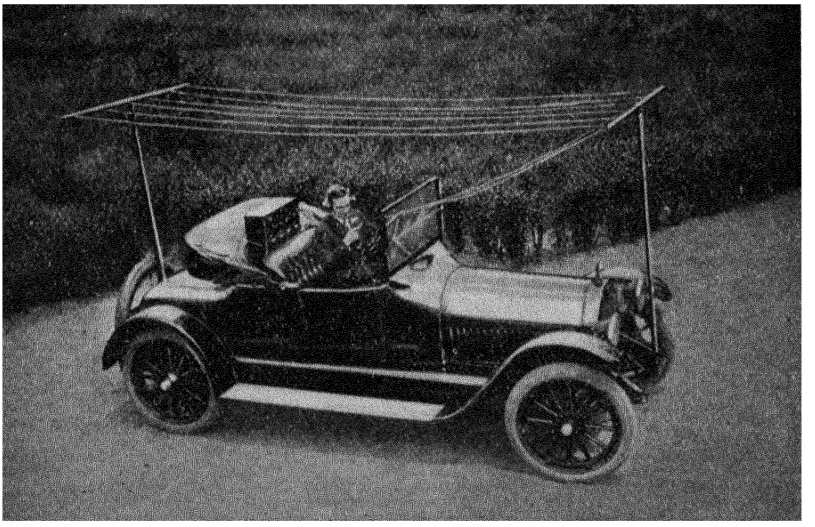


Photo by Brown Brothers

A "RADIO FAN" WHO HAS "TUNED IN" WHILE TRAVELING

Although the business man has as yet made comparatively little use of radio for communicating purposes, he is experimenting with it. No doubt it will grow rapidly in importance for business use.

upon the employee. Wages vary in different parts of the country. Full information about telegraph service may be had by applying in person or by letter to the Western Union Telegraph Company or the Postal Telegraph-Cable Company in your town or city.

Lines of promotion in telegraph operating work. — Some of the lines of promotion for Morse operators are shown on page 317 :

I	II
Morse operator	Morse operator
Unit supervisor	Manager (in small office)
Supervisor	Manager (in city office)
Ass't chief operator	General manager
Chief operator	

The telegraph messenger service. — One other type of work in which some boys will be interested is the messenger service of the telegraph companies. Usually boys must be sixteen years of age and know how to ride and care for a bicycle or motorcycle. They must also be able to read names and addresses readily and be familiar with the city in which they work, so that they will be able to find given addresses quickly.

Promotion for messengers. — For the messenger who is alert, intelligent, and willing to work, who is prompt, accurate, and courteous, there are many opportunities for advancement to positions of greater responsibility and better salary. Some of the lines of promotion are given below: [1]

I

From messenger to:

1. Call-circuit clerk
2. Collect register clerk
3. Delivery route clerk
4. Delivery supervisor

II

From messenger to:

1. Delivery clerk
2. Receiving clerk
3. Bookkeeping clerk
4. Cashier
5. Manager

III

From messenger to:

1. Receiving clerk
2. Money transfer clerk
3. Money transfer agent

IV

From messenger to:

1. Morse operator (in small office)
2. Manager (in small office)

[1] R. E. Berry, *Part-Time Education Series, No. 10, Bulletin No. 7:* "The Work of Juniors in the Telegraph Service" (University of California).

QUESTIONS AND PROJECTS

1. State as many ways as you can in which information that you receive helps you in deciding what to do. In how many of these ways would a business man be helped?

2. Why does a business man nowadays need more information than a craftsman of medieval days?

3. What are some of the ways in which you can communicate to one of your friends that you want to go swimming?

4. What are some of the ways in which your teacher can have you communicate what you have learned in studying your lesson?

5. Show one way in which each of the means of communication given on page 287 might be used by your school in carrying on its work.

6. Is there an "office" in your school? Aside from the work of the principal or superintendent, what work is done there?

7. If you wish to communicate with a man in a neighboring city, what agencies might you use?

8. Explain what is meant by saying that jobs in communication arise in every business and also in communicating agencies.

9. Most jobs in communication in a business can be lumped together as office work, even though there is great specialization in the work. How can this be?

10. The general office is the brain of a business. Explain.

11. Some office jobs are called "junior work" and others "senior work." Why is it that some office tasks cannot be intrusted to people under eighteen years of age?

12. Why is it that women and girls are important in office work?

13. Look at the different kinds of junior clerks. Are they examples of specialization? Do you think it would take long to learn such specialized jobs?

14. Why would such specialized clerical jobs not pay very high wages?

15. Look carefully at the duties required of several of the junior commercial occupations. Does it seem to you that these duties can be learned better on the job or in school?

16. Look at the office work done by older workers. Does it seem to you that such work might require more training and education than that done by junior workers? Does it seem that such positions might be more worth holding? Does it seem to you that there would be something to be learned in school that might be very helpful in the office work done by older workers?

17. What features of the work of the stenographer are attractive, and what features are unattractive?

18. Should one who wishes to be a stenographer go to high school? If so, what courses would be helpful?
19. What are some of the special kinds of stenographic work?
20. Are there machines and specialization in communicating work?
21. What do you understand to be the difference between bookkeeping and accounting?
22. Which would need to know more about the business as a whole, the bookkeeper or the accountant?
23. Should one who wishes to be an accountant go through high school? Through college? What courses do you think would be helpful?
24. Are there machines and specialization in the work of senior clerks?
25. Why is it that a good-sized business needs someone to organize the work of all the specialized communicators?
26. Show some of the reasons why it is important to "layout" large offices well.
27. In what division of a telephone company do jobs occur that are not found in other businesses? Can you explain what gives rise to these jobs?
28. List what you think are the requirements for a good telephone operator and give a reason for each requirement.
29. Tell in your own words the work of the telephone operator.
30. Do you think the number of people employed in telephone work will grow larger within the next five years? Why?
31. Look carefully at several of the jobs for junior workers. Then discuss these questions:

Is the work interesting and pleasant?
Can I do or learn to do the work?
Can I grow at this job?
Is the pay good for my age?
Where will the job put me in five years? In ten?
What will the pay be in five years? In ten?
Will more schooling pay in dollars and cents?

32. Do the same for two or three senior office jobs.
33. Do the same for some job with a communicating agency.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.
L. C. Marshall, *The Story of Human Progress*, Chapter VII.

CHAPTER XVII

THE BUSINESS MAN'S TASK OF ORGANIZING EMPLOYEES AND THE OPPORTUNITIES IN PERSONNEL WORK

We have now looked at the main tasks of a business man. One thing remains for us to do; that is, to see what problems arise in the organization, management, supervision, and treatment of his employees. These have come to be called *personnel problems*. These problems in many stores, factories, railroads, mines, and other places are handled by a special department called a *personnel department*, often in charge of a man or woman called a *personnel* or *employment manager*. The experience of John Thomas will show us the duties of persons helping in this work, and it will prove helpful to one seeking a position.

John Thomas leaves school to go to work. — John Thomas who had finished the third year of high school, decided to quit and go to work. He realized he didn't know much about the work done by business men, for unfortunately there had been few courses in high school that helped him to understand business. He was honest and willing to work, however, and so felt sure there must be someone who would be glad to give him a chance.

John receives advice concerning finding a job. — John's first step was to call on a number of storekeepers and at the offices of several railroads and factories to see whether they

needed any help. In every case he was told, " We have nothing just now, but if you will leave your name and address we will let you know if we need you later." John found this method of applying very tedious. Finally he asked at one office if there was any other way to apply for a job than by asking for it in person. The man to whom he spoke replied: " Yes, there are a number of things you might try. For

Of a total of 3,999 —

1,217, or 35.8 per cent, secured positions through friends or relatives as follows:

Friend	555, or	16.3 per cent
Relative	547, or	16.1 per cent
Employer is a relative	115, or	3.4 per cent

1,367, or 40.2 per cent, secured their positions independently, as follows:

Applied personally	1,926, or	38.1 per cent
Answered advertisement	65, or	1.9 per cent
Worked there before	6, or	.2 per cent

136, or 4 per cent, were offered employment.

184, or 5.4 per cent, secured positions through employment or other agencies, as follows:

State employment office	31, or	.9 per cent
Private employment agency	138, or	4.1 per cent
Philanthropic organization	15, or	.4 per cent

132, or 3.9 per cent, secured positions through school or placement bureau, as follows:

Day school	71, or	2.1 per cent
Continuation school	7, or	.2 per cent
Placement bureau	54, or	1.6 per cent

363, or 10.7 per cent, secured positions by methods not reported.

METHODS BY WHICH MORE THAN THREE THOUSAND BOSTON BOYS AND GIRLS SECURED JOBS [1]

Notice the different methods of finding work. Which methods were used the most?

[1] Adapted from Helen Sumner Woodbury, "The Working Children of Boston." U. S. Department of Labor, *Publication No. 89*, p. 172.

instance, you would save time by writing to some business men instead of calling on them. Then you can advertise for a position in the newspapers and read the 'help wanted' advertisements. And you might go to one or more of the employment agencies in the city and register for work. These agencies are businesses organized just to help people



Photo by Brown Brothers

APPLICANTS FOR POSITIONS WAITING TO BE INTERVIEWED
The interviews take place in the office at the right.

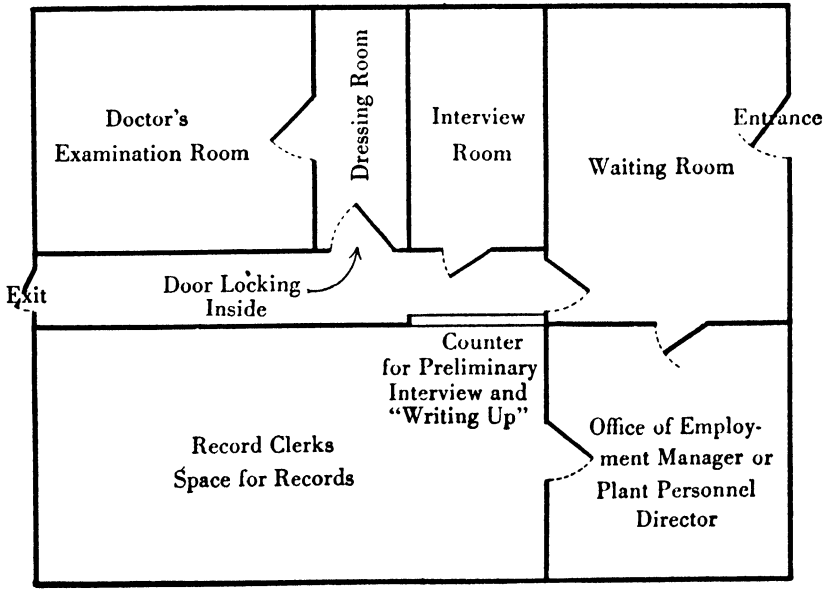
find work, and they might know of just the position for you. Indeed, I believe the high school you just left has a vocational or employment bureau which would be glad to help you. When I employ helpers I use all of the means I have just mentioned, and there may be others of which I do not know." John thanked him for his advice.

The newspapers prove useful. — That same evening John stopped at a morning newspaper office and asked to have the following advertisement run for three days:

> High-school boy wishes permanent office position with opportunity for advancement. Alert and willing, but inexperienced.

While awaiting an answer to his advertisement, he read the "help wanted" column of the daily papers. Two days later he was interested by the following advertisement:

> WANTED: A file clerk in our purchasing department. Good chance to learn the business. High-school graduate preferred.



LAYOUT OF EMPLOYMENT OFFICE [1]

It was an office somewhat like this that John Thomas found when he came to apply for a position.

[1] Used by permission from L. P. Alford, *Management's Handbook* (The Ronald Press).

He called at the address given. There were a number of other boys already there, who had come to apply for the same position. Presently a young man appeared and addressed the boys: "I presume you are here to apply for the position we advertised. I should like to talk with each of you alone." He motioned for one of the boys to follow him into an inner office. John waited while the boys who had arrived before him were interviewed, and then walked into the inner office.

APPLICATION BLANK

Cleveland Manufacturing Company

Date..... Telephone No.....
Name in full.....
Address.....
Street City State
What is your age?..... Date of birth?.....
Month Day Year
Nationality or descent?..... Where were you born?.....
Are you single? Married, widower, or divorced?..... Number of dependents?.....
Are you living with parents? Relatives? Boarding or housekeeping?.....
Have you any relatives employed by us?.... If so, names and where employed.....
.....
What grade or class were you in when you left school?.....
Did you study any bookkeeping or office practice while in school?
For how long did you study either or both?.....
For what position do you apply?.....
Have you any defects in sight? Hearing? Speech? Limb?
In order to satisfy yourself and us that you are in good health, are you willing to submit to a physical examination?.....
List below names and addresses of five persons whom you know well.
.....
.....
.....
.....
.....

General Electric Light Company of Pennsylvania

OCCUPATIONAL DESCRIPTION

NAME OF OCCUPATION . . Office Boy . . B. SYMBOL . 1550 . DATE 9/26/21 . .
NAME OF DEPARTMENT . Financial

Pay	The employment salary for this position is $6 per week.
Hours	8 : 30 A.M. to 5 : 00 P.M. Monday to Friday, inclusive. One half hour for lunch. 8 : 30 A.M. to 1 : 00 P.M. Saturday.
Duties and responsibilities	The Office Boy places the Company's endorsement on all checks, using a machine. He also uses a patent machine which stamps the *amount* on dividend checks. All mail coming into the department is stamped, showing the time it is received and distributed by him to those for whom it is intended. He also files "Statements" and other papers in "Grip Binders." The Office Boy assorts coupons consecutively according to "Series Numbers." Each coupon period of each bond issue has a "Series Number," and the coupons are numbered within the "Series." When the cancelled coupons are received, they are assorted in the manner outlined above. In addition to the above-mentioned duties, the Office Boy frequently executes errands to the different departments.
	He is required to give bond of two thousand dollars.
Personal qualities desired	A boy between the ages of fourteen and sixteen years is desired. He should have a neat appearance, because his errand duties necessitate his circulating among the executive offices of the Company. Accuracy is required in the assorting of coupons according to series and number.
Working conditions	The Financial Department is located on the eighteenth floor of the Lexington Building, and the office is well lighted and ventilated. A small desk with the necessary appurtenances is supplied for the use of the Office Boy. The work involves considerable standing and walking around the department and to other departments of the Company.
Education and experience desired	No former experience is necessary.
	An eighth-grade education or its equivalent is desired, in order that the Office Boy may be able to perform the filing and assorting and the stamping of checks as called for in his duties.
Opportunities for advancement	This position furnishes promotion to Burroughs Bookkeeping Machine Operator.
Sources of supply	The public schools are a source of supply.

The interview and the application blank. — He was asked to be seated and encouraged to talk about his chief interests and pastimes. He was questioned concerning his name, age, parentage, health, and any work he had done. Finally the interviewer, who was the first assistant of the employment manager for this factory, said: "Before you go, fill out this blank and we will notify you within a day or two if we can use you."

The physical examination. — Although John did not know it, each boy who applied was asked to fill out a similar application blank. The employment manager and his assistant later discussed the interviews and went over the filled-in blanks carefully. John's interview and application seemed the most promising, and he was therefore notified to report at the office. Upon arrival, he was told that he was being considered favorably and was asked to take a physical examination. He was taken to the office of a physician employed by the company, where he was thoroughly examined. The doctor was careful to see that his body was robust and healthy, that his teeth were well cared for, and that he had no disease that might be communicated to others. He then prepared a certificate saying that John was physically fit. Shortly he was accepted as an employee.

The office school. — John had thought that his school days were over, but the very first day on his new job he was told that for some time he would be expected to spend one hour each afternoon in the office school. "I know from your application blank," said his instructor, "that you studied bookkeeping and office practice in high school. But we have our own system of doing things here. We want you to learn how to file catalogues, vouchers, and letters for the purchasing agent. We do that in our own way. Furthermore, we hope it will not be long before we can advance you, and

we want you to learn how other things in this office are done."

A school within a business was a new idea to John. He did not know that many business men have realized that public schools cannot teach the exact methods used in different offices, stores, and factories. He did not know that such business men had organized *company* or *corporation* schools of their own to meet this situation. In these schools employees are taught to apply a general knowledge of business to the business of their employer, and to learn the exact methods employed within his business. A corporation or company school does not usually teach much that will be useful excepting in working for that one business organization. Knowledge of general usefulness must be gained before one goes to work, or outside of work hours.

John hears of the bonus.—One day as John was leaving the office, he met a boy of about his own age, who told him he was a clerk in the accounting department. The clerk said: "I help figure how much bonus each salesman gets."

"What is a bonus?" asked John.

The clerk explained that each of the men who sold goods for the factory was given a certain allotment to sell each month. He explained that a certain salesman, for example, was expected to sell each month fifty of the machines that the factory made. His pay was two hundred dollars a month if he sold less than fifty; but if he sold fifty, he received two hundred and twenty-five dollars instead of two hundred. The extra twenty-five dollars was the bonus for selling his allotment.

John might have learned, too, that the bonus method of encouraging or stimulating a helper was only one of many used by business men. He might have learned that similar methods of payment were often used in the factory to pay

the mechanics and other hand-workers as well as to pay salesmen. If he had thought about it, he might have realized that one reason why the employment manager received a high salary was because he had devised various plans to stimulate the men and encourage them to do their best.

SOME WAYS IN WHICH PERSONNEL WORK IS CARRIED ON

1. Ability of applicants is judged by —
   a. Personal interviews
   b. Application blanks
   c. Mental and physical tests and other special tests, to fit the needs of specific cases
2. Employees are developed by —
   a. Special training courses
   b. Instruction by a supervisor or special instructor
   c. Lectures and bulletins
   d. Motion pictures
3. Advisability of promotion or change of work is judged by —
   a. Records of work done
   b. Records of school work
   c. Reports of personal attitude toward work, coöperation with workers, and other personal matters that might be of value or detrimental to the employee
4. Employees are kept interested in their work and encouraged by —
   a. Good payment plans, such as bonuses or profit-sharing
   b. Social and athletic activities
   c. Good working conditions and surroundings
   d. Restaurants, rest rooms, and other conveniences

Different employers feel that different personnel methods are effective in promoting good will and effective work. The outline above lists some of the more common practices.

There were good physical conditions of work. — As time went on, John realized that a great deal of trouble was taken to make the office workers healthy and comfortable in their work and to provide means for making their work easy.

If anyone fell ill, the company physician attended him without charge. Every desk was so arranged that its occupant enjoyed good light and air. Noiseless typewriters were in use, so that the noise of typing would not be distracting and irritating to the workers; and soundproof walls partitioned one section of the office from another so that sounds in one part of the office would not disturb workers elsewhere.

One day the purchasing agent sent John out to the factory to get some inventory record slips from the storekeeper. On his way to the storekeeper's room, he noticed how orderly and pleasant the whole factory was. Every machine was well oiled and clean, and all sharp edges, belts, or other parts of the apparatus that might injure a workman were carefully guarded. The place was filled with sunlight from well placed windows. Near the door were rows of lockers in which the men could leave their greasy overalls before starting home.

Adjoining the factory there was a restaurant operated by the company, where everyone could obtain a warm lunch at cost. The employment manager believed that people who are well fed work better.

Within a few weeks of his arrival, John was asked to join a baseball team composed of boys of his own age who worked for the company. He learned that there were other athletic teams made up of workers in the office and the factory. The employment manager believed that athletics built better workers and that the interest in the company's teams aroused an interest in the company. After a year John was given a week's vacation and invited to spend it near a lake where the company provided accommodations at low cost.

Promotion. — After his vacation, John was asked to go to the office of the employment manager. He was greeted by the assistant, who said:

" Well, John, the purchasing agent is well pleased with your work and believes you are capable of holding a more responsible position. He is in need of a clerk to take charge of checking all requisitions for materials, and suggests that you be given a trial at this work. Would you care to assume the responsibility? "

The position of requisition clerk brought one in close contact with the purchasing agent and enabled one to learn a great deal about the materials used in the business and the methods of buying them. Naturally, it was considered a very desirable job, and so John quickly replied:

" I should like to try it."

" Very well, then," replied the assistant, " you may report to Mr. Scott. I will see that someone fills your old place. Your salary will be raised ten dollars a month."

John's experience was unusual. — Few boys or girls who go to work at John's age would find as good conditions of employment and as rapid advancement as he did. By studying his case, however, we have seen some of the main tasks of the employment manager. We found that his work is concerned with —

1. Finding and hiring helpers
2. Educating and training helpers to do their work in the best possible way
3. Stimulating and encouraging workers to do the best work they can
4. Surrounding the helpers with the conditions which make good work possible
5. Arranging and overseeing promotion and advances in pay
6. Drawing up accounts and records which help the business man to know just what his helpers are doing and what each job in his organization requires

Occupation Date and place of birth *2/15/09 Lime, Iowa* Self-dependent? *Yes* Dependents? How many? *None*	Name *Thomas, John* Address *435 S. Ninth St., Lime, Iowa* Telephone *Main 426* Notify in emergency: *Mrs. L. W. Thomas (Mother)* Telephone *M. 426*

Previous experience *None*

Education

Common school — Graduate? — Name of school *Lime West Side School* — Age at end *13*

High school — Graduate? *No — 3 years only* — Name of high school *Lime High School* — Age at end *16*

Remarks: *School records show good scholarship*

College *None* — Name *None* — Degree *None*

Technical Training *None*

QUALIFICATION CARD — FRONT

Physical data			Test scores		
			Date	Test	Score
Height *5'6"*	Weight *126*	Eyes *Good*	*6/30/25*	Mathematics	*88*
Ears *Good*	Lungs *Fair*	Heart *Good*	*10/20/25*	Business Practice	*90*

Times tardy	Times absent	Company experience
1925 *3*	1922 *0*	*File Clerk in Purchasing Dept.*
1926 *2*	1923 *1*	

Follow-up reports

7/15/22 *Enthusiastic and ambitious*
8/30/25 *Well liked by associates*
10/30/25 *With instruction in mathematics, good material for promotion*
5/30/26 *Should be promoted, as he has outgrown present position*

QUALIFICATION CARD — REVERSE

This card shows how information from the personal interview, the application blank, and other records regarding an employee is all brought together on one card for ready reference.

Jobs in Personnel Work

The opportunities in employment work. — Scientific employment management is in a pioneer state. A great many business men are not convinced of the usefulness of such work and still give little attention to the matter. On the other hand, some large corporations have found the establishment of a scientific employment department both gratifying and useful. As one student of the subject says, "There are employment managers and employment managers. At one end of the line we find the subordinate clerk who merely hires and fires. At the other end of the line we find the employment manager who is coördinate in rank and authority with the works, the sales, and the financial managers; who is responsible for all administrative and executive work pertaining to the personnel . . . ; who is representative of the work-people to the management, and of the management to the work-people."

Until business men are convinced of the usefulness of scientific and well organized employment departments, there cannot be a wide field for people trained in personnel work. Those firms that have established such departments have found them of such help that it seems justifiable to believe that in time many others will follow their example. The executive positions in this field are well paid. The assistants and clerical helpers are paid on a scale similar to that of such employees in other departments. An idea of the kinds of positions available in firms where employment departments are well organized may be had from the following list of occupations:

Director of personnel
Employment manager
Assistant employment manager

Interviewer
Medical director
Industrial physician
Industrial nurse
Safety engineer
Director of training or education
Director of recreation and physical training
Editor of employees' magazine
Director of research
Supervisor of service
Manager of employees' lunch room
Research assistants for —

- Labor audits
- Job analysis
- Time and motion study
- Employment statistics
- Trade tests

Director of recreation and physical training
Plant librarian
Investigators and other assistants in personnel administration [1]

Qualifications and training necessary. — Personnel or employment work is attractive for those who enjoy meeting and talking with people and who are able to place themselves in the other person's position and see his viewpoint. But agreeableness of personality and ease in talking are not enough. Several other kinds of ability, and a readiness for hard work are required. The following chart [2] shows the characteristics of a successful personnel manager:

[1] From a list compiled by the Bureau of Personnel Administration.

[2] Cf. Scott and Clothier, *Personnel Management* (A. W. Shaw Company), p. 72.

A Successful Personnel Manager	
must possess	a keen sense of social justice interest in people judgment and common sense courage sales ability unselfish point of view tact and diplomacy power of analysis
in order to	advise the higher command on matters of personnel policy advise and coöperate with the executives act in salary determination direct personnel department efficiency represent company in employee activities render personal service to employees

An important basis for personnel work is an understanding of people, their development, and their work. Persons interested in this field will profit by studying psychology, anthropology, history, economics, sociology, and biology. Such courses help them better to understand individuals and how they adapt themselves to their surroundings. Of great value is an understanding of all phases of business. College training is desirable for one wishing to become an employment manager. Courses in personnel administration are offered in many universities, usually in economics or business departments.

QUESTIONS AND PROJECTS

1. In carrying out all of his tasks, the business man makes use of helpers. Why does he need a special department to help use helpers?
2. List the means that John Thomas might have used to secure a job. Illustrate as many of these as you can from your own town or city.
3. Explain the use of the application blank. Show why it is important to know what qualifications are needed for a job before the personnel manager can draw up a good application blank.

4. The interview and the application blank are used for the same purpose. Explain.

5. Explain the use of the occupational description shown. How could such a description be prepared?

6. Define a corporation school or company school. Show by illustrating with a particular business, such as a grocery store with which you are familiar, why there are some things that can be learned better "on the job" than anywhere else. Show why there are some things that might be useful on the job that can be learned better in school than at work.

7. Suppose that a teacher had decided that five problems were a fair assignment for one day's work. The class is told that if all five problems are finished correctly, a grade of 100 will be given; if less than five are done, the grade will be 50. Would this be a reasonable way of marking? Would it be reasonable unless the proper number of problems had been carefully planned? Show the relation between this question and a bonus system of payment.

8. List five conditions in a factory, store, or school that might make for efficient work.

9. Explain why the owner of a factory or a store might think it did not pay to provide all the conditions that would make the workers most efficient.

10. Put down the list of occupations that grow out of personnel work. Write after each one the kind of work that seems to be required by the job.

11. It is said that the following qualifications are useful in a personnel manager:

A keen sense of social justice
Interest in people
Judgment and common sense
Courage
Sales ability
Unselfish point of view
Tact and diplomacy
Power of analysis

Show how each of these might be valuable in dealing with people.

12. What courses in your school might be useful in helping toward personnel work?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part III.

CHAPTER XVIII

THE MEANING AND VARIETY OF PROFESSIONS

In Chapter III we first saw that jobs are the specialized tasks that organizers decided must be performed in carrying on their work. We learned that society has given the work of organization to several agencies of which two are of chief importance. One of these is individual enterprise and the other is public enterprise.

We also noticed in that chapter that individual enterprisers either undertake the work we call " business " or they go into the " professions." We have spent a number of chapters studying the tasks performed by the business man and the jobs that grow out of the business man's work as an organizer. Now we may turn our attention to the professions.

What is a profession? — In many ways a man who enters a profession is doing the same sort of thing as one who enters business. He is taking some of society's resources and offering to convert them into something people want. Although a professional man often uses a much smaller quantity of social resources than a business man, some professional men occupy large offices (offices are capital) and employ a considerable number of people (people are labor power). Professional men, too, often are as much interested in making money as are business men.

The goods furnished by the professional men are not usually so easy to see as those furnished by a business man.

An automobile, for example, is more noticeable than a doctor's advice; but the goods furnished by professional people are extremely important. Who can measure the value to the world of the work of great scientists such as Pasteur or Edison? Who can measure the value of the service given to us by great writers, teachers, doctors, musicians, painters, and actors?

Most persons who have tried to define professions have found the task difficult. Sometimes we think of a man as being in professional work when he has chiefly his own services to sell. Again, we think of professional people as those engaged in the kinds of work that from tradition have gained a standing somewhat higher than other types. The practice of medicine and law and the work of the clergy are sometimes thus viewed. Nearly always, however, there is associated with the notion of professional work an idea that those engaged in it, work, partly at least, for the purpose of rendering some service regardless of gain to themselves. We think of it as being done partly because it is interesting in itself, and partly because it furnishes a way in which something can be added to the knowledge of the world. Society would be fortunate if professions succeeded in keeping such ideals in the minds of all their members.

Changes in the pattern have changed professions. — When we studied making a living in medieval days, we saw that the church was the chief profession, and that some persons were engaged in medicine, in law, and in entertaining. The United States census now lists thirty-three kinds of professions and gives a long list of semi-professional occupations. What has made this difference? What has given the professions their importance? Expansion in the professions might be traced through the same changes that have made business nowadays so different from business in 1300.

Perhaps the most important change has been enlarged scientific knowledge. This has greatly increased specialization in some of the professions. A medical man of the Middle Ages may have had as much knowledge of anatomy, physiology, and medicine as was then available. But every phase of science has developed to such an extent that no one can feel well-informed about the entire field. Therefore he specializes. A physician or surgeon of to-day finds it difficult enough to know thoroughly only a small part of the body. He concentrates on the teeth and becomes a dentist, or on the nerves, bones, heart, or brain, and becomes a specialist on one of these. He does not mix his own drugs, as before. Professional men called pharmacists do that. Other specialized professions, such as bacteriology and radiology are arising, which deal in detail with only a small part of the work that is included in the practice of medicine and surgery. A skilled craftsman formerly knew the principles of mechanics that were then considered important. He made his own designs and drawings and worked the necessary wood or metal. Now building and manufacturing have been divided into many parts, so that they give work to architects, designers, draftsmen, and a whole list of engineers and builders, as well as to such workers as those we studied in Chapter XII.

In the entertaining and inspiring professions, we find a similar specialization. The jongleur or minstrel has given place to a great variety of entertainers. The Church has turned much of its work over to other institutions. Noticeable is the work of educating, which is now mostly done by the public school system. A similar specialization exists all through our professional work. Partly, as in professions based on science, this is due to increase in knowledge of the subject dealt with; partly it is due to the fact that a good

specialist in almost any field can now find enough people ready to buy his wares to yield him a living. We say " his market has widened."

The business man hires professional men. — The professions have also grown in importance because they have been found very useful by the business man. The business man has discovered that there are many things he need not attempt to learn, because he can hire a professional man to work for him. And, as business has become large-scale, the business man can well afford to employ one or more specialized professional men in various branches of his business. For his building and production work, he turns to the engineer. In making his adjustments to the rules laid down by society, he hires a lawyer. For planning and supervising the keeping of his records, he may employ a public accountant. More and more he finds that his own work is in collecting a number of specialized professional men and directing them so that they supplement one another in operating the business.

Classes of professions. — We have said that the United States census lists thirty-three professions. Some persons would make the list of professions even longer. There are two classes, however, into which professions may be divided. These are:

1. Those professions that are now concerned mostly with helping the business man in some of his tasks
2. Those professions that give some service that people use directly for their own enjoyment or improvement

Under these two heads we may list professions [1] in the manner shown on the next page.

[1] The lists show the approximate number of people engaged in these professions in the United States.

PROFESSIONAL WORKERS WHO GIVE SERVICE THAT PEOPLE USE DIRECTLY FOR THEIR OWN ENJOYMENT OR IMPROVEMENT

	TOTAL	MALE	FEMALE
Medical workers	368,781	214,405	154,376
Physicians and surgeons	144,977	137,758	7,219
Dentists	56,152	54,323	1,829
Osteopaths	5,030	3,367	1,663
Trained nurses	149,128	5,464	143,664
Veterinary surgeons	13,494	13,493	1
Social workers	41,078	14,151	26,927
Clergymen	127,270	125,483	1,787
College presidents and professors	33,407	23,332	10,075
Teachers	761,766	122,525	639,241
Librarians	15,297	1,795	13,502
Writers	40,865	32,129	8,736
Authors	6,668	3,662	3,006
Editors and reporters	34,197	28,467	5,730
Entertainers and artists	248,098	139,330	108,768
Actors and showmen	48,172	33,818	14,354
Painters, sculptors, and teachers of art	35,402	20,785	14,617
Musicians and teachers of music	130,265	57,587	72,678
Photographers	34,259	27,140	7,119
Home-makers	21,318,933		21,318,933

In these lists there is some overlapping. Lawyers and architects are starred because they do a great deal of work for the business man and also for individuals. With this idea of what the professions are, we are ready to look at them as possible ways of making a living. We ought to have some idea of the importance of each profession and some idea of the kinds of work it includes, its rewards and possibilities, and how to get into it.

PROFESSIONAL WORKERS CONCERNED MOSTLY WITH HELPING THE BUSINESS MAN IN SOME OF HIS TASKS

	TOTAL	MALE	FEMALE
Engineering professions	239,713	230,294	9,419
Engineers	136,121	136,080	41
Designers	15,410	9,758	5,652
Draftsmen	52,865	50,880	1,985
Inventors	2,376	2,349	27
Chemists, assayists, and metallurgists	32,941	31,227	1,714
Architects *	18,185	18,048	137
Lawyers *	122,519	120,781	1,738
Public accountants, about	6,000		Only a few

* Do much work also directly for people not in business.

QUESTIONS AND PROJECTS

1. One man says that he can see no difference between a professional man and a business man. Make a list of ways in which it seems to you that professions and business are alike; are different.

2. Make a list of five professions in your own city. Name a man or woman in each profession.

3. Show how the work of the doctor has become specialized since medieval days; the work of the lawyer. Show how the work of the clergy has been divided among other professions since medieval days. Show how the work of the minstrel has been specialized. What causes can you give for these changes?

4. Look at the list of professions that help the business man and show which of these might be hired by a manufacturer.

5. Look at the list of professional workers that serve people directly. Which ones of these have ever been of any use to you?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part IV.

"Educational Directory: 1925." U. S. Department of the Interior, Bureau of Education, *Bulletin No. 1.*

CHAPTER XIX

PROFESSIONS EMPLOYED BY THE BUSINESS MAN

Engineers

In Chapter V we saw something of the great increase in scientific knowledge which the world gained between 1300 and the present time. We also saw something of how science was put to work to make goods. It is the task of engineers to put science to work; though others also apply science, we look to engineers to turn scientific knowledge to practical use in many important ways. Their work has become so important that there are more than 240,000 persons in engineering work in the United States, more than 9,000 of whom are women.

The kinds of work done by engineers. — Since it is the work of engineers to harness science and make it serve us, it is not strange that the business man has hired engineers for many purposes. Their knowledge of chemistry may be applied in such industries as making dyes or the manufacturing of steel. An engineer's knowledge of physics and mathematics may be needed in constructing a building or planning a railroad bridge. It may be that his knowledge of geology will be valuable in a mining operation. An engineer may apply his knowledge of electricity to the building of a power plant or to directing the transmission of electrical power. An engineer may be called upon to guide a city in providing its water supply or disposing of its sewage.

These varied possibilities suggest that there are many different kinds of engineers; and there are. The largest divisions of engineering are civil engineering, mechanical engineering, chemical engineering, electrical engineering,

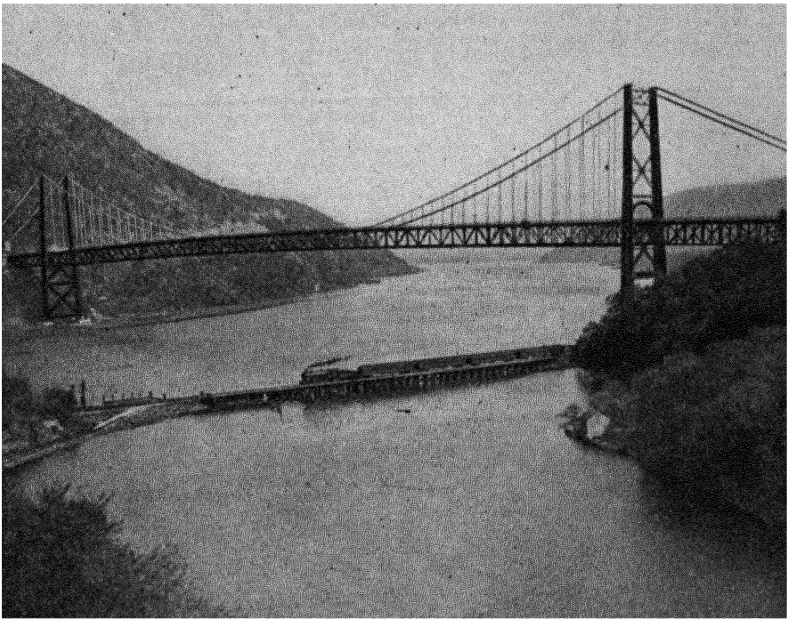


Photo by Ewing Galloway, New York

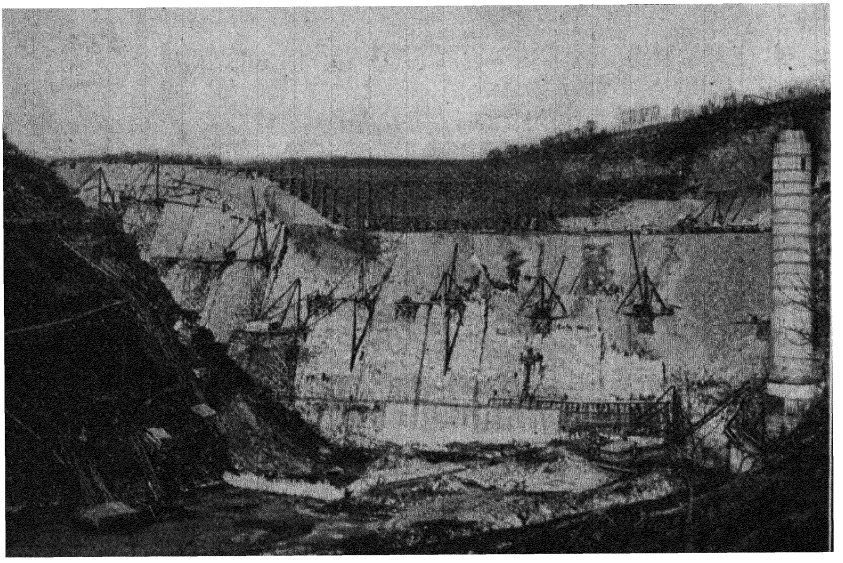
THE FAMOUS BEAR MOUNTAIN AUTOMOBILE BRIDGE ACROSS THE HUDSON RIVER

This splendid piece of engineering has greatly increased the enjoyment of thousands of motorists in the beautiful Hudson valley.

and mining and metallurgical engineering. Besides these large divisions, there are many subdivisions. The construction of roads, railroads (both steam and electric), canals, and harbors calls for specialists. Bridge engineering has become a field by itself, as has the engineering required for tunnel construction, water supply, power development, irri-

gation and drainage projects. Structural engineers are needed for the design and construction of all types of building and manufacturing plants.

Every day, engineers are making new uses of science in their work. The steam engine, the airplane, the submarine, the air brake, the suspension bridge, the automobile, and the wireless are all examples of the work of engineers.



Courtesy of the Engineering News-Record

AN IMMENSE DAM IN PROCESS OF CONSTRUCTION

Such is the work of the engineer and builder.

Qualities needed by the engineer. — Since the engineer is concerned with using science in some practical way, it goes without saying that success as an engineer requires a knowledge of science. Almost always there is also a need for a good knowledge of mathematics. The electrical engineer of the Western Union Telegraph Company thus states the qualities needed for success:

"The work of an engineer requires power of imagination, accuracy of thought, and capacity for judgment. Anyone considering it as a possible vocation should be of the curious type, have the creative instinct, be apt in contriving, composing, and inventing, and have an interest in the workings of the laws of nature.

"Another quality which an engineer must have is mental honesty, accuracy of thought. He cannot juggle figures; he cannot change the laws of physics or mathematics. He cannot make a guess or take a chance. . . .

"Judgment, which can to a certain extent be acquired, is the third essential natural qualification for the engineer. He must have the power of making accurate and definite decisions and feel confident he is right. He must be capable of making quick and accurate estimates on which to base decisions.

"The qualification of the artist to create — to produce or construct something where there was nothing before — is another essential for the engineer. The river tunnels and subways in New York are products of this quality."[1]

The pay of the engineer. — The pay of an engineer is ordinarily good. Of course, graduates of engineering schools do not begin at the top in this work any more than they do in any other. They are often employed first as draftsmen, designers, instrument men, or assistant engineers. The telephone companies and certain large manufacturing companies now visit many of the universities and attempt to get graduates to come to them. The telephone companies pay about fifteen hundred dollars a year at the beginning. The pay is increased at the rate of two or three hundred dollars annually. The following lists show the sort of pay which

[1] Douglas Fryer, *Vocational Self-Guidance* (J. B. Lippincott Company, 1925), pp. 280–81.

may be expected in a number of divisions of work done by assistant engineers and their aids:

I

MONTHLY SALARIES OF ASSISTANT ENGINEERS AND ENGINEERING ASSISTANTS [1]

Tracer	$125 to $150
Detailer (structural, mechanical, and electrical)	150 to 225
Designer, in all classes of work	225 to 300
Specialist in structural design	350
Estimator	300 to 350
Rodman and levelman	125 to 160
Instrument man	150 to 160
Chief of party (on location and other engineering surveys)	160 to 225
Assistant engineer	200 or more
Map draftsman	150 to 200
Surveyor	150 to 190
Research engineer	175 to 250

(For temporary positions, the pay averages 20 per cent higher than stated above.)

II

MONTHLY SALARIES IN THE ENGINEER CORPS OF A RAILROAD [2]

Division engineer	$400.00
Ass't division engineer	268.00
Office engineer	208.00
Ass't engineer	$178 to 208.00
Instrument man	148 to 158.00
Draftsman	133 to 158.00
Tracer	105.00
Rodman	95 to 105.00

A study made of the graduates of an eastern engineering school showed that at the end of fifteen years these men were receiving an average annual salary of seven thousand dollars. Consulting engineers — that is, those who do not work on a salary for any particular company but are in busi-

[1] *Bulletin No. 76, Series No. 3* (Stanford University), p. 101.
[2] *Ibid.*, p. 102.

ness for themselves and may be called upon for advice — receive from $25 to $100 a day and sometimes make a high total for the year. Many find, however, that it is more satisfactory to work for a salary as such an income is certain.

Training required for the engineer. — In former years, when engineering work was less scientific than it is now, men with a great deal of experience in the field were given preference over men with college training. This statement is no longer true, however, for now a college training, or its equivalent, is recognized as essential for engineering.

The college engineering course is usually four years, although a fifth year is urged at an increasing number of schools. It is a good plan for an engineering student to spend his vacations gaining practical experience under actual working conditions.

As a background for a college course in engineering, a student would do well to take a considerable amount of mathematics and science while in high school. He should not take so much as to interfere too seriously with work in English, history, civics, economics, and business subjects, however. It is very important that engineers have a broad and liberal education along with their technical training, for they will be called upon to work with many kinds of men. The boy planning to be an engineer should remember that the chances are large that he will work for some business. He should therefore know the tasks of a business man and how they are performed.

It is possible for those who cannot attend college to become successful engineers, but the road is hard and long. Practical work for pay in the daytime may be supplemented by study through a correspondence or night school. A great deal of perseverance and pluck is required to gain an engineering education in this way, however.

Schools where engineering is taught. — The United States Bureau of Education lists some one hundred twenty-seven schools of engineering. Many of them, including many of the highest standing, admit women students on equal terms with men. Some of the leading engineering schools in various parts of the United States are listed below:

California Institute of Technology, Pasadena, Cal.
University of California, Berkeley, Cal.
Colorado School of Mines, Golden, Col.
Yale University, New Haven, Conn.
University of Kansas, Lawrence, Kan.
University of Illinois, Urbana, Ill.
Massachusetts Institute of Technology, Cambridge, Mass.
Harvard University, Cambridge, Mass.
Johns Hopkins University, Baltimore, Md.
University of Michigan, Ann Arbor, Mich.
Dartmouth College, Hanover, N. H.
Cooper Union, New York City.
Columbia University, New York City.
Ohio State University, Columbus, Ohio.
Carnegie Institute of Technology, Pittsburgh, Pa.
University of Pittsburgh, Pittsburgh, Pa.
University of Texas, Austin, Tex.
State College of Washington, Pullman, Wash.
University of Washington, Seattle, Wash.
University of Virginia, Charlottesville, Va.
University of Wisconsin, Madison, Wis.
Washington University, St. Louis, Mo.[1]

Lines of promotion in engineering work. — Lines of promotion vary in the different kinds of engineering work and in the various industries where engineers are employed. Some idea of lines of advancement and salaries in this work may be gained by looking at the following tables, which show the different grades of engineers employed by the federal government.[2]

[1] Cf. Bureau of Vocational Information, *Training for the Professions and Allied Occupations*, p. 339.

[2] *Bulletin No. 76, Series No. 3* (Stanford University), p. 104.

ANNUAL SALARIES IN ENGINEER CORPS OF FEDERAL GOVERNMENT

Position	Pay	Remarks
Consulting engineer	$10,000	Extraordinary positions — the ultimate of engineering pay in regular federal service
Chairman Alaskan Engineering Commission	15,000	
Asst. chief engr., Motor Transport Service . . .	6,000 to 7,500	These positions represent the usual upper limits for engineers in federal service
Chiefs of bureaus and chief engineers of bureaus (10)	4,500 to 7,500	
Valuation engineer	3,300 to 4,000	Treasury Department
Engineers	4,000	Average for Public Roads Bureau
District engineer (12) . . .	3,300 to 4,000	Board of Rivers and Harbors of War Department
Managers of reclamation projects (40)	2,520 to 3,900	
Bridge and construction engineers (Alaska)	4,200	Alaskan Engr. Com. (Salaries higher in Alaska)
District engineers and assistants	3,000 to 3,720	Department of Agriculture
Surveyor general (13) . . .	3,000	Interior Department
Chief draftsman, computers, chiefs of division (6) . . .	3,300 to 4,500	
Hydraulic engineers . . .	2,200 to 3,600	Reclamation Service, Dept. of Agriculture, and generally in Interior Dept.
Engineers and assistant engineers (173)	2,400 to 3,300	
Draftsman, technical assistant, junior engineers, and office assistants	1,500 to 2,400	Department of Interior, U.S. G.S., Patent Office, Rec. Ser., Treas. Dept., War Dept., Navy Dept., Coast and Geodetic Survey

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
SCHOOL OF CHEMICAL ENGINEERING PRACTICE

Individual and practical training at five industrial plants are important features of the Graduate Course in Chemical Engineering Practice. Field work is carried on at Bangor, Me., Boston, Mass., and Buffalo, N. Y., in plants producing sulphite and soda pulp, paper, caustic soda, chlorine, heavy acids and salts, sugar, coke, gas, steel, and other chemical products.

The more important operations of Chemical Engineering, as typified by the above processes, are studied systematically by tests and experiments on actual plant apparatus, thus fixing in the student's mind the principles of Chemical Engineering and correlating these principles with practice.

The work is non-remunerative and independent of plant control, the whole interest of the students being study and experimentation.

Registration is limited, as students study and experiment in small groups and receive individual instruction.

Admission requires adequate preparation in chemistry and engineering. Able students can complete the requirements for the Master of Science degree in one and a half years.

Representatives of thirty colleges and universities now attend the School of Chemical Engineering Practice.

For further details address the

SCHOOL OF CHEMICAL ENGINEERING PRACTICE
Massachusetts Institute of Technology, Cambridge, Mass.

THIS IS THE WAY IN WHICH ONE SCHOOL OF ENGINEERING DESCRIBES ITS WORK

One of the largest employers of civil engineers in the federal service is the Department of the Interior. We shall study some of the work of that department in the section on government. Here let us discuss only the engineering profession. In a recent year, there were in this department 2,383 civil engineering positions [1] which were classified as follows:

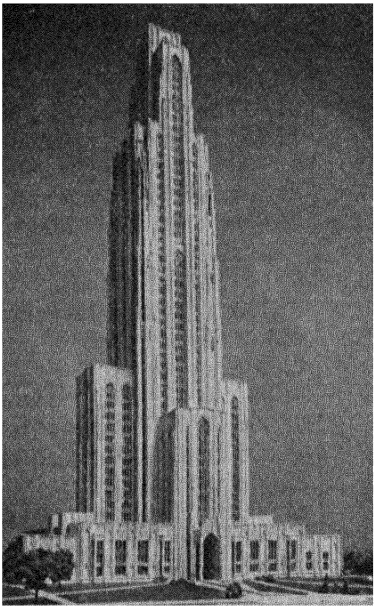
[1] *Bulletin No. 76, Series No. 3* (Stanford University), p. 105.

ANNUAL SALARIES IN CIVIL ENGINEERING POSITIONS
DEPARTMENT OF THE INTERIOR

Kind of Position	Number of Positions	Range of Salary
Chief engineers	4	$4,000 to $10,000 per annum
Asst. chief engineers	2	$3,000 to $ 8,000 per annum
Civil engineers	55	$2,400 to $ 6,000 per annum
Asst. civil engineers	87	$1,500 to $ 3,300 per annum
Assistant engineers	38	$1,800 to $ 2,310 per annum
Engineers (hydraulic)	12	$2,160 to $ 2,880 per annum
Junior engineers	20	$1,440 to $ 1,800 per annum
Hydraulic engineers	36	$2,460 to $ 5,000 per annum
Division engineers	36	$2,500 to $ 5,000 per annum
Topographic engineers	87	$1,800 to $ 5,000 per annum
Asst. topographic engineers	40	$125 per month to $2,040 per annum
Junior topographers	28	$90 to $125 per month
Designing engineers	9	$2,100 to $4,500 per annum
Consulting engineers	18	$15 to $50 per day
Bridge engineers	1	$3,600 per annum
Office engineers	2	$1,800 to $3,000 per annum
Resident engineers	3	$2,400 to $2,700 per annum
Construction engineers	4	$1,800 to $2,500 per annum
Highway engineers	1	$2,400 per annum
Engineer computers	2	$1,500 to $2,100 per annum
Project engineers	4	$2,100 per annum
Forestry engineers	1	$2,000 per annum
Cadastral engineers	64	$155 to $300 per month
U. S. surveyors	26	$125 to $150 per month
Mineral examiners	23	$1,620 to $3,000 per annum
Transit men	31	$100 to $160 per month
Chain men	539	$45 per month to $1,560 per annum
Rodmen	1,017	$45 per month to $1,740 per annum
Instrument men	73	$110 to $175 per month
Levelmen	9	$90 to $155 per month
Structural draftsmen	2	$2,640 to $4,200 per annum
Draftsmen	107	$1,200 to $2,700 per annum
Estimators	2	$1,800 to $2,400 per annum
Total	2,383	

Architects

The work of the architect may properly be thought of as part of the engineering profession. Architecture is concerned with the designing of buildings and their surroundings and with supervising construction. It has grown in importance as buildings have become larger and more complicated and elaborate. The work of the architect extends into the neighboring fields of interior decorating and landscape gardening.



The Cathedral of Learning

This structure planned by architects for the University of Pittsburgh is an interesting example of the kind of work that can be done by an architect with training, skill, and imagination.

The bases of architecture are design and planning. The work requires, therefore, a knowledge similar to that of the engineer; but there must be coupled with it, for success, an ability in, and knowledge of, art. Since the architect must sell his services, business ability is a great help. There were over 18,000 men and 127 women architects in the United States in 1920.

Opportunities and income. — We have only to think of the extensive construction of office buildings, store buildings, factories, banks, and apartments to realize the importance of the architect's profession to the business man. Our own homes also illustrate the work of the architect. It is

believed that in small cities steady incomes of from $3,000 to $6,000 are common. Architects who have the confidence of wealthy friends and business associates are likely to secure very much higher returns, for they will receive contracts to plan expensive homes and buildings. The profession is one in which income varies greatly with good and bad times. In good times more building is done and so the architect has more work.

How to become an architect. — In nearly half of the states of the Union it is now necessary for an architect to take an examination and secure a certificate before he may practice. He may prepare for this examination either by working in the office of an architect as a sort of apprentice or by going to a school of architecture. Either way is possible, but experienced architects point out that specialization in most architects' offices has now become so great that it is very hard for the boy or girl who begins at the bottom to learn while working all that must be learned to be a successful architect. Good schools of architecture, on the other hand, are increasing in number. One must first be graduated from high school to enter most of them. In some cases the course may be completed in two years, although in most instances it takes four years. In some cases the course is combined with engineering work, and in others with art work. If one gets into a good school of architecture, however, he may be sure of sound advice concerning the best courses to take and the best directions in which to specialize. There are good schools of architecture in every part of the country. The University of California, at Berkeley, Cal., is a good example in the West. The University of Illinois, at Urbana, Ill., the University of Michigan, at Ann Arbor, Mich., and Washington University, at St. Louis, Mo., are examples in the Middle West. Massachu-

setts Institute of Technology, at Cambridge, Mass., Cornell University, at Ithaca, N. Y., and Harvard University, at Cambridge, Mass., might be mentioned as among the good schools of the East. There are many other excellent schools throughout the United States.

Lawyers

Law is one of the oldest of the professions, and it has long been one which attracts men of energy and ability. In the largest sense, law is concerned with giving justice, and lawyers are regarded as officers of the court, whose duty it is to see that justice is done in cases that are being tried.

The profession of law is increasing in importance constantly. The *specialization* of modern life has increased the kind and number of relations which give possible cause for dispute between people, and so has created new needs for law. The *large scale* of *modern business* has increased the need for law, because large businesses require the work of many people whose rights and duties must be looked after, and because large businesses require many adjustments to the rules laid down by society. The *increased use of science* has added to the importance of law and has developed such new fields as patent law. The *growth of individual enterprise* in our economic organization has meant an increased need for lawyers, both as guides in competition and as helpers in adjusting the disputes which arise in business activities. The *growth of government activities* has meant increased work for men and women versed in the law. In our country it has long been a belief that lawyers are well prepared for government service, not only as judges and public attorneys, but in the law-making and law-enforcing branches of our government as well.

In the United States there are over 122,000 lawyers, nearly 2,000 of whom are women.

The work of the lawyer. — From the statements that have been made regarding the changes that have increased the demand for lawyers, one can infer something of the lawyer's work. Whether as a counsellor to a corporation or to an individual business man, as a judge, as a lawmaker, or as a patent attorney, a lawyer, to succeed best, will need to be a careful student and a man able to give continued and hard thought to a question placed before him.



Photo by International News Reel

MABEL WILLEBRANDT

This woman has shown remarkable ability as an assistant attorney-general of the United States, and proved that women as well as men can practice law successfully.

At times the lawyer's work will be in presenting facts to a judge or a jury. Here ability to speak well will be a great advantage; but a lawyer's ability to speak must be backed by thorough knowledge of the law in the case. He will be opposed by competent men, and he cannot expect to rely on words and voice only.

The work of the average lawyer is in his office, in studying the law in a case or in discussing with clients or others the possibilities of bringing about settlements of disputes without appearing in court. This work calls for knowledge, tact, and self-confidence.

Possibilities and rewards. — As has been seen, law has a relation to so many actions of so many people that a lawyer can use his training in almost any direction. Private practice with specialization in one field (say, patent law), work for business men as counsellors and trial lawyers, and tenure of public office are the three main directions in which a lawyer's work will lead him. The many opportunities in law and appreciation of the respect with which most people regard the profession have led so many into it that it has become a crowded vocation. Although some lawyers make large incomes, the average return to the man who practices law is comparatively small. A study made of the graduates from one eastern and one western university showed that for the first year of practice the average income was less than $700; for the fifth year, about $2,600; and for the tenth year, between $5,000 and $6,000. Women lawyers, make somewhat less.

Getting into the profession. — Nearly all states require that an examination under the direction of the state shall be passed before one is permitted to practice law within the boundaries of the state. Almost all the states also require evidence that one has studied law for a number of years, usually three, before taking the examination. Some fourteen states admit graduates of the state university law school to practice without examination. A requirement of high-school graduation, and in some states a requirement of one or two years of college work, is not uncommon. In Illinois the rule reads as follows:

Rule 39 of the Illinois Supreme Court as Revised at the October Term, 1923, provides that candidates who begin the study of law after July 1, 1924, must show proof of general education consisting of a diploma of graduation from a four-year high school or other preparatory school whose graduates are admitted on such diploma to the freshman class of any college or university where the requirements for admission

are equal to those of the University of Illinois, or the certificate of the registrar of such a college or university that the applicant is entitled to enter. In addition he must present a certificate from a college or university accredited by the Board of Law Examiners showing the completion of at least seventy-two weeks of general college work, or, in lieu thereof, he must pass examinations given under the direction of the Board of Law Examiners in a course of studies approved by the Board as the equivalent of seventy-two weeks of college study. . . .

The high-school education must be completed before the college studies begin, and the college education or its equivalent must be completed before the law studies begin.[1]

The rules for the different states are not alike. For instance, New York State has the following requirements:

No person shall be admitted to practice as an attorney or counselor in any court of record of the state except upon an order of the Appellate Division of the Supreme Court admitting him to the bar and licensing him to practice upon compliance with these rules. . . .

The following classes of persons may in the discretion of the Appellate Division be admitted and licensed without examination:

1. Any person admitted to practice and who has practiced five years as a member of the bar in the highest law court in any other state or territory of the American Union or in the District of Columbia.

2. Any person admitted to practice and who has practiced five years in another country whose jurisprudence is based on the principles of the English common law.

3. Any American citizen domiciled in a foreign country whose jurisprudence is based on the principles of the English common law, holding a diploma or degree which would entitle him to practice law in the courts of such foreign country if a citizen thereof. . . .

Three classes of persons may be admitted to the bar upon examination:

1. Persons who are not graduates of a college or university;

2. Persons who are graduates of a college or university; and

3. Persons who have been admitted as attorneys and have practiced three years in another state or country.

In each class the applicant must prove by his own affidavit to the satisfaction of the State Board of Law Examiners that he is a citizen of the United States, twenty-one years of age. . . .

Applicants in the first class (i.e., persons who are not graduates of a college or university) must have studied law for a period of four years.

[1] *Circular of Information Concerning Proof of Preliminary Education for Admission to the Bar Examination* (published by the State of Illinois).

Such an applicant may pursue his course of law study wholly by serving a clerkship in the office of a practicing attorney, or partly by serving such clerkship and partly by attending a law school; but every such applicant must serve such clerkship for a period of at least one year continuously, either before examination by the State Board of Law Examiners or after such examination and prior to admission to the bar. . . . But the provision of this rule requiring every such applicant to serve a clerkship for a period of at least one year continuously shall not apply to any applicant who has successfully completed two years in a college or university and shall thereafter have attended a law school for a period of four years.

Applicants in the second class (i.e., persons who are graduates of a college or university) must have studied law for a period of three years. Such an applicant may pursue his course of law study wholly by serving a clerkship in the office of a practicing attorney, or wholly by attending a law school, or partly by serving such clerkship and partly by attending a law school.

Applicants in the third class (i.e., persons who have been admitted as attorneys and have practiced three years in another state or country) must have studied law for a period of one year within this state and pursue such course of study either by serving a clerkship or by attendance upon a law school as the applicant may elect.[1]

It will be seen from the statements just read that a general education before special study of law is growing more important. Of course, the fact is that a lawyer is just a man who deals with the rules society makes about the way people shall live and work together. Therefore, the more time a man can give to learning how people live and work together, the better he can understand and apply the rules. The lawyer needs all he can learn about our economic community and the way in which business, the professions, and the government work in organizing that community.

Public Accountants

The work of the public accountant. — From our study of business men as organizers we have seen clearly the importance of accounting. Years ago the man who ran a busi-

[1] *Rules of the Court of Appeals for the Admission of Attorneys and Counselors-at-Law for New York State.*

ness might carry all necessary information in his own head. But, as a business grew, it became necessary to record information. This required an accounting and clerical force. Accounting needs have grown so general that some men make a living, not by working for one firm, but by holding themselves ready to be employed as special advisers in accounting for anyone who wishes to hire them. This work is the work of the *public accountant.* It is a well recognized profession.

The work of the public accountant has become important in several directions. One important line of work is *auditing.* Auditing consists of examining the records and financial books of a company to make sure there have been no errors or dishonesty. For such work many business men prefer to employ a man from outside their own office.

A second important line of work done by public accountants is in examining books and preparing reports. We have seen in Chapter VIII how the business man secures funds. When he goes to the bank to get a loan or tries to sell stock or bonds to investors, the lenders may ask him for a financial statement which will show just the condition of his business at that time. The lenders wish to have this statement checked by some disinterested person outside of the business itself. Therefore the business man hires a public accountant, who examines the books and certifies to the correctness of the records.

The public accountant is also often called upon by a court of law when the court must close the business of a bankrupt firm. In such cases the accountant must go over the bankrupt's books and ascertain how much he will be able to pay everyone whom he owes money.

In the last few years public accountants have found a great deal of employment in the preparation of tax reports

for individuals and corporations. This has been especially true since income taxes came into existence.

HASKINS & SELLS
Certified Public Accountants
37 West 39th Street
New York

General Motors Corporation — New York, N. Y.
224 West 57th Street, New York, N. Y. — February 19, 1925

We have audited your general accounts and those of your subsidiary manufacturing companies for the year ended December 31, 1924.

We have verified your provision for current federal tax liability, but have made no study of the reserves which you have established as sufficient to meet any tax adjustments applicable to prior years, since the corporation has a special department to handle such federal tax matters.

We have not examined the minutes of your governing bodies.

We Hereby Certify that, subject to the above, the accompanying Condensed Consolidated Balance Sheet, December 31, 1924, and related Summaries of Income and Surplus for the year ended that date, in our opinion, are correct.

Haskins & Sells

A Public Accountant's Report

This is an example of a statement made by a firm of certified public accountants certifying to the correctness of records.

A field which is of growing importance in the work of the public accountant is in preparing accounting systems for business men. A business man may employ bookkeepers, but he may find that it pays to hire an outside expert to plan the system of books that will best give him the information he wants. This system may be concerned with the costs of manufacturing, in which case it would be called a cost-accounting system, or it may be concerned with sales records or with accounts of any other or all parts of the business.

There are about six thousand public accountants in the United States. Not many women have yet entered this profession.

Possibilities in public accounting. — The possibilities in public accounting at this time are very good. It is a new profession and one which is not yet as crowded as the older professions. Public accountants usually charge from twenty-five to one hundred dollars a day for their services; and inasmuch as there are a great many ways in which they can aid the business man, their services are in demand.

How to become a public accountant. — The practice of public accounting, like the practice of law, in most states now requires the passing of an examination. The best preparation for this examination is in three lines of work — accounting, business, and law. Enough knowledge can be obtained by working for a number of years in a public accountant's office; but there, as in other places, a man may be required to do such specialized work that he will not learn enough different things to pass the examination.

There are a great many schools that offer to train for public accounting by mail. Some of these are good, but some give little for the money they take. Some evening schools also give courses that are very helpful. It is doubtful if it pays to begin such specialized study in high school. The best preparation, if one can go to college, is a general high-school course followed by a college course with emphasis on business and economics, combined with some courses in law. This is especially true because in practicing public accounting one will have to compete with others who have good training. Such a college course should include a considerable amount of work in accounting. One may be sure, however, that if he enters a good collegiate school of

business he will get good advice on the courses which will be most suitable in preparation for public accounting.

The rules for admission to the examination in one state are as follows:

"Applicants must present satisfactory evidence of five years' satisfactory experience in the practice of accountancy, and at least two of the five years' experience shall have been in the employ of a certified public accountant in active practice, except that candidates who have received a degree as evidence of completing a regular four-year course of study in a recognized college or university will be required to have only three years' practical experience." [1]

In another state, Indiana, an applicant must be at least twenty-one years of age, a high-school graduate or have had the equivalent of such an education, of good moral character, a citizen of the United States or have declared his intention of becoming such citizen, and must have had three years' experience in accounting.

A grade of seventy per cent is required in Commercial Law, and seventy-five per cent each in Accounting and Auditing.

QUESTIONS AND PROJECTS

1. The engineer has been the outgrowth of science. There was no place for engineers until the scientist had discovered some of the powers of nature. Explain what this means. Do you think this statement is true?
2. Uncivilized men are superstitious. They call upon the magician for help. Civilized man knows that nature has power to help him if he can find out how to apply this power. He looks to the scientist and the engineer. Discuss these statements.
3. What are some of the chief divisions of engineering? What is one of the sciences with which each works?
4. Have some member of the class report on the Panama canal, another on the Hudson River tunnels, another on the New York water supply, as examples of engineering work.

[1] *Information for Candidates for C. P. A. Examination* (a pamphlet issued by the Pennsylvania State Board of Examiners of Public Accountants, 1922).

5. What phases of the work done by engineers seem interesting to you? Are there any parts of the work that seem uninteresting?

6. Compare the figures shown under "pay of the engineer" with the salaries for salesmen, purchasing agents, and office workers studied earlier.

7. Explain why it is more necessary now for an engineer to have a college training than it was fifty years ago.

8. Can you find out the location of the engineering school nearest your home town or city? Have some member of the class write to your state university or some other institution for a catalogue of the engineering school and have the catalogue put where the class can look at it.

9. It is sometimes said that mathematics and science are all that an engineer needs to know. Show why it might help him to be familiar with the work of a business man. Show how it might help him to know something about government.

10. What might one who is interested in engineering gain by spending his vacations with a surveying gang? In a factory? In some construction or building work?

11. Does your city have a city engineer? If so, have someone in the class find out the work for which the city engineer is responsible and report to the class.

12. In the list of government engineers given, try to determine some of the kinds of work done by each. Where the name does not tell you, use the dictionary.

13. When our grandfathers built their log cabins they did not employ architects. Why do we now hire architects to plan our homes?

14. Does the size of modern buildings make the work of an architect more necessary than formerly? Give reasons for your answer.

15. What seems to you to be the relationship between the work of the architect and the work of the engineer?

16. Why will increase in the wealth of a country give more opportunities for architects, landscape gardeners, and interior decorators?

17. Why is it that architecture, landscape gardening, and interior decorating are sometimes thought of as belonging to the same profession?

18. What qualifications and training does an architect need?

19. Find out what college or university near you gives courses in architecture?

20. Have some member of the class call at the office of an architect in your city and ask him what he considers the best way to prepare for architectural work. Have the student report to the class.

21. Have some member of your class secure a book on architecture from the public library. Have this where members of the class may look at it and see some of the things in which architects are interested.

22. One important duty of law is to give justice. The need for justice

is felt when people disagree. What are some of the everyday relations between people that give rise to disputes? Show that specialization increases the chances for disputes. Show why a large-scale business might have more need for lawyers than a small-scale business.

23. It is said that the growth of individual enterprise in our economic organization has increased the need for lawyers. Show how a business man might need a lawyer.

24. Why do you think it is that we are so likely to elect lawyers to public office?

25. No lawyer tries to know all of the law, but a lawyer should know how to find the law in records and books. Every year many new laws are enacted and many precedents are made by decisions of courts. Does this explain why a good lawyer must be a good student?

26. In what part of his work would ability to speak in public help a lawyer?

27. It is sometimes said that the best lawyers do not take their cases to court, but settle them outside of court. If you were in business and had an honest disagreement with another business man about business matters, could you see any advantage in settling the dispute outside of court, or would you prefer to sue him?

28. What are said to be the three main lines of opportunities open to the lawyer? Show what some of the work in each line would be.

29. How do you account for the fact that the law is an "overcrowded" profession? Do you think the fact that it is overcrowded means that no one can attain great success in it?

30. Do you think it is well that the states usually require an examination for admission to the practice of law? What harm would it do if everybody was permitted to practice law?

31. Have some member of the class write to the secretary of state of your state and ask for the rules for admission to the bar.

32. Compare the income reported for lawyers with that for engineers, salesmen, and purchasing agents.

33. Make a list of as many ways as possible in which accounting helps the business man.

34. "Without information the business man is blind." Does accounting help a business man to see?

35. Why is it that a business man might wish to have his books audited by an outsider?

36. John Smith goes to the bank to borrow five thousand dollars. He takes a statement showing his earnings for the past year. The statement is signed by the head bookkeeper of his business. The banker asks him to bring a report from a public accountant showing that the statement is correct. Why does the banker wish such a statement?

37. A corporation tries to sell you shares of stock. The agent shows you the corporation's report of its earnings and its financial condition. What could you ask him to do to show that the report was a true statement of the facts?

38. When a business becomes bankrupt, there are creditors for more funds than the business has. Such funds as it has must be divided properly among the creditors. How could a public accountant be of use in such work?

39. A business man recently said: "I have five clerks who can put down all the records I need to have kept, but none of them knows how to plan a good system of accounts. What shall I do?" What would you advise him to do?

40. List the reasons why public accounting offers a good opportunity. Can you see any reason why the state should require examinations before admitting men or women to the practice of accounting?

41. Have one member of your class discuss with a high-school teacher of accounting, and another with a public accountant (if there is one in your city), what they believe to be the best preparation for becoming a public accountant. Have each student report to the class.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part IV.

"Educational Directory." U. S. Department of the Interior, Bureau of Education, *Bulletin No. 1*.

CHAPTER XX

PROFESSIONS THAT GIVE SERVICE FOR INDIVIDUAL ENJOYMENT AND IMPROVEMENT

Medical and Health Workers

Medicine, like law, has been a " learned " profession since medieval times; the profession was ancient even then. We have already seen the way in which it has advanced and taken many specialized forms. It is hardly necessary to mention its importance. The profession has grown in importance not only because of the great increase in scientific knowledge but also because more people now give time and thought to their physical condition than they did even twenty-five years ago. All of this means increased opportunity for those who are in medical and health work. There are about 370,000 persons now engaged in medical and health work in the United States. More than 150,000 of these are women.

Types of medical and health work. — All of us know in a general way what the work of the doctor and surgeon is. But there are other forms of health work that are of growing interest and importance. Nursing is no longer a new profession, but it is one with great attraction for many women. A nurse is trained to give scientific, intelligent care to the sick. Formerly her work was confined to caring for the sick in hospitals and homes; but now she has widening opportunity in public health and social service work. Medically

trained women find positions with educational institutions; city, state, and national governments; business firms; health and social organizations; research laboratories; and magazines concerned with health topics. Public health officers trained in medicine are now employed by the national, state, and city governments. Such officers receive from fifteen hundred to six thousand dollars a year. There is work also for men and women with medical training in the specialized fields of bacteriology, serology, and radiology.

Income in medical work. — As in every profession, the returns from medical and health work are widely different. Physicians usually have but few patients in the early days of their practice, and these early days sometimes last for several years. A few men have made rather large fortunes in the practice of medicine, and in every city there are a number of physicians and surgeons whose incomes are high. Most students of medical work, however, seem to agree that physicians as a rule do not make large returns of a money sort. One writer says: "Few doctors have ever grown rich from their medical fees, and if I read the signs of the times rightly the number of doctors with incomes above five thousand dollars a year is going to be smaller in the future than in the past." [1]

The salary of health officers has been mentioned. Specialists in such fields as bacteriology secure salaries ranging from eighteen hundred to six thousand dollars, with some as high as ten thousand dollars a year.

Nurses have a regular scale for work on private cases in homes. They receive from $35 to $50 a week for such cases. In hospitals they are paid from $50 to $150 a month, with their board, room, and laundry provided. Where the work is supervisory in nature, the pay is higher.

[1] Cabot, *Training and Rewards of the Physician*, Chap. XII.

Preparing for medical work. — As in law and public accounting, the states have taken a hand in deciding who may practice medicine. One who wishes to practice medicine or become a nurse cannot do better than to write to the secretary of state of his own state and ask for the requirements which must be met. In a general way the training needed for all medical and health work is the same. One



© *Brown Brothers*

SCENE IN A HOSPITAL WARD

needs good health himself. All medical work is hard, and one is much better prepared who is himself well and possessed of the good spirits that usually accompany health. A long period of training is necessary for most health work. Both the American Medical Association and the Association of American Medical Colleges prescribe two years of college

work beyond high-school graduation before entering a medical school. Some medical schools accept students directly from high school, however. There are plenty of good medical schools now available, and nearly all of these admit women on equal terms with men.

For training in the special kinds of health work (such as bacteriology), college training in physics, biology, and other sciences is necessary.

Nurses can begin their special training after graduating from high school, although some college work is a valuable help. This additional college training is worth while because it is to women with such training that the better positions in hospitals and schools are likely to be given. Nurses' training schools are usually conducted in hospitals. The student nurse's work pays for her instruction and living. Her only expenses are for clothes, books, and incidentals.

Other types of health work. — There are many other kinds of medical work, such as that of dentists, osteopaths, and veterinaries. The foundation education needed in all of this work is similar, and the particular requirements demanded by the state can best be obtained as has been indicated — by a letter to the secretary of state of your own state.

Social Service Workers

Society has never yet been able to get itself well enough organized so that everyone was comfortably taken care of. "The poor we have always with us." We not only have the poor, but we have the sick, the injured, and the poorly trained people who need help which they are unable to give themselves. People have always felt some obligation to those who are unfortunate. To some extent this obligation has been met by the government in ways that we shall study

more about in our chapters on government, and to some extent the obligation has been met by private enterprise.

Agencies have been organized for social work. — Private charity was formerly a matter of personal relations between the giver and the receiver. Beggars were more common than now. Kind-hearted well-to-do persons who knew of poor families made it their business to give help. Of course these methods were very unsatisfactory. The best beggar got the most, and many very needy persons whom no one knew about were overlooked entirely.

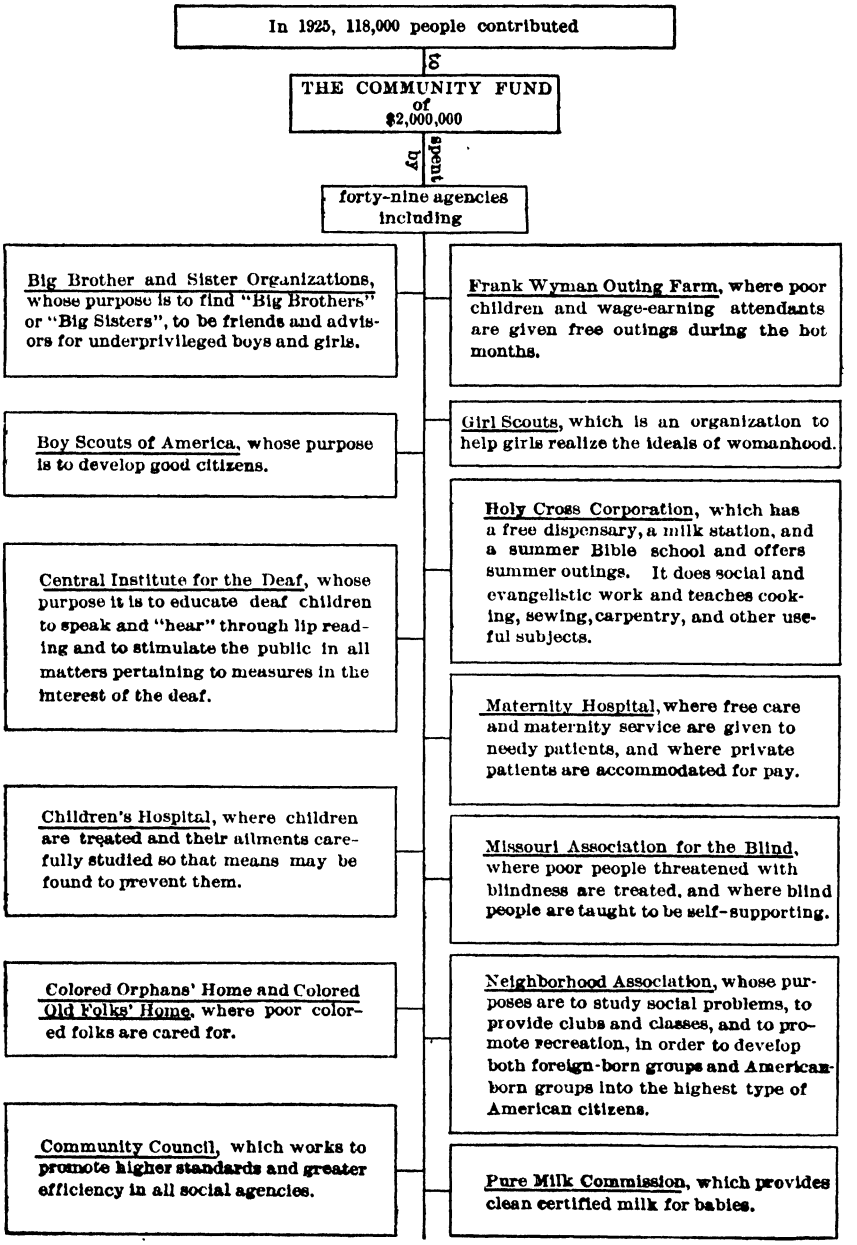
Now in many cities there are organized agencies with paid persons in charge to receive funds and to spend them wisely and helpfully in caring for the needy. Such agencies are called social service agencies, and the work they do is called social service work. These agencies give careful study to individual problems. When any one of them hears of a family in need, it investigates. It makes sure that the family really needs help. Then it gives aid; but it also tries to eliminate the cause for the need. That is, if the family is destitute because the father is out of work, an effort is made to secure work for him. Or, if the trouble is that the children are uncared-for because the mother is ill, an effort is made to give the mother medical care so that she can again look after her children properly. There are many social agencies, and they do a great many different kinds of work. Each one is formed by some person, group of persons, or church or other institution interested in some particular kind of social service work. Sometimes there is much overlapping of the work, and persons who wish to take advantage of this get help from several agencies at once. To do away with this condition and to make it easier to collect and dispense funds wisely, a city may organize many of its social service agencies so that they work as a unit.

St. Louis Community Fund as an example. — One good example of such organized social service work is in St. Louis, Mo., where in 1925 nearly two million dollars was contributed and put into a fund called the Community Fund. The diagram on page 372 illustrates the workings of the St. Louis Community Fund and how this fund is divided among forty-nine different institutions.

Occupations grow from organized social service work. — Social service agencies are comparatively new; but now that we have begun such work in a planned and organized way, it is necessary to employ people to carry on the work as thoughtfully as any business might be carried on. In 1920 there were 26,927 women and 14,151 men in the United States engaged in welfare or social service work of one kind or another.

Different types of social work. — As we can see from our chart on page 372, there is a good deal of specialization in social service work. Health work, child welfare, family welfare, industrial welfare, recreation and neighborhood activities, settlement work, and work with mental delinquents are all separate fields. Such specialization makes it possible for people interested in welfare work to concentrate on the type of work they like best and feel they can do best. For instance, health work offers a splendid opportunity for trained nurses. They may become visiting nurses, or they may specialize in work with the mentally defective and devote their time to the instruction and care of the feeble-minded and insane in various institutions.

Child welfare work is likewise a varied as well as a broad field. There are all sorts of agencies throughout the country that are concerned with the care and protection of needy, neglected, mistreated, and delinquent children. The workers for these agencies make personal studies of the children



DISTRIBUTION OF A TWO MILLION DOLLAR COMMUNITY FUND

and their families, find homes for the children if necessary, and supervise the care given them in these new homes. They represent the interests of the children in courts and prosecute those who harm or injure them. They direct the recreation of the children in their care, and the work for the development of the children's character. They secure needed medical care for the children, and do whatever else is possible to improve the children's chances in life.

"Industrial welfare work" is the name given to work done by social workers now employed by many large business firms. Many factory and department-store owners employ one or more such social workers. Some of these workers supervise the health of employees and their working surroundings and conditions; others are interested in forming clubs and promoting entertainments to furnish wholesome amusement for the employees; and some even visit the homes of the employees and give help when there is sickness or trouble.

In all types of social work, however, the workers fall into definite classes. There are those who investigate special cases brought to the attention of the social agency for which they work. These people are called *case workers.* There are those who take charge of group work. That is, they plan and supervise club work, classes, and other recreational activities for factories, children's playgrounds, industrial schools, and other places. These are known as *group workers.* There are other workers known as *propagandists* or *educators* whose work consists of stimulating the interest of the community and developing a public opinion favorable to social improvement. This is done to secure laws that favor social improvement and also to aid in securing funds to carry on social service work. Still other social workers devote all their time to studying how to solve social problems. These are

research workers. In social agencies there are always some who spend their time in organizing and directing the work done by the others. These are the *executives.*

Pay and opportunities in social service work. — There are many opportunities for entering social service work; but there are also many people anxious to enter the field. However, a great many people do not stay in the work long, for they find they do not fit into it well or happily. For this reason, people with good training and a record for successful experience are usually assured of places.

It is hard to make a statement regarding salaries in social service work, for they vary in different parts of the country, in different organizations, and in accordance with the training demanded of the person employed.

Available figures show that probably the largest number of social workers receive from $1,500 to $2,500 a year. Salaries for trained workers, however, range from $1,200 to $10,000. It is not unusual for highly trained and efficient specialists to receive from $5,000 to $7,000, although salaries of from $3,000 to $4,000 for such positions are more common. Men, who comprise about one fourth of the social workers, receive higher salaries than women.[1] As in the medical profession, however, the reward cannot be gauged by the money earned. Interesting work and satisfactory and constructive results are no small part of the reward of the earnest social worker.

Training for social work. — Professional training for social work is a new field, and standards have not been very definitely placed as yet. About twenty-eight schools in the United States offer training courses, and most of these

[1] Cf. Edith S. King, "The Scope and Nature of Positions in the Field of Non-governmental Social Agencies." *Annals of the American Academy of Political and Social Science,* January, 1923, p. 176.

schools are parts of colleges or universities. Some of them admit high-school graduates and offer four-year courses which include general and professional subjects. Others require two, three, or four years of college training before entrance. History, political economy, sociology, psychology, biology, government, and law are all considered useful subjects for social service students.

Some social agencies train social workers by the apprenticeship method. That is, they have beginners work under experienced and successful workers until they have learned proper methods. If one is interested in such work, it will be a good plan to talk to the directors of some of the social service agencies in his own town. They will be glad to give advice on the education needed.

Ministers

From our study of medieval professions we shall remember how important was the work of the clergy. Practically everything that might be thought of as inspirational and educational work was in their hands. The clergy, however, now have only a small part of their former duties left to them. Various parts of this work have been taken over by other professions. The ministry, however, is still a profession of importance. The 1920 census shows 125,000 men and nearly 2,000 women ministers. The work of the minister is familiar in a general way to everyone who has had any church association. In the ministry, however, as elsewhere, there are wide differences in the kinds of work done. One study of vocations makes this statement: "In the ministry this is the day of specialists. The great number of clergymen must continue to minister in congregations. But some specialize and become professors in colleges and seminaries, teaching Hebrew, Greek, Biblical literature, theology, ethics

and sociology. Others become administrators — organizing social service, missionary work, Sunday schools, and welfare work in great industrial centers. A few enter the field of ecclesiastical journalism." [1]

Payment of ministers. — Everyone knows that ministers are not highly paid. On the other hand, there are few professions in which employment is more certain. The returns, however, must be measured in satisfaction and the affection of one's parishioners, rather than in money. This calling is one into which men and women should go only when they feel it of supreme importance compared with any other vocation.

Preparation for the ministry. — Every religious denomination has well-organized schools for training ministers. Preparation for the work involves graduation from one of these schools. In most of them a considerable amount of general education is a prerequisite. In fact, a college degree is required by many theological seminaries.

Educators

Education is the most extensive as well as one of the most useful of all the professions. It has opportunities in great variety both for men and for women. There are more than 145,857 men and about 650,000 women in educational work in the United States. Teaching offers the greatest opportunity in education. Teachers are needed in kindergarten and elementary grades, in junior and senior high schools, in normal schools, in colleges and universities, in private schools, and in schools in industry. In high schools and colleges there is a wide range of subjects to be taught. A teacher may find his interest in science, language, mathematics, social studies, business subjects, or other fields.

[1] *Bulletin No. 76, Series No. 3* (Stanford University), p. 192.

It is worth while for anyone interested in education to consider carefully these different levels of teaching and the nature of the work in each level. Every one of us from his own school work already has a good idea of what kindergarten teaching and grade-school teaching are like. And as we go on through high school, we can learn something of the teachers' work there. In many college and university positions the work of education calls for study, research, and writing quite as much as it does for teaching. The teacher must find new material and organize it for presentation to students. In normal schools students are trained for teaching, and teachers in these schools exert a wide influence on education.

The work of superintendents. — Aside from teaching, educational work offers many executive positions. Most important of these are positions as school superintendents and principals. Many school systems also have supervisors of special subjects, such as music, drawing, home economics, physical education, and manual training. For people who like educational work but do not find teaching pleasant, such positions are attractive.

Pay in educational work. — The pay of people in educational work is improving. In many cities there is a regular scale of payment, and this scale has been increased in the past few years. Kindergarten and elementary teachers receive salaries of from six hundred to twenty-five hundred dollars a year; high-school teachers receive from eight hundred to thirty-five hundred dollars. University teaching is divided into several classes. Instructors are paid from one thousand to twenty-five hundred dollars annually; more advanced ranks are paid from two thousand to as much as eight thousand dollars a year, with more salaries of thirty-five hundred than of five thousand dollars.

The work of superintending education in public schools is better paid than is teaching in public schools. Superintendents in the larger cities often receive salaries of four, five, and six thousand dollars. One large city pays its superintendent of schools seventeen thousand dollars. This is said to be the highest salary paid a school superintendent in the United States.

Preparation for teaching. — Preparation for teaching is, of course, largely a matter of "going to school." State governments usually fix a requirement for teachers and demand that an examination be passed for teaching in the public schools. A grade-school teacher cannot expect to go far who has not had at least a high-school education with two years in a teachers college or normal school. High-school teachers should have normal-school work and in many places are required to be college graduates. Information concerning teaching in the grade and high schools of your own community may be obtained from your county or city superintendent of schools. For college and university teaching, one must plan to graduate from college and then to take graduate work leading to an advanced degree in the field of his special interest. If one wishes some day to teach in a college or university, he can do no better than to consult with his teachers while he himself is a student in college.

Library Workers

The work of the librarian is very closely associated with education, inspiration, and research. A library was once thought of as a thing to be guarded as one might guard some rare souvenir of the past. But a good library is far more than a collection of books. It is an accumulation of the knowledge, ideas, and hopes of the past and present. The

purpose of the librarian is to make this accumulation of knowledge, ideas, and hopes easily available to as many persons as possible. For this purpose many public and private libraries have been opened for the use of everyone.

Librarians are needed to take care of these libraries and to aid those who come for books.

Nature of library work. — The work of librarians in small libraries is as varied as the work of owners of small stores. They have purchasing, storing, record keeping, financing, and distributing to do. In larger libraries, as in larger businesses, the work is specialized and divided among such departments as acquisition, reference, cataloguing, circulation, and others. Such specialization in large libraries gives a chance for persons of different interests to work at what they like best. In the reference department, for example, the work is that which will appeal to one who likes study and investigation, for the purpose of such a department is to supply material for readers on any subject. In the circulation department the work is more like that of a salesman, for this department tries to bring the facilities of the library to the attention of as many people as possible.

Kinds of libraries. — Probably each of us has been in a public library. Perhaps there is also a little library in your school. Other institutions besides cities and schools have libraries. For example, hospitals, clubs, colleges, professional schools, large business houses, city, state, and national governments, and some private individuals have libraries. In some of these one may find a chance to work with books and periodicals dealing with the subjects in which he is most interested. There were 15,297 librarians in the United States in 1920, 13,502 of whom were women. Men are employed in library work chiefly for the more important administrative positions.

Pay in library work. — The pay in most library positions is not high, but, as in the case of teachers, it is rising steadily. This is more true of some sections of the country than of others. If one goes into such work, the positions are usually permanent and the surroundings pleasant, wholesome, and educative. Many persons find great satisfaction in the service they give through such work. Trained persons without experience are commanding from $1,100 to $1,600 or more yearly. Experienced workers receive more. Most salaries are probably below $2,000, but many individuals receive from $2,000 to $10,000 (with only a few, however, in the upper level).

Preparation for library work. — Positions in libraries are obtained in a number of ways, but for satisfaction and success library-school training has become almost essential. There are a dozen or more library training schools in the United States, which make up the Association of American Library Schools. To enter any of these one must have a four-year high-school course or its equivalent. The work in these schools, according to their own agreement, must be at least one full year of library courses. Six of these library schools require some college training, and two require graduation from college, before one may be admitted as a student. Many of the universities and several of the colleges in the country also have good library schools. Then, too, there are courses offered in the summer by universities and by library schools, where one may get training. Anyone who is interested in library work as a vocation should write to the American Library Association, Chicago, Illinois, and ask for information of the sort desired. Also, the workers in your own school or public library will be glad to talk with you about the matter of training and to discuss with you the merits and disadvantages of library work.

Writers

Writing as a profession may well be included under our heading " entertainers and artists," or it may be placed in the class of those professions that educate and inspire. Writing and authorship cover a wide and varied field of work in which over forty thousand people in the United States find their main vocation. More than eight thousand of these are women. Among the authors there are nearly as many women as men. The field is of growing importance, as more and more people are able to obtain an education and become rapid and interested readers in a wide range of subjects. Improvements in printing, in publishing, and in carrying mail have also increased the number of readers by bringing attractive reading matter to them at a small expense. There are two fields in which writing may be carried on as a vocation: writing books, and writing for serial publication.

Writing books. — The chief classes of books are fiction and textbooks. There are also important books for general reading, such as histories and biographies. For writing fiction, whether in the form of novels, plays, or otherwise, natural talent seems to be almost necessary for success, although many writers claim that genius in their work is merely a matter of persistence, patience, and hard work. Writers of textbooks need as their chief qualification something to say — some special knowledge of a subject which enables them to offer useful material to students. This, of course, can be obtained by research and study. Indeed in all writing it is important to have something to say, and fiction writers as well as text writers are usually at work studying or gathering experiences that they may use for " material." With " something to say " taken for granted,

the other qualification of the writer is the ability to say it so that others will read it.

Writing for serial publications. — Serial publications include newspapers, magazines, and trade journals. We are all familiar with newspapers and magazines. Trade journals are a special kind of newspaper or magazine; a trade journal deals with some one industry or kind of business, such as agriculture, flour milling, railroading, or banking. The number of such journals is increasing. All serial publications offer opportunities for the sort of writing which is called "reporting" or "journalism." They are interested in current topics, either of general news, as in the case of the newspapers, or in the particular field concerned, as in the case of the trade journals. The topics may be bits of gossip or articles on special subjects, or they may be editorials. For trade-journal work one needs, of course, a special knowledge of the field as well as ability to present material in an interesting way.

Pay for writing. — There are few occupations in which incomes are more uncertain or more varied than in writing. Many a person has attempted to make a living in this way and has worked for years with very small returns. The most successful writers receive very large returns indeed. But many who have tried have not succeeded. Publishing companies hesitate to buy the products of new writers unless the products are of startling merit. A great deal of writing is therefore done by people who enjoy it as a by-product of other work. Teachers, lawyers, physicians, engineers, business men, housewives, and persons in many other vocations have succeeded in writing without giving up their regular employment.

The salaries for newspaper work vary, of course, with experience and ability. Beginners may receive from $75

to $125 a month. They are usually able to add to this by special bits of writing for their papers.

Preparation for writing. — Writers who have achieved success have had such varied experience that it is hard to say that any one road is better than another. It is certain that general education helps. Since most writers are concerned with people and affairs in their own country, a knowledge of history, political science, economics, and business is always valuable. It goes without saying that no amount of study and training in the use of language will be wasted. Students of this matter agree that there is no study that may not be useful to the future writer.

General college work is valuable, if not essential, and many schools now have special courses in journalism besides courses in the novel, the drama, and the short story. After school is finished, newspaper and magazine offices make perhaps the best places for apprenticeship and practice unless one has ability and a strong desire to attempt to write novels at once and has means upon which to live while he is awaiting the results of his efforts.

Entertainers and Artists

Entertainers and artists are of so many kinds that we cannot talk about all of them. In our list near the end of Chapter XVIII we mentioned the following: actors and showmen; painters, sculptors, and teachers of art; musicians and teachers of music; and photographers. There are almost 250,000 people, nearly half of whom are women, in these groups. Other groups might be added. There are certain ways in which all of these professional workers are alike. They are all offering people something that may not be thought to be as important as bread and clothing, but for which many people are much more hungry. Most of

us feel the need of seeing or hearing that which we find beautiful, inspiring, amusing, or entertaining. Entertainers and artists make it possible for us to do so. Another way in which all of the best entertainers and artists are alike is that they have a great interest in what they are doing. They find satisfaction in expressing themselves through their work. They want the kind of living that enables them



Photograph from Brown Brothers

SCENE FROM AN OPERA

Success in operatic work requires ability both to sing and to act.

to express themselves. So true are these statements that great success cannot be had in these lines except by those who are carried on by a tremendous enthusiasm for the work they do. One study of opportunities in this field makes the following statement about possibilities and difficulties of work on the stage, for example:

The actor is essentially an artist and devotes himself to the stage because of an inspiration, a real calling; he must be ready to meet the

stern requirements of any art — absolute sincerity, long, arduous work, and perhaps hardship. The theater offers at best a precarious career. There are always many more aspirants than the profession can possibly absorb; many are misguided, attracted by the glamour of the footlights, and should consider well the uncertainties before them. On the other hand, there is always need and demand for superior talent; and, with the developing intelligence and taste of the public in regard to the theater, there will be increasing and more congenial opportunity for those who seriously choose acting as a career.[1]

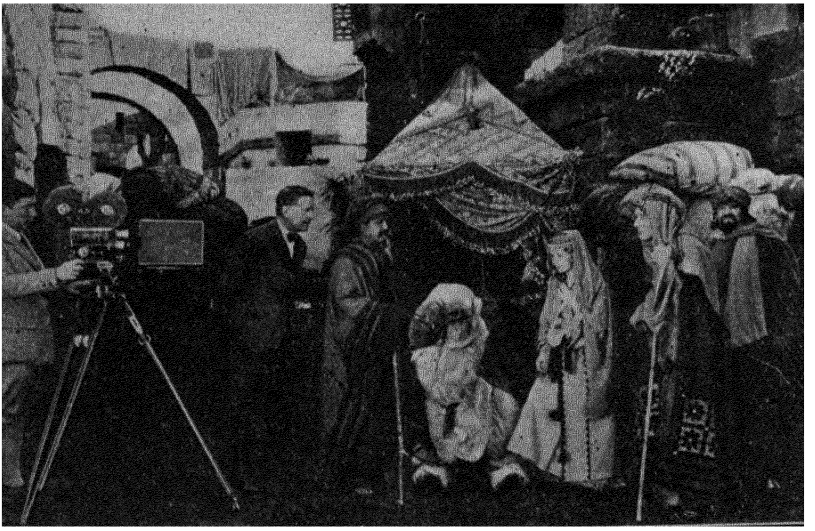
At least to some extent the above statement applies to other lines of entertainment and art.

The opportunities to make a living by entertaining are varied. The first thing that any of us might think of is the stage. The "movies," however, offer as strong an attraction to many people — and perhaps even greater rewards for those few who are completely successful. Lyceum bureaus employ entertainers of every sort to travel about the country and give entertainments for churches, clubs, and special meetings. Entertainers who are successful enough often prefer to give their own concerts or other exhibitions. They rent theaters or halls, advertise, and conduct their affairs just as any business enterprise might be carried on. The radio is offering a new opportunity for entertainers. Some manufacturers, merchants and others who wish to keep their names before the public engage entertainers to represent them "on the air." And of course the work done by the announcer is known to all of us. A great many people use their knowledge and ability as entertainers, not as their chief vocations, but as enjoyable ways to increase their incomes during spare time. They give public readings, play in orchestras, give lectures, paint, draw, or illustrate articles.

In all of the fields that we are discussing there is a growing

[1] Bureau of Vocational Information, *Training for the Professions* and *Allied Occupations* (1924), p. 263.

opportunity for teachers. Musical work is a good example. Music has been introduced quite generally as part of public school work. The interest aroused in music by public school teaching has caused more students to apply to private teachers for instruction and so has increased their opportunities. Drawing, painting, and applied forms of art, such as clothing design and interior decorating, are now common



Courtesy of Metro-Goldwyn-Mayer Pictures

A Scene in Making a Photoplay Film

The actors are at the right, the director in the middle, and the photographer at the left. Three vocations are thus represented.

public school courses. Many who enjoy work in art or music will find an outlet for their interests in teaching these subjects. Pay in these fields is similar to that in other lines of teaching and ranges from less than a thousand dollars a year to thirty-five hundred dollars and even more.

How to get into this type of work. — No matter what sort of artistic or entertaining work one wishes to enter, there

are now good schools available, and good schools offer the best road of entry. It is important, however, in picking a school for training in acting, music, or art, that one be careful to find the best school possible. It is easy for students to be deceived in this kind of work, and as such schools are usually private and not under the direction of public officers, there is plenty of opportunity to spend one's money for useless training. Anyone interested will do well to talk with people who are already succeeding in such work, and with teachers and superintendents of public schools.

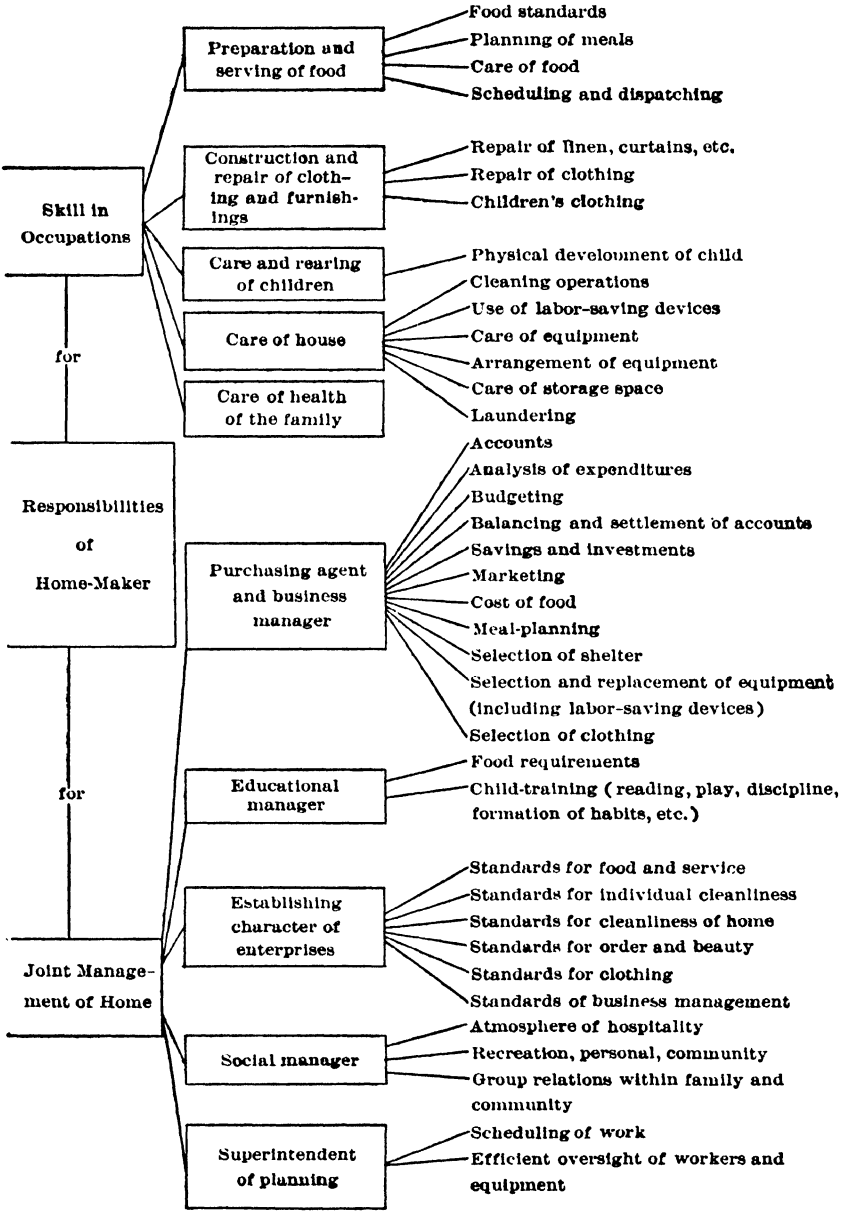
Home-Makers

From the beginning of history the great vocation for women — their one greatest profession — has been home-making. The importance of home-making has always been the same. But the things considered important in home-making have increased in number and perhaps in difficulty.

In earlier times, on the medieval manor or the frontier farm, when houses were small and simple, when the variety of food that people could obtain was not great, when the importance of care of health in the home was not realized, the duties of the home-maker did not require as much thought as they do now. One writer thus describes the demands that are now made upon the home-maker:

> Those of us who are interested in home-making have a right to expect that the woman who takes upon herself the responsibility of building a home should know something about the fundamental principles of health and hygiene. She must know something about the economic aspects of the different branches of home-making; something about home nursing; something about the furnishing and management of the home; something of child care, including not only the physical training but the mental and spiritual as well; something about recreation; and something about woman's responsibility to society.[1]

[1] Marcia E. Turner *et al.*, *The Family Life and the Teaching of Home Economics* (Vocational Education Association of the Middle West), p. 5.



SOME RESPONSIBILITIES OF THE HOME-MAKER[1]

[1] A chart prepared by Mildred Weigley Wood.

A more careful and detailed study of the occupation of home-making is shown in the chart on page 388. It shows that caring for a home involves many tasks.

Everyone in a home helps make it. — Home-making is an interesting vocation for us at this time because, although we may not realize it, we are all engaged in it. While the chart that we have looked at points out the work that falls mostly upon the mother in a household, a mother is not the only home-maker. Neither are the mother and the father alone in the work. Every child is helping to make the home more pleasant, more agreeable, more helpful — or less so. How true this is and how easily we may watch ourselves in the vocation of home-making are shown by this little experiment tried in one high school. Some of us might try it for ourselves. The problem given to the students was:

"How may I best develop an appreciation of family life in order to make myself a better member of my family group?" The first thing the class did was to set up tentative standards for ideal family life. I say tentative, because as the study progressed, these were later revised or added to until they reached the form in the present outline. It was comparatively easy to set up standards. Sitting in a comfortable classroom planning a course of conduct is a pleasant enough occupation. Whether it is beneficial depends naturally, as do the more usual forms of home-economics work, upon how much of it "carries over into the home." Just how was it possible to incorporate those ideals into the actual home experiences of those girls? A survey of the field of literature upon the subject of the family showed that there was amazingly little published, especially anything suitable for placing in the hands of high-school students. We did succeed, however, in finding a few good books and a number of excellent magazine articles which were read and discussed in class. These discussions had the effect of drawing from the students a frank expression of their own problems and paved the way for some home projects based upon the main problem. These projects were undertaken most seriously. In individual conference with the student teachers, the girls were surprisingly frank in revealing their own shortcomings as members of a family group. In each case there was a preliminary conference with the girl and her mother, followed by one or two later visits to the

girl's home. Some of the projects as taken from the final reports are as follows:

"The purpose of my project was to make mother's work easier by following a definite plan for keeping my belongings picked up and otherwise caring for them. I also undertook to do my daily work pleasantly so as to make myself more agreeable to my family."

Another girl reported that she had undertaken to become a good listener "even when someone is talking with nothing to say that interests me." Her plan included not interrupting nor contradicting and "letting the other fellow have his opinion."

A third girl had succeeded to some extent in teaching her younger brother to "pay attention, not contradict, and to come when called."

Still another girl reported herself as on the road to breaking herself of the habit of speaking discourteously to her mother, and learning to acknowledge herself in the wrong.

One girl discovered through the daily record of personal expenditures (to which five minutes of class time was devoted each day) that she was spending more than her share of the family income for amusements, ice cream, etc., and so voluntarily limited her patronage of moving pictures and candy shops.

While the plans of procedure differed, each girl in addition to the exercise of vigilance had her own method worked out for accomplishing her purpose. In the end, most of the class expressed the sentiment of one girl: "I feel that I have had an experience worth remembering, and I intend to extend my project till I can do these things without thinking." [1]

Occupations related to home-making. — We have come to know that home-making, like every other thing in life, can be improved by thinking and studying about it. Thus there have grown up schools and courses in schools for the study of home-making. Such work is usually called *home economics.*

These schools and special courses have done much to improve homes. They include a study of foods and their preparation, household sanitation and hygiene, child health and welfare, and home nursing; of household furnishing

[1] Marcia E. Turner *et al.*, *The Family Life and the Teaching of Home Economics* (Vocational Education Association of the Middle West).

and decoration; of home marketing, budgets, and accounts; and of household administration in general.

All these studies have led to special knowledge and special ability in certain kinds of work. For example, persons who have learned a great deal about food are called *dietitians*. They have found that there are positions for them not only in homes, but also in clubs, hotels, hospitals, sanitariums, tea rooms, and other institutions. The work done is the planning of the meals, the supervising of the kitchens and dining rooms, and other tasks related to these.

In studying home-making, people have become skilled in buying supplies and in spending money economically. Such people find that there are jobs for them in work called *institutional management*. This work is offered by school dormitories, clubs, hotels, and other institutions. Such positions in hospitals and schools are sometimes combined with some work in child care or in teaching.

Teaching home economics. — One of the largest vocations in home economics work is in teaching home economics. Courses in this study are being organized in colleges, high schools, and even grade schools throughout the country. Teaching home economics is like other teaching work, excepting that the subject is one that many women find of special interest. It attracts some women because it is not only a growing and comparatively well paid field of teaching, but because it is good preparation for managing their own homes.

Pay in home economics work. — In discussing pay in home-making and home economics work we may omit the housewife. Her financial rewards are a share in the family income. Her other rewards cannot be measured. Dietitians and institutional managers receive wages about like those given to nurses and teachers. Where the work is for an institution, one is likely to receive board, room, and

laundry in addition to a salary. The pay for teaching home economics is similar to that in other teaching work, although it is at present somewhat better, as the growth of this work has been so rapid that schools pay well for properly trained people.

How to prepare. — Schools that give courses in home economics are plentiful. No doubt in your own grade school and high school there is some work in this field. Many universities give four-year courses in home economics. One such university outlines a four-year course somewhat as follows:[1]

Freshman Year

Elementary Physical Training
Preliminary Hygiene
General Physics
General Zoölogy
General Inorganic Chemistry
Textiles
Garment-Making
Drawing and Design
Rhetoric

Sophomore Year

Physical Education
Agricultural Biochemistry
Elementary Bacteriology
Dressmaking
Foods and Cookery
Food Economics
Human Physiology
General Psychology
Public Speaking
Introduction to Sociology

Junior Year

Agricultural Economics
Art History and Appreciation
Advanced Design
Child-Training
Health Care of the Family
Argumentation or Literature

Senior Year

Home Management; Operation and Maintenance
Home Economics Survey
House Planning and Equipment

The best way to secure more information about preparation for home-making and home economics is to ask teachers of the subject where to write for information. If there are no teachers of such subjects in your school, write to the state university of your own state.

[1] *Announcement of Courses for the Years 1924–1926*, College of Agriculture, Forestry, and Home Economics, University of Minnesota.

QUESTIONS AND PROJECTS

1. Make a list of the causes for the increase in the importance of medical work.

2. Ask your parents, or, if possible, your grandparents, to tell you about doctors and hospitals when they were young, and to compare them with doctors and hospitals to-day.

3. Look up in an encyclopedia the "Red Cross" and report to the class.

4. Have some member of the class look up the life of Florence Nightingale.

5. Have some member of your class find out if your city has a health department, and, if so, report to the class the types of persons employed in it.

6. Look up the terms "bacteriology," "serology," and "radiology." What relation have these sciences to the practice of medicine? Why do they offer opportunities for work?

7. From what you can observe, does it seem to you that physicians in your town make a small, large, or medium income?

8. What are the features of a nurse's work that seem attractive? Unattractive? What are the features of a physician's work that seem attractive? Unattractive?

9. What reasons can you give for requiring state examinations before permitting men and women to practice medicine?

10. Can you show why our increased knowledge of science has made it desirable for health workers to have a longer training than formerly before beginning their special study of medicine?

11. Why do nurses need less general training than physicians?

12. Have some member of the class write to the state board of health at your state capital and secure a list of the medical schools in your state and the requirements for entering each. If the class is interested, work out the same problem for dentists, osteopaths, and other health workers.

13. Give as many examples as you can of people who need help from other persons or from the government.

14. Give as many reasons as you can why people find themselves in a position to need aid.

15. If we had a perfectly organized society, would everyone be taken care of comfortably? Would everyone who was well and able to work be taken care of comfortably?

16. Why do we have the poor always with us?

17. It has sometimes been argued that cities, counties, and states should not help the poor — that the poor should take care of themselves. What arguments can you make for or against this view?

18. In a community where people give freely to beggars and where no investigation is made, it pays to be a *good* beggar. What does this mean?

19. Show how worthy persons may be overlooked where there is no organized social work.

20. Show some of the work to lessen poverty and distress that might be done by an organized agency for social work and that probably would not be done by charitable persons who knew of families in difficulties.

21. It is sometimes said that it is a mistake to have paid workers aiding in distributing the gifts of a community, "because the workers themselves are paid so much that there is little left for the poor."

In the St. Louis Community Fund, "overhead" includes two costs:

a. Campaign for collecting the money (3.9 per cent of the total)

b. Administration, or pay of the executive and other workers who direct the spending of the money (3.2 per cent of the total)

How much money is spent for each? Do you think it is worth this much to have two million dollars collected and carefully spent for the poor?

22. What are some of the main kinds of social service work? Can you illustrate each from the St. Louis Community Fund expenditures?

23. What attractive and what unattractive features do you see in social service work? With what other professions do you think the pay for social service work might be compared?

24. What social service agencies are there in your own town or city? How could you find out more about social service work?

25. Make as long a list as you can of kinds of people who seem to spend most of their time in trying to improve the world. Place a check mark after those that did not exist in medieval days. Can you account for the change?

26. What books have you ever read that seem to you particularly useful in making one think of the value of education and inspiration?

27. What different churches are there in your town?

28. Look up the word "religion" in an encyclopedia and report on the great religions of the world. Who were the great teachers or inspirers who founded each of these great religions?

29. Education is made up of many things: It is concerned with learning new truths; with teaching old and new truths to the new generation; and with trying to find better ways of doing both of these. Can you give an example of each of these parts of educational work?

30. Why do we need school superintendents and principals?

31. What attractive and what unattractive features do you see in teaching?

32. Is there a normal school or a teachers college or a school of education in your city or in a neighboring city? If so, have some one write for a catalogue.

33. Write to the state university in your state and ask for information concerning training for teachers and the requirements for teachers in grade schools and high schools in your state.

34. Show how your public library is helpful to your school. Show how it is helpful to your family.

35. What is meant by saying that a library is a collection of the knowledge, ideas, and hopes of the past and present?

36. Give five illustrations of the way in which we build on our knowledge of the past.

37. Make a visit to the public library of your town or city. Notice several ways in which interesting or new books are brought to the attention of readers.

38. Can you see any ways in which the librarian's work is like the work of the salesman?

39. Is it true that the library has the work of purchasing, storing, "selling its services," and record keeping? Give an example of each.

40. Suppose you wished to find out all you could about library work, law, automobiles, or Russia. Could the librarian help you? If the library were large and had specialized divisions, to what division would you appeal for help?

41. What attractive and what unattractive characteristics do you see in library work?

42. Have some member of your class get information from the public library concerning the training necessary for a good librarian. Have another member of the class write to the state university for similar information.

43. In what different ways have you used the services of writers during the past week?

44. How much do you think is spent in your home in a month for the services of writers?

45. The public library puts at our disposal, without any direct cost, the work of many writers. Why is this reasonable when we do not have a public theater or a public shoe store?

46. Make a list of as many reasons as you can why writing has been a field of growing importance. Explain how increased education has helped. Increased wealth.

47. One writer says, "Genius in writing is spelled I N D U S T R Y." What does he mean by this?

48. For one who likes to write, there is an advantage in working for a newspaper or a trade journal, for one may be sure of readers. Show how this is true.

49. What is a trade journal? Have some member of the class bring one or two trade journals from the public library to exhibit to the class.

50. Who do you think are the readers of the following trade journals: *Sales Management; Advertising and Selling; Iron Age; Journal of Accountancy; Northwestern Miller; American Architect; American Journal of Social Science; American Law Review: Mathematical Monthly?* What sort of articles would be interesting in each of these?

51. What characteristics of writing work seem to you to make such a vocation attractive? Unattractive?

52. Why does it seem to you that most writers should know something about history, government, economics, and business?

53. Do you know any people in your town or city who make a living by writing?

54. What courses in your school would be helpful in preparation for the vocation of writing?

55. Who were the entertainers of medieval times? Ask your father or mother, or grandparents, if possible, what were the entertainments they enjoyed most when they were young. Ask them to compare the variety and kinds of entertainment then with those we have nowadays.

56. "Man doth not live by bread alone." Explain.

57. One reason why people in entertaining and art work have need for interest and enthusiasm is that their vocation is uncertain and often poorly paid. Why is it harder to sell one's services as an actor, singer, or painter than as a blacksmith, a carpenter, or a teacher?

58. What are the characteristics of work in acting, singing, or playing that you think attractive?

59. In what schools in your town or city are any of the following taught: music, drawing, painting, public speaking? Find out whether there are any schools of music, acting, or art in your town or city.

60. Have some member of your class write to the state university and secure information on opportunities for training in any of the fields of work discussed in this section.

61. In medieval days and in pioneer days, women did much work on the land. In Europe women still do a great deal of farm work. Why do you think it is that women work less on American farms now than formerly, and less than European women now do?

62. Women formerly made the family clothing, canned vegetables and fruit, and baked bread. These things are now done for women by workers in factories. Make a list of other things that science and machines have done to lessen the work of women.

63. Does living in an apartment make a woman's work lighter than living in a house? Why?

64. It has been said that "Since the factory and the machine now do so much for the housewife, she must decide what to do with her time. She may spend it wastefully, or she may spend it usefully." If she has spare

time, what do you think are some of the ways of spending it wastefully? And what are some of the ways in which she could spend it usefully?

65. Look at the chart showing the responsibilities of the home-maker. Does it seem to you that a woman may still find plenty to do at home? Take five of the tasks of the home-maker shown on the chart (planning meals is one example) and show what would have to be done to perform each of these five tasks.

66. Is it true that the task of home-making is one at which each of us may work? Think of two things you might do in your own home to make it more pleasant. You need not report on these, but experiment with them.

67. If there is a hospital or club in your town or city, have some student find out whether there is some one who is responsible for purchasing food and other equipment, planning meals, and doing the other tasks that are similar to those done in a home. Find out the title given to this person.

68. What reasons can you give for teaching home economics in grade schools and high schools? Are there such courses in your school? What kinds of work are given in the courses?

69. If there is a teacher of home economics in your school, have some member of the class ask her to name some of the good schools that teach home economics and to explain how one may prepare for such work.

70. Have some member of the class write to the state university for a description of the courses in home economics taught there and for information about other schools that teach home economics.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part IV.

PART IV

ORGANIZATION BY PUBLIC ENTERPRISE

CHAPTER XXI

WHAT IT MEANS TO ESTABLISH A GOVERNMENT

Now that we have finished our study of organization by individual enterprise and of the tasks in business and the professions, we shall turn to organization by public enterprise. We shall see that public enterprise works through governments; that governments must be formed; that governments in planning their work and in carrying it out require the work of many people.

We may begin this part of our work by seeing just what it means to go into government.

How a Class Government Was Formed

In the Autumn of 1926 one hundred students entered the Bridgetown High School as freshmen. They had been graduated from the grade schools of Bridgetown in the preceding June. All of the one hundred were anxious to finish high school, to get as much good from it as they could, and to have as much fun as possible while they were there. During the first few weeks they were in high school, many things seemed strange to them. The building was strange; the subjects which they were studying were strange; the class sessions were longer than those to which they were accustomed. School began earlier, the number of subjects taken was fewer, and the number of rooms in which they recited was greater than had been the case when they were

in the grammar school. Many of them felt confused; and no doubt all of them would have been even more disturbed if the school principal and teachers had not had a well organized plan which directed the activities of each student every hour of the day.

As a result of the planning and directing of the principal and teachers, these high-school freshmen soon began to feel at home in the high-school building and high-school atmosphere. Less and less did they have to think about just what to do next. They found that their daily actions were becoming more and more matters of habit. They felt that they had time for other interests than their studies.

A class government is suggested. — As the students in this freshman class had come from several different grade schools scattered over Bridgetown, they were not all acquainted with one another. Several of the students discussed this fact and expressed the belief that a class party would be the way to get acquainted, but they did not know just how to arrange one. One day several of them were talking with one of their teachers about it. "Why," said the teacher, "the thing to do is to organize a class government. With a class government, we can arrange for a class party, and we can do other useful things besides."

"But how do we do it?" asked one of the boys.

"That will be easy," said the teacher. "Write on the board in each of the rooms where members of your class are seated an announcement that a meeting of the class of 1930 will be held in this room next Friday afternoon. When the students gather here, one of you may state that the meeting has been called for the purpose of organizing a class government."

"But what will happen then?" inquired Richard Grant, who was one of the boys most interested in the meeting.

"Well," said the teacher, "if you are in charge of the meeting — and I think you would be a good person to take charge of it — you might suggest that if no one objects you will act as chairman. Probably everyone will be glad to have you do so. Then you might state that a committee should be appointed to draw up a constitution for the class. It would be proper for you to say that if there is no objection you will appoint five members of the class to form a constitutional committee. Probably no one will object to this; but if there is objection, ask that names be suggested and then have five names chosen by vote."

"What would this constitutional committee do?" asked Richard.

"Its work," said the teacher, "would be to draw up a written constitution, which should state first of all why the class wishes to create and organize a government. It should then state what officers are to be chosen, the length of their terms, and the powers these officers are to be given. Finally it should provide a way for its own amendment, for changes in it may become necessary later on.

"After the constitution has been drawn up by the committee, a meeting should be called and the class should vote whether or not they will accept the constitution. If the class accept it, members of the class should be elected to the offices mentioned in it. The class will then have an organized government."

Although Richard Grant shivered a great deal at the responsibility, a class meeting was called and the teacher's suggestions were followed. Five members of the class were chosen to draw up a constitution. When they had finished their work another meeting of the class was called, at which the constitution was read and adopted. The class constitution read like this:

CONSTITUTION OF THE CLASS OF 1930

PREAMBLE

We, the members of the Class of 1930, in order to form a class government and to secure the benefits of working together in an organized way, establish this constitution for our class.

ARTICLE I. POWER TO MAKE RULES

SECTION 1. *Class Meetings.* — No rules to govern the Class of 1930 shall be made except in a general class meeting. Meetings may be called by the President. The President is required to call a meeting when requested in writing to do so by three members of the class.

SEC. 2. *Voting.* — Voting shall be limited to those members of the Class of 1930 whose class dues have been paid up to date.

SEC. 3. *Passing Rules.* — Rules shall be passed by a majority vote of those members present. A quorum shall be one third of the members of the class.

ARTICLE II. OFFICERS

SEC. 1. *Titles of Officers.* — The officers of the Class of 1930 shall be President, Vice-President, Secretary, and Treasurer.

SEC. 2. *Election of Officers.* — The officers shall be elected by a written ballot and shall each serve for one semester. The candidate who receives the largest number of votes shall be elected. Officers may be reëlected.

SEC. 3. *Duties of the Officers.* — *Duties of the President.* It shall be the duty of the President to call regular class meetings once each month and to call special class meetings whenever requested by a written petition signed by ten members of the class. The President shall preside at all meetings. He shall not vote except in case of a tie.

Duties of the Vice-President. The Vice-President shall assume the duties of the President in case of his absence or his incapacity to act.

Duties of the Secretary. It shall be the duty of the Secretary to keep a record of actions taken at all meetings and to carry on any necessary correspondence.

Duties of the Treasurer. It shall be the duty of the Treasurer to collect all class dues, to keep a record of receipts and disbursements, and to report to the class its financial condition at each meeting.

ARTICLE III. RATIFICATION

SEC. 1. This constitution shall be considered binding when it has been presented in a public class meeting and accepted by a vote of three fourths of those present.

ARTICLE IV. AMENDMENTS

SEC. 1. This constitution may be amended at any class meeting when the desired amendment, presented in writing and signed by five members of the class, shall be approved by two thirds of the members present.

After the constitution had been adopted the chairman asked for nominations for president. Several names, including Richard Grant's, were suggested, but Richard Grant was elected.

Government proves to be a useful device. — The Class of 1930 of the Bridgetown High School found their new government a very useful contrivance. One of the first things they used it for was to arrange a class party. At one of the regular meetings someone proposed that a class party should be held two weeks before Christmas. This was put to a vote. All voted favorably. The treasurer's report showed that the payment of dues, which were ten cents a month for each class member, would supply money enough. The class party proved very successful and the students became much better acquainted.

The class found that there were a number of other things they could do well by means of their class government. When a teacher, of whom many members of the class were very fond, left school to be married, the class bought her a wedding present. As a body the class sent flowers and expressions of sympathy to the family of one of the boys who was killed in an accident and to one of the girls of the class who went to the hospital for a severe operation. In later years of their high-school life the class, through their government, were able to do still other things which they would have found it impossible to do without a governmental organization. Besides one or two parties each year, in their junior year they gave a large reception to the seniors. A

yearbook was published in the senior year and a gift was purchased to leave as a remembrance of the Class of 1930.

Other governments are like class governments. — This story of the way in which the Class of 1930 in the Bridgetown High School organized a government and used it to help them secure many things will help us to see two very important facts. These facts are: (1) When a group wishes to act together in a *public enterprise* it must create a *government* as an instrument through which to work. (2) When a group sets up a government to help it get what it wants, we might very sensibly say it *goes into government.* Its action is very much like that of the private enterpriser who goes into business.

How the American Colonies Went into Government and Failed

The preceding section has shown us how a group that wishes to do something in a collective way may form a government as a tool through which to work. People in groups have always found it desirable to have governments when they wished to act collectively in gratifying wants. We could hardly find a better illustration of the usefulness of government as a tool for collective action in gratifying wants than in the history of the formation of our own national government.

Colonial governments existed before the national government. — Every American schoolboy knows well that each of the thirteen American colonies had a government of its own before the Declaration of Independence. These governments carried on many activities for the colonists.

Certain work was done for all of the colonists by the central government of England. When the colonists by the Declaration of Independence in 1776 declared themselves free and

independent of England, each colony had its local government left to work for it; but the national government was gone. The colonists made two vigorous attempts to form a national government. The first was a miserable failure; the second a great success. Both illustrate very well the importance of government as a tool by which we may organize for gratifying certain wants. Both illustrate how difficult it sometimes is to get a satisfactory governmental tool.

National government had been experimented with. — Even before the Declaration of Independence, the colonists had tried a few small experiments in national government-making. They had used temporary governments to satisfy temporary needs. Some of the colonies had joined in a New England Confederation in 1643. In 1690, there had been a conference to discuss a joint military expedition in the French and Indian War. There had been a meeting in Albany in 1754 to discuss matters with the six nations of the Iroquois. Again in 1765 a meeting or "congress," as it was called, was held in New York to protest against the stamp act and other acts of Great Britain.

How our first national government was formed. — In 1775 there was a meeting at Philadelphia at which all of the colonies were represented. The representatives to this meeting had not expected that they would be called upon to transact business of such great importance as fell to their lot. But unforeseen events occurred. Before they met, the battle of Lexington had been fought, and the representatives at the meeting felt that the colonies were almost in a state of war with Great Britain.

The congress of 1775, which came to be called the Second Continental Congress, drew up the Declaration of Independence and carried on the War of the Revolution which followed.

> When in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the Powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

THE FIRST PARAGRAPH OF THE DECLARATION OF INDEPENDENCE

The members of this congress merely acted as they thought the people of the states from which they came would like to have them act. There was no written constitution which described their powers. The members of this congress believed, however, that they should draw up a constitution, which was sent to the various states. This document was called the Articles of Confederation. By 1781 every state had ratified it.

The Articles of Confederation were not satisfactory. — The Articles of Confederation presented a plan for an organized national government. It provided for offices and for methods by which laws might be made, but it was not satisfactory. Its chief weakness was the fact that the officers for which it provided did not have the power to compel individuals to do what the laws required. The Articles of Confederation, for example, explained the way in which a congress might be organized and elected. It provided that each state should send delegates to the congress; but if these delegates did not come, the congress could do nothing about it. The central government could tell the states to send men and money for the armies; but if the state did not send them, force could not be used.

The weaknesses in the new government proved very serious. In October and November, 1781, for example,

the congress called upon the states for eight million dollars; but during the year and a half following, only a half million of dollars was received. In the four years between 1782 and 1786 it called for six million dollars and it received only one million. With such poor compliance with its requests, the national government could not pay its soldiers, reduce its debts, nor carry on public works.

There were many other weaknesses in this attempt to "go into government." Often too few states were represented in congress to make a quorum. At certain important meetings in 1787 only eight states were represented and these by but a few men each. In 1788 there were barely enough members present to carry on business, and at last so many of these had gone home that there were not enough present properly to vote an adjournment. Thus our first attempt to create a national government collapsed and left our forefathers practically without a central government for a time.

How the United States Went into Government Successfully

When our government based on the Articles of Confederation broke down, some of the people in the thirteen states felt that a good thing had happened. The saying, "King Congress was no better than old King George," was popular. Moreover, most of the people were so proud to be members of their own states that they did not care much about being members of a larger group. Furthermore, the citizens of one state found that their interests conflicted with those of citizens of another state. The farmers of New York state discovered that the butter, cheese, grain, and firewood brought to New York City by New Jersey farmers lessened the opportunity for New York farmers to sell their products

in the city. Accordingly they secured a New York law which laid a heavy tax on farmers from " foreign " states when they unloaded their boats in a New York market. In the same way Pennsylvania passed a law taxing all commodities, such as implements and cloth, sent in from Delaware, which might compete with the " home market." All in all there were many persons who believed that their own states were the best agencies to protect their interests.

But the arguments were not all on one side. The states that passed laws taxing " imported " goods soon found that the game worked both ways. Delaware reacted against Pennsylvania by passing a law taxing Pennsylvania products brought into Delaware, and the state of New Jersey levied a heavy tax on a lighthouse which New York had purchased on New Jersey soil.

As time went on, the need for a national government was felt in many ways. Farmers soon began to complain that it would be easier and more profitable to sell their products across state lines if there were no taxes. A need for organized military activity against the Indians existed, and some concerted action to make rules for navigating rivers and bays which belonged to more than one state was necessary.

They were just such wants as those described above that called for united action and that, in 1785, led to a meeting of representatives from Maryland and Virginia. The representatives of these states soon found, however, that other states as well as their own needed to have a voice in the discussion. Their meeting, therefore, resulted in a second meeting at Annapolis, and here under the guidance of Alexander Hamilton and other leaders it was decided that what was needed was a new central government stronger than the old. It was therefore agreed to call a convention to meet in Philadelphia on May 25, 1787, "to take into con-

sideration the situation of the United States, to decide therefor such provisions as shall appear to them necessary to render the government adequate to the exigencies of the union." The leaders of the old congress of the confederation called a meeting to be held at the same time and place as the former congress. The men who met in Philadelphia on May 25, 1787, were in a position to act as a constitutional committee. George Washington was chosen president of this committee.

Some problems of the constitutional convention. — It was now the task of this committee or convention, exactly as it was the task of the constitutional committee of the Class of 1930 of the Bridgetown High School, to draw up a plan or outline to serve as a framework for the government of the United States. Their task was not an easy one. There were many ways in which the delegates disagreed. All were agreed that representatives who could make laws governing everyone must be elected from each state. But the small states wished as many representatives as the large states. The large states wanted representation in proportion to population. This disagreement was finally settled by deciding upon a lawmaking body of two parts, a Senate and a House of Representatives. In the Senate, it was agreed, each state, no matter how small, should have two members; in the House of Representatives states should be represented in proportion to their population.

There were other problems even more difficult. One question was whether slaves should be counted as people when choosing representatives and in apportioning direct taxes. Another question was the regulation of the slave trade. It was equally difficult to decide what tasks the new government should be given to perform. Finally, however, the convention or committee finished a Constitution which

they were ready to present to the states for approval, just as the constitutional committee in the Bridgetown High School finished its constitution and asked for the approval of the Class of 1930. Eventually the Constitution was accepted by the states. It thus became the basis of our present national government. This government we believe the most successful in the world.

Evidence that our national government is a way of organizing to gratify wants.—If we need any further evidence that the government of the United States was formed as a great instrument for gratifying human wants, we can find it in the Constitution itself. The Constitution of the United States begins with this preamble:

> We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.

The particular tasks which were given to the national government to perform for us were set forth in Section 8 of the Constitution, which reads as follows:

> SECTION 8. The Congress shall have power to lay and collect taxes, duties, imposts and excises, to pay the debts and provide for the common defence and general welfare of the United States; but all duties, imposts and excises shall be uniform throughout the United States;
>
> To borrow money on the credit of the United States;[1]
>
> To regulate commerce with foreign nations, and among the several states, and with the Indian tribes;
>
> To establish an uniform rule of naturalization and uniform laws on the subject of bankruptcies throughout the United States.
>
> To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures.
>
> To provide for the punishment of counterfeiting the securities and current coin of the United States;

[1] These first two paragraphs merely provide means of raising money to carry on the tasks specified in the other divisions of Section 8.

To establish post offices and post roads;

To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries;

To constitute tribunals inferior to the Supreme Court;

To define and punish piracies and felonies committed on the high seas, and offences against the law of nations;

To declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water;

To raise and support armies, but no appropriation of money to that use shall be for a longer term than two years;

To provide and maintain a navy;

To make rules for the government and regulation of the land and naval forces;

To provide for calling forth the militia to execute the laws of the Union, suppress insurrections and repel invasions;

To provide for organizing, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the states respectively the appointment of the officers and the authority of training the militia according to the discipline prescribed by Congress;

To exercise exclusive legislation in all cases whatsoever over such district (not exceeding ten miles square) as may, by cession of particular states and the acceptance of Congress, become the seat of the government of the United States, and to exercise like authority over all places purchased by the consent of the legislature of the state in which the same shall be, for the erection of forts, magazines, arsenals, dockyards, and other needful buildings; and

To make all laws which shall be necessary and proper for carrying into execution the foregoing powers and all other powers vested by this Constitution in the government of the United States or in any department or officer thereof.

Who Should Create Government?

When we talk of a group's acting collectively and forming a governmental unit, we are taking it for granted that the group is free or is strong enough to do such work. Of course the people of the colonies were free to form a national government after they had succeeded in the Revolution; they were not legally free to do so before, as England saw the matter.

But they believed they were justified in overthrowing English rule, and they were strong enough to do so.

Not in every case are people free to form governments that they believe will serve them well. Nor are they always strong enough. In many cases governments are imposed by conquerors. World history is full of cases where great military leaders have put upon nations governments that served the conqueror rather than the people governed. In such governments, where a king, emperor, sultan, or czar is usually the ruler, power passes down to a son or other close relative of the ruler. These governments are called monarchies. Monarchies do not have to be made and remade continually. A monarchy is represented in the chart. Few, if any, such complete monarchies are left in Europe. Although there are still kings in Europe, a large part of the power they once had has been taken away from them and given to a congress or parliament or some other group that represents the people. A limited monarchy, such as most of the governments in Europe now are, is represented by the chart that is shown on page 415.

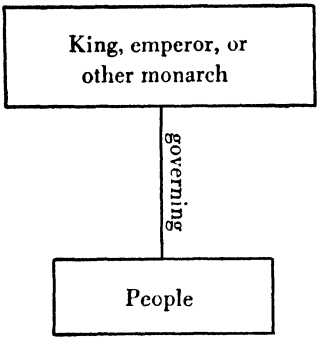
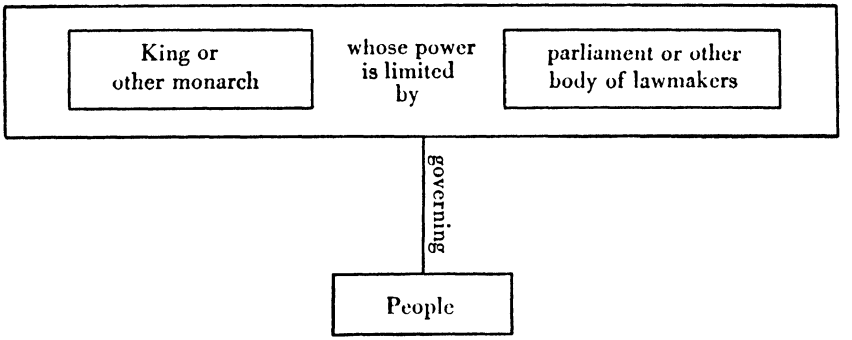


CHART OF AN ABSOLUTE MONARCHY

Democracy can be used in a small community. — A government such as we saw set up by the Class of 1930 in the Bridgetown High School might be called a democracy. A democracy is a government carried on with all of the people concerned making the rules by which they are governed. Where communities are small, government can function in this way. It functioned in this way in New England when all of the people of a township met together and at their

meeting decided what should be done, how much taxes should be collected, and who should be chosen to carry on each kind of work. Everything was discussed and settled just as it might be discussed and settled in a class meeting.



A Limited Monarchy

Such a simple form of government — a pure democracy, it is often called — becomes impossible when the community gets larger and the tasks of government numerous and difficult.

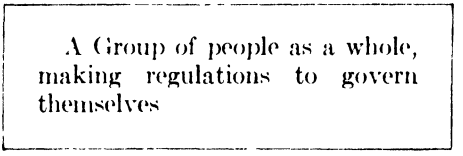


Chart of a Pure Democracy

Our governments are republics. — Our governments are republics. By this we mean that our governments are ones in which the people who are governed select certain representatives who shall make the laws which govern us all. No laws or rules are made in our national government or in any of our cities, states, or other governmental units except by persons whom we elect and to whom we give that power. Such governments are sometimes called *representative*, because the actual work done by the government is turned

over to representatives who are chosen by the group as a whole.

The duties of a citizen in a republic.—In doing its work the important part of any of our governmental units is the men and women who compose it. If they are capable and honest we are likely to get good laws and have them honestly enforced. But as we make our government ourselves, we can never have a better one than we make. We can have as good a one as we make. Any of us therefore is likely to feel as much interest in good government as he feels in the want-gratifying goods that government gives him. If his city water supply is furnished by government but is so bad that it is likely to produce disease, if the police protection is so unsatisfactory that both his property and his life are in constant danger, if he feels that his taxes are high because the men in office are spending the money foolishly or dishonestly, he is very likely to work and vote to make his government better. If he feels that it makes little difference to him but that other people are being unfairly treated by men in office, he will also work and vote to put different men into power. If he is interested in having as many want-gratifying goods as possible made from our social resources, he will also feel it his duty as a citizen to have as good government as possible. Government is one method of making want-gratifying goods, and we can compare it with the methods of private enterprise only if we have a good government.

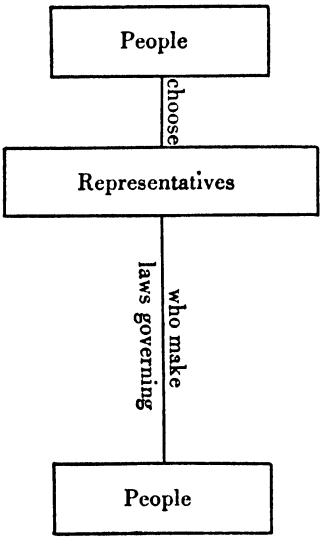


CHART OF A REPUBLIC

QUESTIONS AND PROJECTS

1. Make a list of five things that your class could do best coöperatively.

2. Of what use is a constitution in the forming of a government?

3. It is said that a constitution needs these parts: (1) a statement telling why the government is formed; (2) a description of the officers to be chosen, the methods by which they shall be chosen, and the powers of the officers; (3) a statement as to how the constitution may be made effective; (4) a method for changing or improving a constitution. Are all of these divisions to be found in the constitution adopted by the students of the Bridgetown High School?

4. Look at a copy of the Constitution of the United States and see if you can divide it into these parts.

5. A government is a tool through which public enterprise works. Can you explain what this means?

6. Governments are tools that we may use to help us gratify our wants. Explain and illustrate.

7. All the people of the United States, like the class of the Bridgetown High School, need a government if they wish to work collectively. What are five things that you think they can best do by collective work or public enterprise?

8. Set down a list of some of the ways in which national government had been experimented with in our country before 1775. Opposite each experiment put down the purpose for which the government was used. Opposite each statement of purpose put down the kind of want-gratifying goods that government was expected to give in each case.

9. Set down three reasons why our first national government was a failure.

10. Can you show that the meeting of the representatives from Maryland and Virginia in 1785 came from a desire of the people of those states to gratify their wants?

11. Why were representatives from other states called in?

12. What were some of the problems that the constitutional convention had to settle in trying to form a government for the United States?

13. Why was it difficult to decide what want-gratifying activities should be given to the central government?

14. Look carefully at the powers given to Congress by Section 8 of the Constitution (omit the first and second paragraphs of the section). Can you show how each power given to Congress is the assignment of a task that is of some service to you? What service does each power give or aid in giving?

15. Which of the following seems to you the true purpose of govern-

ment: (1) to make objectionable rules for us to obey; (2) to use us and our work for the benefit of those who govern us; (3) to work for us in helping us to gratify our wants?

16. Is an office-holder whom the people have elected superior to those who elect him? Is he a servant of those who elect him?

17. Why is it true in a republic that government will be as good as the voters make it and no better?

18. Explain why it is that some citizens take very little interest in their government.

19. Public enterprise and private enterprise are two different ways of carrying on our efforts to gratify wants. We can decide which works better only if we have honest and efficient government officers. Show why.

20. List five things that some one of our governments does for you. What persons are employed to do the work in each case?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part V.

CHAPTER XXII

THE STRUCTURE OF OUR GOVERNMENTS

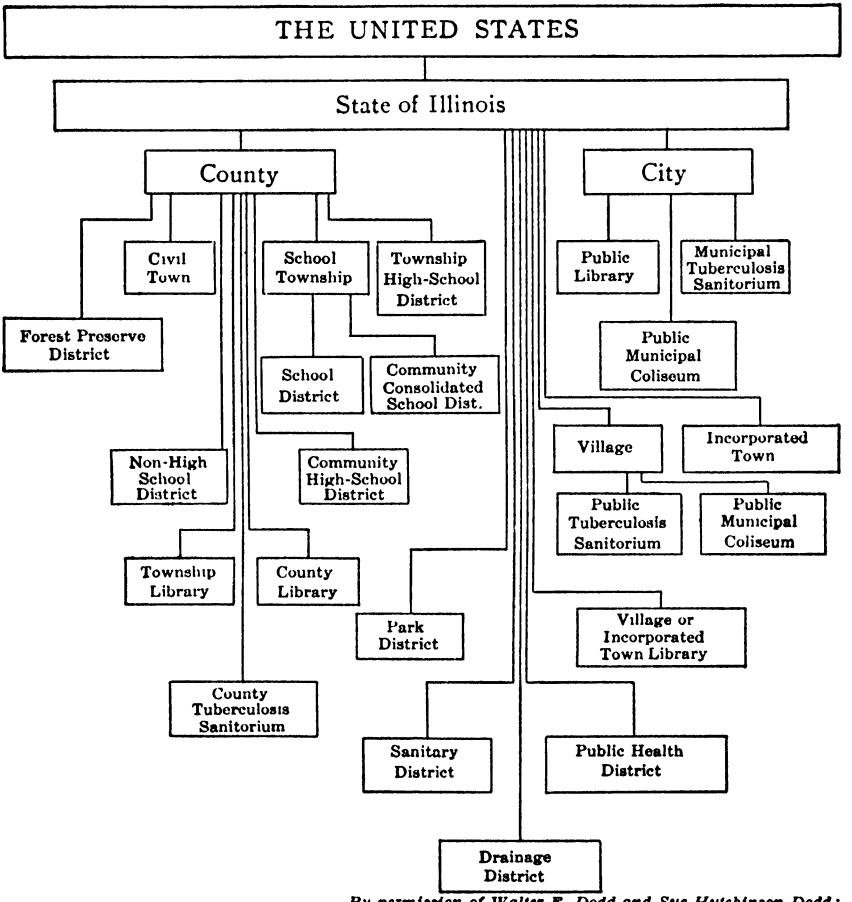
Governmental Units [1]

In the preceding chapter we saw how our *national* government was brought into existence. But of course our national government is not the only form of governmental unit we use to help us in gratifying our wants. Government is so useful an organizing tool to get us certain things we want that we create many different kinds and sizes of governmental units. We do not need to be told that we live in a state — such as California, Massachusetts, Illinois, or Texas — and that our state has a government. Somewhat more than half the people of the United States also live in cities, and so we are all familiar with city governments.

National, state, and city governments, however, are not the only ones that people have found it desirable to organize to do certain tasks. Township and county governments are very important in some instances. Still other governmental units are formed for other purposes. Districts in a city may be marked off and a government organized for the purpose of building and maintaining a bridge or a library. In Illinois a large part of one county has been organized into a separate government for the purpose of building and main-

[1] At the beginning of this study write to the secretary of state of your state for one or more copies of the *State Blue Book* or *Year Book*. These will be furnished without charge and will give the class diagrams of the legislature, the number of congressional and senatorial districts, and the names of representatives and other state officers. Every public library will have a copy.

taining the canals and other equipment necessary for the disposal of sewage. This division is called the Drainage



By permission of Walter F. Dodd and Sue Hutchinson Dodd: Government of Illinois (University of Chicago Press)

TYPICAL SYSTEMS OF GOVERNMENT WITHIN A STATE (ILLINOIS)

This chart shows the numerous governmental agencies which are of service to individuals within a state. Illinois is selected as an example.

District. The chart above shows the possible governments which exercise authority in the state of Illinois.

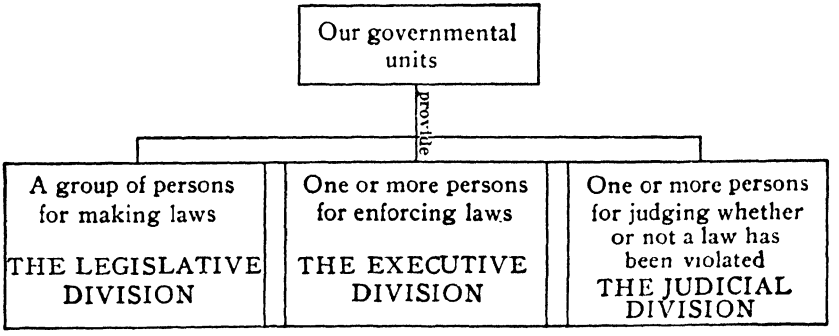
Some of the more special forms of governmental units we

may leave for study in other courses. The more important forms of government that have been organized in the United States are the following:

1. National government
2. State government
3. County government
4. Township government
5. City government

The Three Divisions of Power within Governmental Units

In carrying on their tasks, our governmental units work through law rather than through the notions or whims of those who happen to be in office. Therefore if we do not want persons to run automobiles at a high speed or employ children in factories, we prevent them from doing so by laws passed by our representatives.



Division of Power within Our Governmental Units

By law also our governments take other helpful and constructive action. If a committee is wanted to regulate the charges for gas or electricity in a city or state or to inspect farms for Canada thistle, a law is passed creating such a committee and giving it power to act.

The legislative division of government. — Since laws must be made, it is easy to see that every governmental unit must have a division given over to the work of *making laws.* Such a division of government is called the *lawmaking* or *legislative division.* The people who are elected to make laws are generally called legislators.

The body of lawmakers that meets at Washington is called Congress. We have seen in our study of the way in which our government was formed that Congress has two parts, a Senate and a House of Representatives.

Every state has its lawmaking body also. The members are called the state legislators. A body of people for making laws is also found in most cities. It is called the city council or commission.

Laws must be enforced. — Laws are not fully useful unless they can be enforced. A law against stealing would be weak unless there were officers to arrest people who steal and to enforce the penalties which the law provides for theft. There must be, therefore, in each governmental unit a division for enforcing laws. This is called the *executive* branch of the government.

In the national government the executive power is given to the President. In the states it is given to the governor. In every important unit the duty of executing or carrying out the laws which have been made by the legislative branch of the government is given to some man or men.

Disagreements must be settled. — Suppose that a man who has been arrested and charged with stealing says that he is not guilty. Or suppose that when Smith says Brown owes him money, Brown denies it. Here are disagreements. It will not do to have anyone punished for stealing without proof that he is guilty. It will not do to have one man compelled to do certain acts just because another *says* he has

promised to do them. There must be some way of settling such disputes if justice is to be done. Government has turned over the work of giving justice to judges. The division of government which has charge of giving justice is called the judging or *judicial division.* The judges who pass upon disputes involving the national laws are called the United States judges. But judges are also provided in states, counties, and cities for the purpose of interpreting the laws of these judicial divisions, respectively.

A chart of the divisions of government. — The following chart shows the way in which governments — national, state, or local — are usually planned in the United States. The chart shows how lawmaking, the enforcing of law, and the settling of disputes are all taken care of.

How Legislative, Executive, and Judicial Powers Are Vested in Our Chief Governmental Units

Our National Government	Legislative Body — Congress Chief Executive — President Judicial Bodies — United States Courts
Our State Governments	Legislative Body — State Legislature Chief Executive — Governor of State Judicial Bodies — State Courts
Most of Our City Governments	Legislative Body — City Council Chief Executive — Mayor Judicial Bodies — Police Courts, and sometimes other city courts
Typical County Government	Legislative Body — County Commissioners Chief Executive — Sheriff Judicial Bodies — County Judge, or a state judge for several counties
Typical Township Government	Legislative Body — Town Board or Commission Chief Executive — Constable Judicial Body — Justice of the Peace

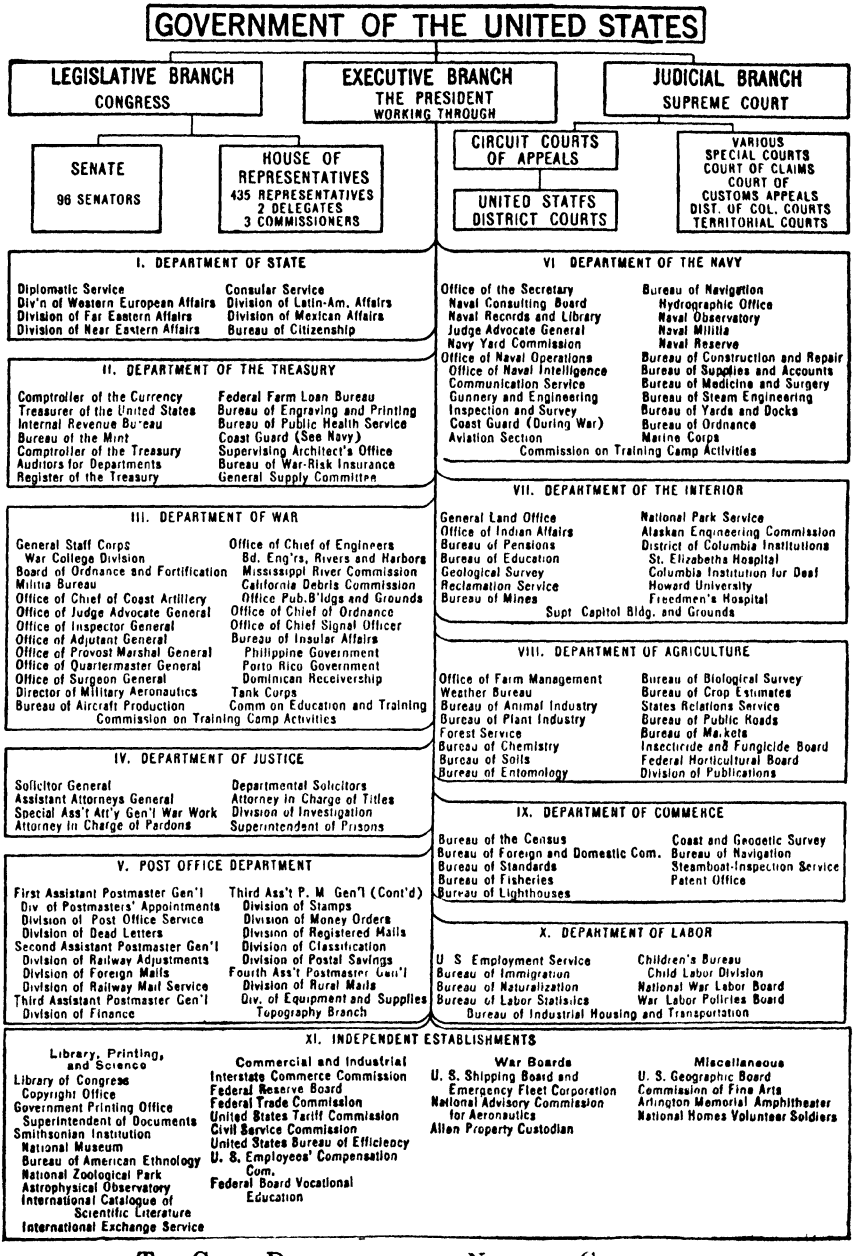
Illustrations of the Structure of Our Governmental Units

We shall not try to study the structure of our various governmental units in great detail; nor shall we study carefully the electing of officers or the methods of making laws and carrying on other business. Such study is useful but may well be left to other courses or supplementary readings. We must, however, look at the more important offices that have been created in placing legislative, executive, and judicial power in each of our governmental units. This is necessary that we may see what opportunities there are for a career as part of government or in working for the government.

I. National Government

The plan for our national government is outlined in the Constitution of the United States, which we saw developed by the Constitutional Convention under the leadership of George Washington. A chart of our national government, which shows clearly the legislative, executive, and judicial divisions thereof, is shown on the following page.

Congress and its make-up. — The Constitution declares that the laws of the United States shall be made by Congress and that Congress shall be composed of two houses, the Senate and the House of Representatives. The members of both of these houses are elected by the people. Two Senators represent each state in the Senate. Thus, densely populated states such as New York and Illinois have no more Senators than New Mexico and Wyoming. For the House of Representatives, however, members are chosen from the states according to population. At present there is a total of 435 members in the House of Representatives. The number in the House has been changed many times



THE CHIEF DIVISIONS OF OUR NATIONAL GOVERNMENT

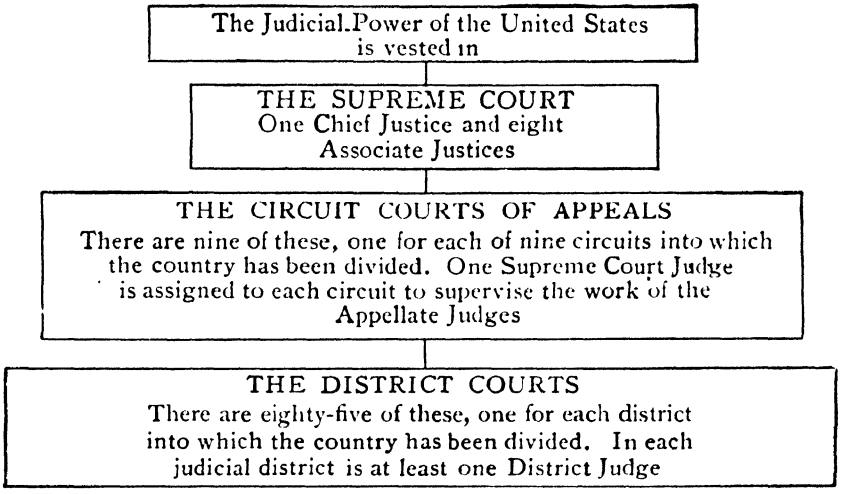
since the first Congress met. Every ten years the United States government makes a count of all the people in the United States. After this census Congress passes a law fixing the number of Representatives in the House. The number of Representatives is then divided into the total population. This shows how many people are to be represented by one member of the House of Representatives. By dividing this number into the population of a state, one can tell how many Representatives that state may have in the House. After the officers of a state have learned how many Representatives they are to have, they divide the state into districts, from each one of which a Representative is elected. If the state officers neglect to do this before an election when the state is entitled to a new Representative, the new member to the House is chosen by the voters of the state as a whole. He is then called a Representative at Large.

Members of the House of Representatives, usually called Congressmen, are elected for terms of two years. The salary of a Congressman, like the salary of a Senator, is ten thousand dollars a year. Senators are elected for six-year terms, and the terms are so arranged that one third of them expire every two years.

The President. — The President is, as has been seen, the chief executive of the nation. The Constitution states that he shall " hold his office during the term of four years," and although a President may be elected as many times as the voters care to reëlect him, none has ever held the position more than two terms.

If the office of the President is made vacant through his death, resignation, or removal, or if he is unable to perform the duties of his office, the Vice-President takes his place. If the Vice-President is unable to carry on the work of the office or dies, the law provides for a succession to the presi-

dency: the Secretary of State, the Secretary of the Treasury; the Secretary of War; the Attorney-General; the Postmaster-General; the Secretary of the Navy; the Secretary of the Interior. The Constitution of the United States provides that the President be paid for his services. The amount of this payment is fixed by Congress and is at present seventy-five thousand dollars a year plus additional sums of a hundred thousand dollars and more granted by Congress for entertainments, traveling expenses, clerical help, and other needs.

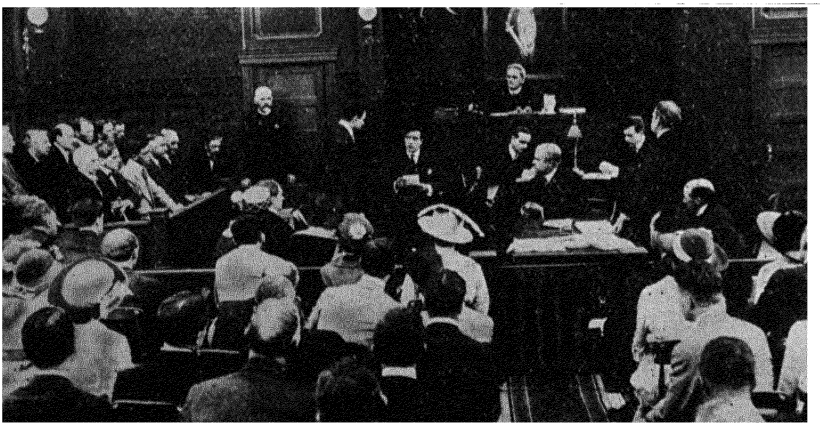


CLASSES OF COURTS COMPRISING THE NATIONAL JUDICIARY

The executive aids of the President. — To carry out the executive work of the national government, ten executive departments have been created. In charge of each department is a head called a secretary. These secretaries are together called the *Cabinet.* The Cabinet meets frequently to advise the President and to confer with him. Notice in the chart on page 425 that each of these main departments has many bureaus and divisions. The work of each of the executive departments is about what might be

expected from its name. In Chapter XXIV we shall see something of the service of each.

The national judiciary. — The Constitution says that the judicial power of the United States shall be vested in one Supreme Court and such other courts as Congress may from time to time create. A court really consists of a man or a group of men who have the power to try cases in dispute and to give decisions which will be enforced. Congress



A COURT IN SESSION *Photo by Brown Brothers*

In such manner we carry on our efforts to secure justice. Note the judge on the bench, the attorneys before him, and the jury on the left.

has from time to time seen fit to create other courts. The important ones of these are the District Courts, the United States Circuit Courts of Appeals, and certain special courts such as the Court of the Customs Appeals (which decides disputes about taxes on imports), and the Court of Claims (which considers claims against the United States government). The District Courts are the first or lowest of the United States courts.

No position in the United States probably is regarded as

higher or more to be respected than a seat on the supreme bench. The pay of a Justice of the Supreme Court is at present $20,000, and the Chief Justice receives $20,500. The tenure of office is for life or during good behavior.

II. State Government

Now that we have seen something of the organization of our national government, we may turn to the next largest division of government — state government. We have noticed that the thirteen colonies each had a fairly well organized state government, even before the national government was established. States that were admitted to the Union later obtained their state governments in a somewhat different way. In 1787 a famous law was passed by Congress, known as the Northwest Ordinance. This law described a plan by which new territory could be formed into states. Its most important provision was that when the number of people in a district of the country had become large enough, the district could be organized into a *territory* and later, if the people of the territory desired, they could draw up a constitution. If this constitution were acceptable to the national government, the territory could be admitted to the sisterhood of states. In other words, it could go into state government for itself as one of the United States. Almost entirely by the use of this method the number of states in the Union has grown from the original thirteen to the forty-eight now belonging to the sisterhood. By joining the Union the people of a state assent to the national government and freely admit that the matters with which it deals are not within the power of the state government.

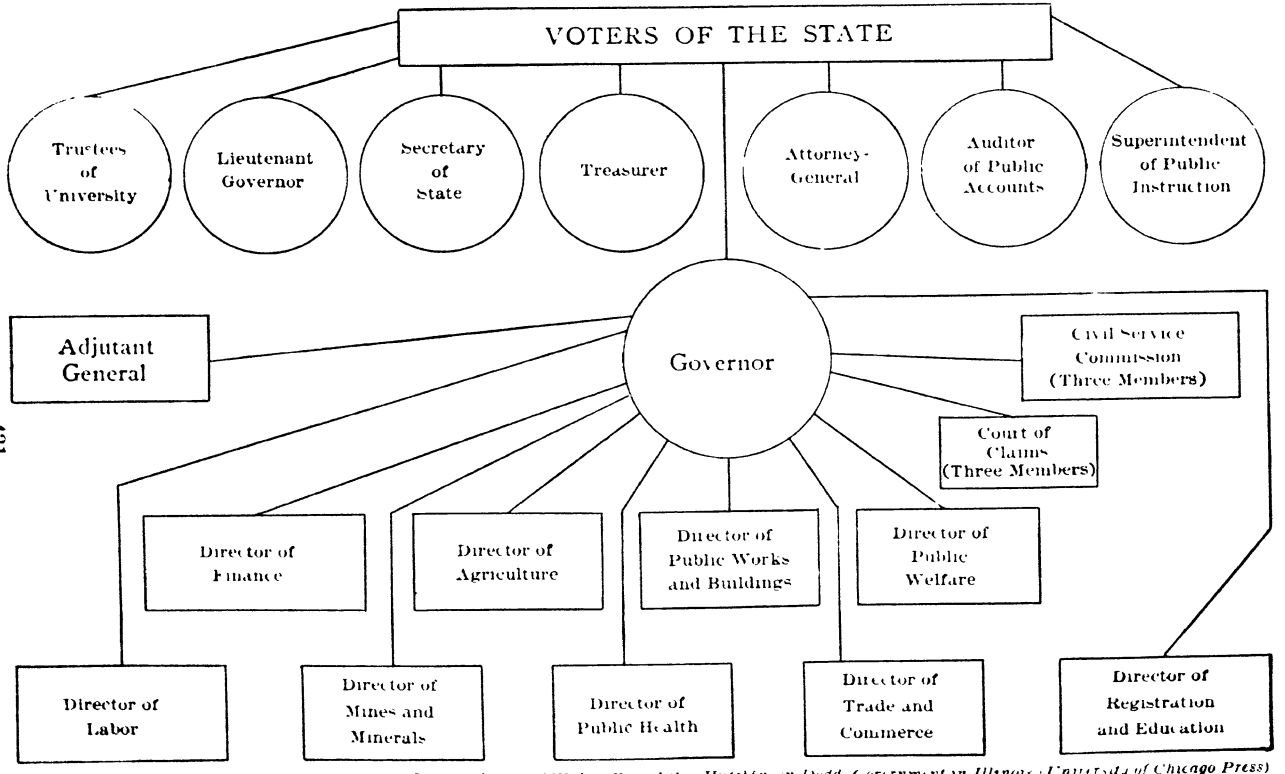
The state legislature. — The power to make laws is in most states given to a body of men called the state legislature or the general assembly. In every state this body has

two divisions, generally known as the senate and the house of representatives or the house of delegates. For purposes of electing members to the state legislature the states are usually divided into districts called senatorial districts. From each of these one senator is chosen and one or more than one representative. Delaware has seventeen such districts, Minnesota twenty-seven, and New York and Illinois each fifty-one.

The state executive. — The chief executive in every state is the governor. The constitution generally provides that he shall share executive power with the heads of the various state departments. These heads of departments together are often called his cabinet. They are in very much the same position in the state as are the heads of the executive departments in the United States. The chief executive officers in most states are similar to those in the national government. There is generally a secretary of state, a state treasurer, a state auditor, an attorney-general, and a state superintendent of instruction.[1] There are also state boards of charity, public works, public utility, and health. In the most of the states the number of departments and boards is continually increasing, and this again suggests that we are using state government more and more to help us in gratifying our wants. An increase in the number of elective state officers has made it difficult for the voters to judge wisely in casting their ballots. Illinois has led the way in a very important reform in simplifying the carrying out of laws in that state. The chart on page 431 shows the organization now in effect.

State courts. — In each state, as in the national government, there is, of course, a judicial department. Therefore state

[1] In some states the superintendent of instruction has university as well as public school jurisdictions. In Illinois the board of trustees of the State University includes in its membership this officer and the governor. There are nine members, three of whom are elected every year.



By permission of Walter F. and Sue Hutchinson Dodd, Government in Illinois (University of Chicago Press)

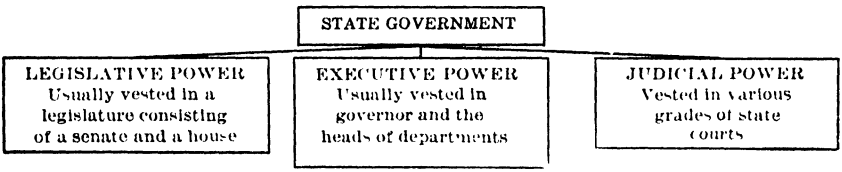
ORGANIZATION OF THE EXECUTIVE DEPARTMENT OF THE STATE OF ILLINOIS

Circles represent elected officers; rectangles, appointed officers.

courts are organized. Each state has, as has the United States, a series of courts ranging from police courts, which can try cases for minor offenses, through county and circuit courts to the supreme court of the state. In a few states there is a still higher state court to which the case may be appealed. In New York this is known as the court of appeals.

Judges of state courts are usually elected by the voters and serve for terms of two or more years.

Below is a chart which outlines the large divisions of state government as we have described them.



DIVISION OF POWER WITHIN A TYPICAL STATE GOVERNMENT

III. CITY GOVERNMENT

The city council. — In the past, city governments have usually been organized in much the same way as national and state governments. The lawmaking body in most cities is the city council. The city council is composed of representatives elected from the wards into which the city is divided. Groups of people are given permission to organize city governments by the laws of the state. The city council, therefore, usually may do anything which the laws of the states permit.

The mayor. — The mayor, who also is elected by the voters in most American cities, usually has the power to choose a number of important assistants who are made heads of departments with the approval of the council. The departments of police, fire, public works, finance, health, and law

are the most important city departments. Some cities have very many others. Each department has usually a large number of bureaus, offices, or other subdivisions.

Police magistrates. — In most cities the only judges are police magistrates. Their power does not extend to many very important kinds of cases. In some of the larger cities



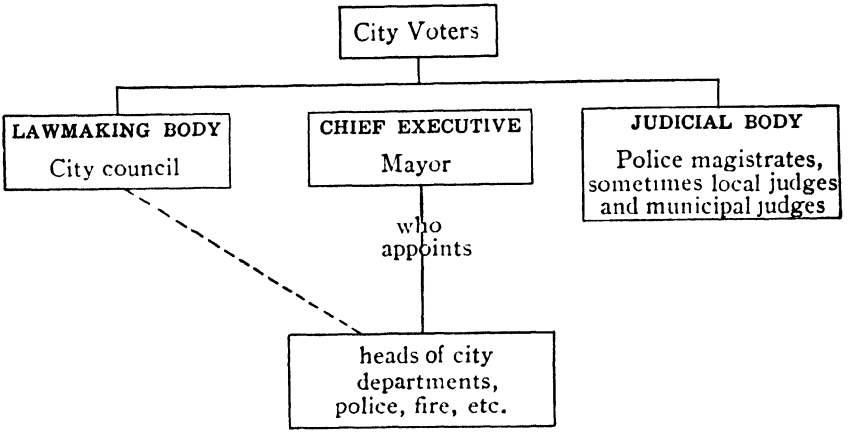
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NEW YORK CITY ASSEMBLY IN SESSION

This is an important city legislative body. Our houses of Congress and our state legislatures meet in a similar way.

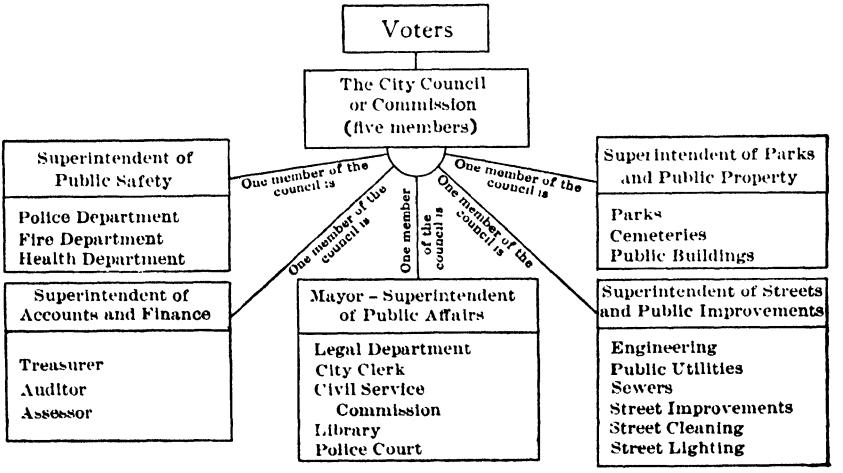
special courts have been created known as city or local courts. The judges of these courts have very extensive power. The chart on page 434 will show us how city government is organized under the mayor and council plan. This is still the most common one.

Commission form of city government. — No plan of government has been criticized so extensively as the ordinary form of city government. Dishonesty and inefficiency in



THE MOST COMMON FORM OF CITY GOVERNMENT

city government have been very common. Queerly enough, it was a great catastrophe that led to the forming of a new kind of city government. In 1901 the city of Galveston, Texas, was overwhelmed by a tidal wave. The situation demanded unusual measures. Many new and very pressing

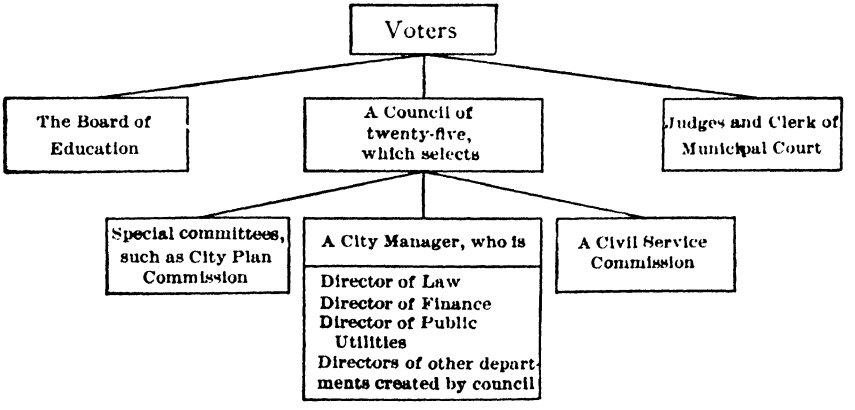


THE COMMISSION FORM OF CITY GOVERNMENT

wants arose, and the old council form of government could not take care of them. The result was the creation of a new form which was called the commission plan.

The commission plan of city government is very simple. Five persons known as commissioners are elected. These commissioners are given entire control of all the city government. They enforce the laws as well as pass them. They make laws and spend money. Usually divisions of the work are given to each of the five commissioners, but the commission as a whole is responsible for all final action.

The city manager plan of government. — Many people believe that a city government is now called upon to do so many things that it is more like a large business than anything else. Therefore, they think a manager should be in charge, just as a manager is placed in charge of a business. The manager plan is operated in the following way: A small group called the commission or the council is elected just as in the commission plan. These men, however, instead of carrying on the work of government themselves, select someone to act as general manager of the city. He is given full charge of all the city's work. One advantage in



THE CITY MANAGER FORM OF CITY GOVERNMENT

the city manager plan is that the manager may be from outside of the city itself. It is thus possible to secure people who have been specially trained for such work. Another advantage lies in the fact that it is easy to know who is responsible if things are done well or ill. More than a hundred cities, of which Dayton, Ohio, was the first large one, have adopted the city manager plan of government.

Groups too small to form city governments may form village governments. — Most states permit groups of people to organize villages when they are too few in number to organize cities. In villages a board of trustees is generally given the power to make rules, and the president of this board is looked upon as the executive officer. Sometimes a village judge also is elected.

IV. Local Government

The town. — The colonists who settled in New England, like groups of people everywhere, found need for working together, especially in building roads and bridges, providing schools, looking after the public safety, and collecting taxes for these purposes. To take care of these tasks there grew up what was called a New England "town meeting." These town or township governments are still much the same in New England as they were in colonial days. In the town meeting many affairs were discussed and many rules enacted. The town meeting itself is really the representative body, although two or three selectmen are generally chosen, who do some of the work while the town meeting is not in session. These selectmen are also given the power to carry out the laws of the township. In this they are aided by the constables who are the police officers of the township. Justices also are chosen, who act as judges.

The county. — The town meeting worked well in New England where the people, engaged in manufacturing, fishing, and shipbuilding, lived near one another. But in the southern states, where agriculture on large plantations was the chief form of work, the citizens found it more difficult to meet and the county government grew up. In the county the important body is a board of commissioners elected by the voters. The county board is a lawmaking body. It makes rules regarding roads and bridges, cares for the poor, and raises taxes for doing these things much as a town meeting would do in New England.

The county executive. — To carry out the laws in a county, there is usually an officer called a sheriff. Other officers who are important are the superintendent of schools, the county treasurer, the coroner, and the county clerk. The work done for us by these men will be noticed in a later chapter.

An important aid to the enforcement of law is a county officer who is sometimes called the district attorney, sometimes the county attorney, and sometimes the state's attorney. It is his duty to give legal advice to the other officers of the county and to aid in the prosecution of all lawbreakers in the county.

County-township government. — Many of the states in the Central West, as Illinois, Indiana, and Iowa, were settled by colonists, part of whom came from the South and part of whom came from New England. In the Middle States, therefore, there grew up a combination of county and township government. Generally in such states the duties of the township officers in New England and the county officers of the South are divided between township and county officers.

Vocational opportunities grow out of governmental units. — Now we have finished our brief study of the way in which we

in the United States construct our governmental machinery for the task of gratifying wants. This study gives us the basis for seeing that there are many and attractive opportunities in this great organizing agency.

There are two types of work in governmental units. — Government, like business, offers opportunities for those who organize, plan, and manage and for those who carry out the policies of those who organize, plan, and manage. Planners and managers are needed to draw up new constitutions or charters, to decide who shall vote, how elections shall be held, what acts shall be considered as crimes, and what shall be the relations between citizens in business, in inheriting property, and in marriage. Planners must also decide what work shall be given to private enterprise. Shall government or private enterprise protect us? Which shall provide parks, streets, railroads, water, food? Planners must also decide how funds can be raised to carry on government work.

The organizing, planning, and managing of government is referred to as *politics*. Those who do this work are usually called *politicians*. Other names given to the more important politicians are political officials, policy-makers, and political leaders. We are in the habit of thinking of politicians as including, besides policy-makers, men in politics who spend their efforts working at all sorts of tasks that may help others to important offices. Such men may be glad to be appointed to small places in the government machine. They are not politicians in the true sense of the word, for they have no active part in the actual making of government policies. Since such persons are often dishonest and incompetent, the use of the term *politician* to include them has given the word an unpleasant meaning to many people. In spite of this, however, we shall call the planners *politicians* in this study, for in its correct sense this word means *policy-makers*.

Carrying out the plans of the politicians is quite as important as making them. Those who perform this task are said to be in the *government service.* Let us look at an example of the difference between making and carrying out plans. A member of Congress or of a state legislature is *in politics;* he is a political official or a politician. A post-office clerk, a forest ranger, an army officer, or a public-school teacher, on the other hand, is *in the service of the government;* he is a government employee.

The work of planning and the work of carrying out plans may best be studied separately. — We shall need to study separately the work of planning and the work of carrying out plans. In the next chapter we shall consider *politics* as a life work. In doing this we shall study (1) opportunities in politics; (2) how to get into politics; and (3) politics as a career. In later chapters we shall study the service and administrative activities of government and the possibilities of a career in them.

QUESTIONS AND PROJECTS

1. Explain why it is that a free people form government.
2. Explain why it is that we create different kinds and sizes of governmental units.
3. How many kinds of governmental units can you name that have some relation to you? Ask your parents to help you with this question.
4. Do you think that your class as a whole can do some things better than you could do them as an individual?
5. Do you think that your school as a whole can do some things better than your class? Are your class and your school different kinds of units?
6. What is the name of your nation? Your state? Your county? Your township? Your city or village?
7. Explain why it is necessary that laws shall be made by our governmental units.
8. What is the name given to the legislative body of our national government? Of your state government? Your city government?
9. What is the work of the executive branch of government? Who is the chief executive of the national government? Of your state?

10. What power is given to judges in our various governmental units?

11. In some older countries legislative, executive, and judicial power are vested in one man. Can you see any disadvantage in this?

12. Our forefathers believed that no one division of government should be given a large amount of power. They said that by dividing the work into legislative, executive, and judicial divisions they were creating a *check and balance* system of government. Can you show how one part of our governmental units might act as a check or balance on another part?

13. In what body, or person, are vested the legislative, executive, and judicial powers of our national government?

14. Define Congress; Senate; House of Representatives; President; Supreme Court; executive departments.

15. Can you see any reason for dividing the work of the national executive into departments? What is the reason for dividing each department into a number of offices and bureaus?

16. Look at a copy of the Constitution of the United States and read carefully the words in which the Constitution creates the legislative division of our national government. Do the same for the executive and judicial branches.

17. Each state is divided into a number of districts, from each of which one Representative goes to the national House of Representatives. These are called congressional districts. Can you learn the number of the congressional district in which you live? (See a copy of your *State Year Book.*)

18. Who is the President of the United States? The Vice-President?

19. Define the Cabinet.

20. Have some member of the class find a picture of the Supreme Court in some magazine or elsewhere and bring it to class.

21. Who is the Chief Justice of the United States?

22. Who is the governor of your state?

23. States are divided into districts, each of which is represented in the state legislature by a senator and a certain number of representatives. Can you learn the number of the senatorial district in which you live? Can you learn the names of the senator and representatives who represent you? (Consult your *State Year Book.*)

24. If your city has the council form of government, what are the names of the mayor and the person or persons who represent you in the council? If your city has the commission form of government, what are the names of your commissioners? If it has the manager form, what is the name of your city manager?

25. Explain the county, the town, and the county-township forms of government.

26. Make an outline similar to the one on page 423. Attempt to fill in

the names of the officers shown in this outline from the names you have learned for the foregoing questions. (Consult your *State Year Book* and local officers.)

27. If you live in a county seat, walk through the courthouse. Notice the names of the various county officers that appear on the doors in the building.

28. In this chapter we have studied chiefly the *form* of governmental units. In the next chapters we shall see how these forms work through thousands of planners and employees. Will this give us an opportunity to see vocational opportunities? Why?

29. Explain why it is true that a study of governmental units gives us the basis for studying the occupations that exist in government.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part V.

CHAPTER XXIII

POLITICS AS A CAREER

Opportunities in Politics

The lawmaker. — When one thinks of the planning phase of government, he probably thinks first of the lawmakers — the members of the legislative bodies, national, state, and local. Members of Congress, state legislatures, city councils, and county boards number about a hundred thousand men and women. There are few greater honors than to be elected by the people to make their laws.

In the early days, members of lawmaking bodies usually served without pay, partly out of patriotism, and partly because lawmaking took only a small portion of their time. It is customary now for legislators to receive regular salaries, in order that the lawmaking shall not have to be done by a small class of wealthy, leisured men. In the city and state lawmaking bodies, salaries are not large, because the members do not give their full time to government work. State legislatures usually meet only for a few months every second year. Between sessions the members are engaged in their businesses or professions. Members of city councils also are usually business or professional men who give only part of their time to making city laws. But our national Congress is compelled to stay in session a greater portion of each year to take care of the vast amount of business. A Congressman is a very busy man and usually is obliged to give up his regular occupation. We have seen that Congress-

men and United States Senators receive salaries of $10,000 each. They also have additional allowances for hiring clerks, for stationery, and for travel. Lawmakers' salaries vary in different states. Representatives in state legislatures receive from two dollars a day to eighteen hundred dollars a year. Most state legislatures meet for not more than sixty or ninety days a year. City councilmen in some instances serve without pay. In the largest cities, however, they receive as much as five thousand dollars a year.

Training for lawmaking. — There is no special preparation or course of training for the legislator. A good legislature is one which represents all the elements in a community. In a middle western state, therefore, a legislature would include farmers, business men, lawyers, doctors, bankers, and men of other occupations. Lawyers, however, predominate in American legislatures to such a degree that the study of law is often regarded as the best preparation for a legislative career. According to a study made some years ago, lawyers constituted only one half of one per cent of the men gainfully occupied in the United States, but sixty per cent of the members of Congress were lawyers. Farmers, constituting about one third of the population gainfully occupied, furnished only three per cent of the members of Congress. This does not necessarily mean that the legal profession is overrepresented twelve hundred times in comparison with agriculture, however, for while farmers and business men usually represent only their own occupations, it is the lawyer's business to represent all classes.

Experience in local government, say as a member of a county board, a city council, or any other courthouse or city-hall position, is often useful preparation for service in a state legislature. A large proportion of members of Congress have been members of state legislatures.

Member of a constitutional convention. — Before the legislature or any other part of the government can begin its work, a constitution or charter must be drawn up (see Chapter XXI). During the last few years, Illinois, Nebraska, Louisiana, Arkansas, Missouri, Ohio, and other states have held constitutional conventions to revise and bring up to date their old constitutions. Cities are sometimes given the power of holding charter conventions, to draw up new forms of government for their own communities. The members of these charter or constitutional conventions, while they are in session, are reorganizing government just as a business man whose business is not working well might reorganize it. In conventions are found many former members of Congress and state legislatures, prominent lawyers, judges, and administrative officials. Their work lasts only a short time, seldom more than a year, and they are paid for the time they are actually at work.

Executive officials do some policy-making. — The makers of laws and constitutions are not the only policy-making officials. We have seen that mayors of cities, governors of states, the President of the United States, and their chief assistants have for their main work the carrying out of laws; but they also have policy-making work. A governor may call meetings of the legislature, state what laws should be passed or repealed, veto acts of the legislature, and issue minor regulations known as ordinances. A strong governor can often influence the legislature to pass those laws that he thinks necessary. The President of the United States is commander in chief of the army and navy of the United States, and he shares with the Senate the power to make treaties with foreign countries. He is, therefore, in a position of leadership in foreign affairs. The Secretary of State is himself responsible to a great degree for our relations

with foreign countries. The Attorney-General can decide what laws most need enforcing and how they should be enforced. Thus a high executive official is in a very real sense a politician — a policy-maker.

Boards and commissions. — Another way of taking part in the planning work of government is to be elected or appointed to one of the numerous boards or commissions, such as a board of education, a board of health, a public service commission, or the federal Interstate Commerce Commission. These boards sometimes have the power to make rules that are almost as important as laws. For example, the Interstate Commerce Commission acts as a sort of advisory or control board for the national railway system. It consolidates railroads into systems, correlates railroad and water routes, and fixes rates. These powers belong to Congress, but Congress has delegated them to a special body of experts who make a continuous study of the railroads. Boards of education are bodies that decide how the local schools shall be built, equipped, and conducted, who shall be employed as teachers, and what shall be taught.

Party leaders. — Not all the leaders of government hold governmental offices. To a very great extent, the plans and policies of government are formulated by parties and other groups outside the government. In their committee meetings, conventions, and primaries, the parties select candidates for the important governmental offices and draw up platforms saying what the government ought to do. Frequently, the party is able to control the legislature, the executive, or even the courts. Thus, to be a leader of a powerful party organization is to be " part of the government " just as truly as to be elected to the legislature or to a high executive position.

Party leaders are of three kinds. The genuine " leader "

is a public personage who is able, by virtue of his personality, knowledge, and aggressiveness, to put himself at the head of his party and direct it. Theodore Roosevelt and Woodrow Wilson were political leaders of the best type. Another type is the political "boss." The boss usually holds no office. He stays behind the scenes and tells the officials of government what to do. His control is built up through intimidation and the promise of rewards. He is interested chiefly in keeping the government in his control. The political history of large cities has furnished examples of political "bosses" who wielded great power and who made great fortunes out of politics. A third type of leader is the political "manager." He is a man who is attracted to politics as a game and finds himself successful at it. He finds satisfaction in planning campaigns and winning nominations and elections. Often he does not care for office himself, or at least he is satisfied with a minor office. The "managers" of presidential campaigns are sometimes rewarded with positions in the Cabinet.

Other ways of being in politics. — It is not necessary even to be an influential party man to be part of the government. More and more, government is being influenced by groups of men and women organized for the purpose of getting some particular thing done by the government. The Anti-Saloon League did more than any person or other organization to bring about national prohibition. The American Legion worked for the passage of a soldiers' bonus. The hunters and fishermen of Pennsylvania organized to get adequate fish and game laws passed in that state. Some of the more important organizations which are interested in national legislation are the following:

The United States Chamber of Commerce
The American Federation of Labor
The National Association of Manufacturers

The League of Women Voters
The Anti-Saloon League
The American Bankers Association
The American Farm Bureau
The American Legion

Such organizations send representatives to Washington and to state capitals. These representatives are sometimes known as " lobbyists " because they wait in the lobbies of a capitol to talk to members of Congress or of a legislature about the things their organizations wish done. Sometimes Congress and the state legislatures summon such representatives to appear before legislative committees to explain their wants. Thus in drawing up a new tariff law Congress asks representatives of the manufacturers, the farmers, the wool-growers, the cotton-growers, the lumbermen, and others, to present their arguments for or against a high tariff.

Often, then, one may play a greater part in influencing the government and formulating its policies as an officer or representative of a powerful " lobby " than as a government official.

How to Get into Political Office

The political officeholders—the planners in government—whom we have been describing get into office either by *popular election* or by *appointment.* It is estimated that there are in the United States at least 750,000 elected officials. Those who are appointed are usually given their jobs by elected officers whom they have helped to elect by working with a political party. The President, for example, appoints his Cabinet; governors and mayors appoint their executive assistants. Therefore, if we understand party work and how elections are carried on, we shall have a good basis for understanding how one gets into political office.

The voter is at the bottom of politics. — At the bottom of all machinery for electing men to office is the individual voter. We may, therefore, see first of all who the voters are. Each state has the right to decide who within its borders is entitled to vote. Originally the Constitution of the national government gave the states a free hand; but an amendment following the Civil War denied the states the right to refuse the vote to anyone on account of "race, color, or previous condition of servitude." Another amendment in 1920 denied the states the right to refuse the privilege of voting to anyone on account of sex.

Years ago most of the states required that a man must own property to be entitled to vote. The requirement has now disappeared, except for some special elections, from every state, and the right to vote is in every state given to practically all citizens twenty-one years of age and over. The requirements in Illinois will serve as a good illustration. To vote in Illinois one must be (1) a citizen either by birth or naturalization; (2) twenty-one years of age; (3) a resident of the state one year; (4) a resident of the county ninety days; and (5) of the election district for thirty days preceding the election. In a good many states it is necessary for persons to register a certain number of days before the election at which they wish to vote. Government officers are required to have books of registration ready at certain places at certain times and to make public announcement of this fact so that voters may get their names upon the books.

The first steps in choosing candidates. — Before a voter votes to elect a certain man to office, he usually wishes to know something about that man and what he will do if elected. Since the political party to which the candidate belongs will to a large extent guide his policy if elected, it is

necessary for the voter to know something about political parties.

Whenever a large number of people get to discussing an important matter, they are quite certain not to agree. One group will take one side of the question and the other group will oppose them. This fact has been illustrated almost from the beginning of the United States government. When the United States government was first formed, one group of Americans, led by Alexander Hamilton, believed that central government should be made strong — stronger than the state governments. This group called themselves the Federalists or Federal Party. Another group, who believed that the central government should not be given much power, was led by Thomas Jefferson. This group believed more in state and local government; it was called the Republican Party. This party had no relation to the present Republican Party, however. The latter grew up in the fifties around the idea of freeing the slaves. Both of these old parties have disappeared, but American citizens always find themselves divided into groups by what they believe to be the important work of government. Thus at present we have two important groups or political parties: the Democratic Party and the Republican Party. There are a number of smaller parties, also.

Since people divide into groups over important ideas, the members of a group usually feel that one of their own number will be better in office than a member of an opposing group. Of course this is not necessarily true; but the fact that people so believe results in the formation in each party of a large number of committees to look after the interests of their group. Each party has a national committee. Also in every state it has township committees, county committees, congressional district committees, and a state committee.

These committees, which are supposed to represent the interests of the voters of their party, formerly had more than anyone else to say about who should be the candidates of the party in question. In some states these committees still have a large voice in suggesting the candidates to the voters. In a majority of the states, however, laws have been passed that make it illegal for a committee to nominate the candidates of a party and that require the voters themselves to choose the candidates who will represent the party in the election.

The direct primary. — Those state laws requiring that the voters must have a chance to choose the candidates of their parties are called *direct primary laws*. In most states such laws are in effect.

Suppose one decides that he will be the candidate of the Republican Party for city alderman. He will find that he must file with certain officers who have charge of elections a petition signed by a certain per cent of the voters in the ward in which he lives. (The number of voters who must sign a petition varies with the office and the state.) The law requires that the election commissioners print on a ballot, as candidates for alderman from that ward, the names of the men who have filed petitions. In this manner the names are brought before the voters. A similar procedure is followed in nominating many other officers.

In primary or nominating elections the voter is usually given an opportunity to vote or to select only among the candidates of his own party. This is probably a good rule since it prevents members of one party from helping to nominate unpopular candidates for the opposing party. Usually the candidate who receives the highest number of votes for a given office is declared to be the party nominee.

Some important officers are not nominated by primary

elections. The presidential candidate of each party, for example, is still nominated at a great committee-meeting called a national convention. Delegates from every state meet in this convention, speeches are made, candidates are nominated, and the delegates vote orally for the candidates they wish to support.

The campaign. — After the candidates of each party are announced, the campaign for election begins. Each party has usually collected a considerable amount of money, either as contributions from those who believe they will themselves win office, or from men or corporations who believe that the election of the candidates of that party may result in laws which will be helpful or otherwise desirable to them. This money is freely spent in newspaper and billboard advertising of the candidates, in writing letters to voters, in paying expenses of speakers, and in other ways that will bring the candidates to the favorable attention of the voters. Meetings are held at which the candidates and their supporters tell the voters why they believe the several candidates should be elected to office.

The election. — Finally on the day required by law the election is held. Here again are printed ballots showing the names of the candidates. The voters mark the ballots in such a way as to indicate their choices. The votes are counted by the proper officers and the election of the successful candidates is announced.

Methods of voting. — The older method of voting in most elections was by voice, but this method has now been entirely done away with. At practically every election now the "Australian" ballot is used. This means that the voter is given a printed ballot and is required to mark it secretly. The Australian or secret ballot has done much to enable voters to express their real wishes in elections without

fear of what others may think. In some elections voting-machines are used. These machines make it easier properly to mark the ballot, and they aid greatly in counting the votes for various candidates.

" **Getting into politics.**" — This description of parties and elections explains why it is wise if one wishes to become part of the government, either by election or by appointment, to work with a political party. In a few communities it is possible to be elected or appointed without the help of a political party, but the great majority of governmental positions are controlled by the party system.

Many like to feel independent of the candidates and policies of any political party because they feel that party action is not always wise and honest. It might be better, however, if such well-meaning people would realize that the best way to reform a political party may be to get inside and work. Such action is worth while because political parties have for many years controlled the government and are likely to do so for many years to come. Men like Theodore Roosevelt, William Jennings Bryan, William Howard Taft, Calvin Coolidge, and others have risen to leadership in the government because of their knowledge of party politics and through active party work. Experience in party work alone will not bring political success, however. Idealism, judgment, courage, and tenacity are necessary to make a true political leader.

Beginning at the bottom. — Boys used to be told that if they were good they might some day be President. But in politics as in business, one usually has to begin at the bottom. While you are still in school you may be getting experience and developing qualities that will make you a future political leader. When you are twenty-one and entitled to take part in the government, your help will be welcomed by the

political leaders of your neighborhood. In a city you may be invited to join the local party organization, often a social club with rooms for meeting and recreation. In the country or the small towns, it is a little more difficult to get into the "inner circle." Often the rural party leaders are not anxious to share their leadership with newcomers.

Before primary and election days there is much party work to be done. You may be asked to distribute dodgers or cards for the party, to address and stamp envelopes, or to go from house to house urging people to come out and vote. If you are a good speaker you may be given an opportunity to make a speech at a rally or public meeting in the schoolhouse or on the street. On election day you may be asked to serve as a clerk or watcher, to see that no one votes who is not entitled to.

If you display an interest and some ability in politics, you may be given a political job, such as a minor clerkship in the city hall.

After a few years' experience you may be called upon for more important service, as, for example, member of a party committee or delegate to a party convention. Before long you may be asked to became a candidate for an elective office, such as county clerk, supervisor, alderman, or any one of a score of local offices.

"Working up" in politics. — Most of the leaders in our government got into politics in the way just described. With the experience gained in this way, with a wise acquaintance, and with a favorable reputation, they were enabled to go on to higher positions.

The career of President Coolidge is a good example of "working up" in politics. Mr. Coolidge was trained as a lawyer, but he entered into politics almost as soon as he began practicing law. His first public office was as

councilman of his home city of Northampton, Massachusetts. A year later he was elected city solicitor. Four years later he was elected clerk of courts, and at the same time he became chairman of the Republican city committee. In 1907 he was elected to the lower house of the state legislature, and after one term there he was elected mayor of Northampton. In 1912 he was elected to the state senate, and after two years was chosen president of the senate. In 1916 he was elected lieutenant governor of Massachusetts, and after three terms was elected governor. He had served two terms as governor when he was elected Vice-President of the United States; he became President on the death of Mr. Harding.

Mr. Hughes, another lawyer, got into politics in a little different way. Mr. Hughes was a lawyer and lecturer on law subjects. He gained a reputation as special counsel for a committee of the New York legislature investigating the life insurance business. Shortly after this he was nominated for mayor of New York City, but declined to run. Two years later he was elected governor, and after two terms he was appointed by President Taft as a Justice of the Supreme Court of the United States. After six years on the Supreme Court bench, in 1916 he was nominated by the Republican Party for President, but was defeated by Mr. Wilson. In 1921, Mr. Harding appointed him to the highest office in his Cabinet — Secretary of State.

Mr. Taft's experience is that of another man with legal training who has held many high positions in the executive and judicial branches of the government. His first office was assistant prosecuting attorney of Cincinnati. After a few years he was elected judge of the superior court of Ohio. In 1890 he was appointed Solicitor-General of the United States, and in 1892 he was appointed a Circuit Judge of the

United States. In 1900 Mr. Roosevelt sent him to the Philippines to help organize the first civil government, and from 1900 to 1904 he was the first civil governor of the islands. As Secretary of War from 1904 to 1908, he went to Cuba to help settle a dispute and acted as provisional governor for a few months. In 1908 he was elected President. In 1921 President Harding appointed him Chief Justice of the United States.

Not all the leaders of our government have been lawyers. President Wilson had legal training, but his chief occupation had been as a university professor and a writer. President Harding was a newspaper man before he was elected to the Ohio senate and later to the Senate of the United States. Champ Clark, Speaker of the House from 1913 to 1918, and a candidate for the presidency in 1912, was a school-teacher before he entered politics.

Occasionally, because of some outstanding achievement, a man is elected or appointed to a high office without going through the lower steps. Herbert Hoover had never been interested in politics or held a public office until he was appointed Food Administrator by President Wilson and, later, Secretary of Commerce by President Harding. His work in taking care of the starving people of Belgium and central Europe had demonstrated his organizing ability and his ability to get things done.

Politics as a Career

Discouraging features of politics as a career. — Being a part of government differs from most other work in that it does not always require all of a man's time. True, if you are elected or appointed to office, you may be expected to give the government all your time and thought. But we have seen that many business men take an active part in

government by belonging to political parties or other organizations formed to promote better government. Probably half a million people in our country have important parts in government without giving all their time to it.

Nor is a political career as certain as a business or professional career. A man going into politics does not know when he will have to get out because of a change of parties. Only the United States judges are sure of their positions for life. Consequently, a politician usually continues in his business or profession, so that he can return to it in case he is defeated for reëlection. Many political offices are for short terms, and political bosses often believe in changing the officeholders from term to term so as to " pass the plums around." Faithful and efficient service may be disregarded in order " to give someone else a chance."

Congressman Luce discusses the discouragements of politics in these words:

> As far as my observation goes, ours is the only country in the world that deliberately discourages men from entering on a public career. We say to the youth that in the practice of law or medicine, in the ministry, in every kind of engineering, in business, in every other occupation save that of public service, faithful endeavor shall secure that opportunity for continuous labor which alone promises fame and fortune. . . . In politics alone is a youth confronted with not merely the possibility but with the strong probability that his career will be cut short by some one of a hundred kinds of accident. . . .
>
> The ambitious youth cannot even make a start in public life unless he lives in a district where a majority of voters are of his political way of thinking. The man with the making of a statesman in him may live a long life in a district not of his political faith and never be entrusted with so much as a single term in the legislature.[1]

The attraction of politics. — Earlier we saw that one of the strong motives for going into business is the pecuniary one,

[1] Robert Luce, *Legislative Assemblies* (Houghton Mifflin Company, 1924), p. 226.

the desire to make profits. This motive does not exist in politics, except in the case of grafters, who see opportunities to help themselves from the public treasury. The boy or girl who goes into government will have to be satisfied with a salary. Some persons enter politics because they believe it is the easiest way to make a living. Others like the "game" as they call it. They are thrilled by the excitement of campaigns and like to pit their wits against those of political enemies.

One of the strongest motives for going into politics is the desire for leadership. Some boys and girls are born with the capacity and liking for leadership. To decide difficult questions and to give orders and have others obey appeal to them more than the idea of making money.

Another motive is patriotism, the idea of serving one's country, state, or community. Closely related to both of these motives is the desire for fame or honor. Men and women like to believe that their services will bring them credit, make them talked about and respected, and perhaps revered long after death as servers of the common good.

Preparation for politics. — There is no special course of training for going into politics, but a good preparation includes a knowledge of the history of our country and an understanding of how our government is organized and what it does. A knowledge of the history, organization, and services of governments in other countries makes one still more valuable. The habit of reading newspapers, magazines, and books on political, economic, and business questions, and of discussing them in school, in debating societies, and at home makes one better qualified to take part in government. The study of the law is a very useful training. We have noticed that many high officials of our government have had legal training. In speaking of lawyer politicians,

however, former President Roosevelt once said: "There is no greater delusion than the belief that a lawyer is *per se* also a statesman. On the contrary, the mere lawyer is rather more unfit than, say, the mere dentist, or mere bricklayer, or mere banker to be a public man." [1]

Perhaps the best preparation may be gained in four ways: (1) learning all we can about the tasks at which government works; (2) reading about the methods used by Henry Clay, Abraham Lincoln, Grover Cleveland, Theodore Roosevelt, Woodrow Wilson, and other men whose names will live; (3) watching and working with the political workers in our own community, whose ideals and methods and motives we admire; (4) learning all we can about people's wants and the ways in which we work together to gratify wants.

Men and women alike can do valuable work as parts of their government in its national, state, or local activities.

QUESTIONS AND PROJECTS

1. Compare the salaries of Congressmen, state legislators, and city councilmen with the incomes made in two or three of the occupations studied under business and professions.
2. What reasons can you give why lawyers outnumber other occupations in Congress and state legislatures? Under what conditions might a farmer, a teacher, or a manufacturer be better than a lawyer as a lawmaker?
3. Show how the work of the constitution-makers directs the work of the legislators. Illustrate from Chapter XXI.
4. Give illustrations of the way in which executives, such as the President and the governor, influence lawmaking.
5. Show how a board of experts, such as the Interstate Commerce Commission, to which Congress has given some of its power, may be thought of as a group of lawmakers.
6. What are the different kinds of party leaders? Show how each works. Show how each has an effect on the policies of government.
7. John Smith is a manufacturer. He belongs to a state and a national association of manufacturers. The dues that he pays help pay the ex-

[1] *Letters of H. C. Lodge.*

penses of representatives who further lawmaking at the state and national capitals in a way that will help manufacturers. Show how John Smith helps make the policy of the state and national governments.

8. Show some of the policies that each of the following might like to see followed in state or national government: Anti-Saloon League; American Legion; American Federation of Labor; American Farm Bureau.

9. List the ways in which one can make a living "in politics."

10. Whether one hopes to get into office by election or by appointment, he will gain by understanding how parties work and how elections are conducted. Explain.

11. What is meant by saying that the voter is at the bottom of politics?

12. Can you learn what the requirements for voting in your state are?

13. What are the chief national political parties? Ask your parents to what political party they belong, if any.

14. What is the work done by party committees?

15. Show the steps through which a man might go if he were a candidate for an office in your city.

16. What is a political campaign? Are there nomination campaigns as well as election campaigns?

17. What is the Australian ballot?

18. Suppose one wished to make politics his life work: What are some of the ways in which he might begin?

19. What school training do you believe would be most valuable for a political career? What courses can you take in the high school of your town or city that you believe would be helpful for one interested in going into politics?

20. Make a list of the disadvantages of politics as a life work.

21. Make a list of the attractive features of political life.

22. Make a list of the things one ought to know to do good work in a city council; in a state legislature; in Congress.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part V.

CHAPTER XXIV

THE PUBLIC SERVICE ACTIVITIES OF GOVERNMENT AND THE VOCATIONAL OPPORTUNITIES THEY OFFER

In the last chapter we considered what it means to be a part of government, and the opportunities for going into politics as planners. The main work of these planners is to see that government furnishes certain services, for the only reason for having government is to get certain things done. *We have government to perform services for us.* In order to perform these services, government must employ many people. This gives rise to vocations. The best possible way to get a real idea of the opportunities in government work is to learn about the tasks which government performs. In this chapter, therefore, we shall study the service activities of government.

We cannot get an idea of opportunities in government service by studying only one governmental unit, such as the federal government. Every unit of government aids in performing work that helps in gratifying wants. We shall therefore notice the part done by each unit or grade of government in each task.

A classification of the service activities of government. — The service activities of government may be classified as follows:

I. The protection of life and property and the maintenance of peace and order

II. The giving of justice

III. The promotion of education
IV. The promotion of health and welfare
V. The aiding and regulating of transportation
VI. The aiding and regulating of communication
VII. The manufacture and construction of certain public necessities
VIII. The conservation of natural resources
IX. The maintaining of relations with foreign countries

We may now look at each of these services in more detail. In every case we shall (1) study an outline showing that the service is performed by several governmental units through various agencies and (2) study the opportunities for work offered by the different governmental units in that particular service.

I. **The protection of life and property and the maintenance of peace and order.**—This service is carried on by —

A. Local governments, through such agencies as —
   1. Sheriffs, constables, marshals, and deputies, who enforce the laws, arrest criminals, and take care of prisoners.
      Example: The sheriff of your county arrests automobile thieves.

B. City governments, through more highly developed agencies, such as —
   1. An organized police department, which investigates crimes, arrests criminals, regulates traffic, guards public places, and prevents disturbances of the peace.
   2. An organized fire department, which protects lives and property from the special peril of fires.
   3. Inspectors of various kinds.
      Examples:
      a. Inspectors of boilers guard against explosions.
      b. Building inspectors see that buildings are safely constructed.
      c. Electrical inspectors see that wiring is properly done.
      d. Street and sidewalk inspectors see that the streets and sidewalks are kept in repair.
      e. Inspectors of food protect against the sale of spoiled or unclean food.

C. State governments, through such agencies as —
   1. State police or constabulary.
      Example: The Pennsylvania constabulary patrols the rural districts to prevent crime and put down disorders which the local sheriff cannot take care of.
   2. State militia. Not all states have state police, but every state has a militia organization which can be called out by the governor to put down riots or help the people in disasters such as tornadoes, fires, and floods.
      Examples: Murphysboro tornado and Boston police strike.

D. The National government, through such agencies as —
   1. The army and navy, with their numerous branches, including the air service and the marines.
   2. The coast guard, which patrols the coasts looking for smugglers, bootleggers, etc., and gives aid to ships in distress.
   3. The prohibition enforcement service, which investigates violations of the Volstead law and the eighteenth amendment.
   4. Patent and copyright offices, which give inventors and authors exclusive rights in certain kinds of property.
      Example: The government of the United States gave Thomas A. Edison the exclusive right to make and sell electric lamps for seventeen years.
   5. The weather bureau, which forecasts weather conditions.

Opportunities for Service in the Protective Activities of the Government

The oldest and most important duty of all governmental units is to protect life and property and maintain peace and order. To do this, governments need many helpers of various kinds. Therefore the protective activities of government offer many vocational opportunities.

Local peace officers are our nearest governmental protectors. The chief law-enforcing officials in towns, villages, and rural districts are sheriffs, constables, and marshals. These men are elected to office, but their election is often so much controlled by stronger political officials that they are thought of as appointees. Their positions are therefore open to all the objections mentioned in Chapter XXIII. Therefore

such positions are not regarded as professions or occupations that a young man might enter as a life work.

The sheriff appoints a number of deputies. These men also are usually selected not so much for their training and fitness as for their interest in politics and their usefulness to the local party machine. Not too much must be said, therefore, for the opportunities for service in maintaining law and order in the local governments.

City police are of growing consequence. — In cities, however, the officials who protect lives and property form a distinct profession in which there are definite opportunities for service and a career. There are about four hundred thousand police in the United States.

In most cities the police are selected by a system of examinations, and any man of good physique, good habits, and fair intelligence has an opportunity to get on the force. Promotions from patrolman to sergeant, sergeant to lieutenant, lieutenant to captain, and sometimes to still higher ranks, are made according to a regular system which takes into account length of service, knowledge of duties, and efficiency. The pay of patrolmen varies from $100 to $150 a month; sergeants receive about $50 more; and captains receive $75 or $100 more than sergeants.

In large cities the police force is composed of patrolmen who walk regular beats; traffic police, partly mounted to catch speeders and partly on foot to handle traffic on busy corners; detectives or plain-clothes men, who are used in part to investigate mysterious and puzzling crimes; and the watchmen who guard public buildings and property. Many cities also have women police; and most cities have police matrons who look after women prisoners.

Firemen. — In the early days the police were also supposed to help put out fires. Then there were volunteer fire de-

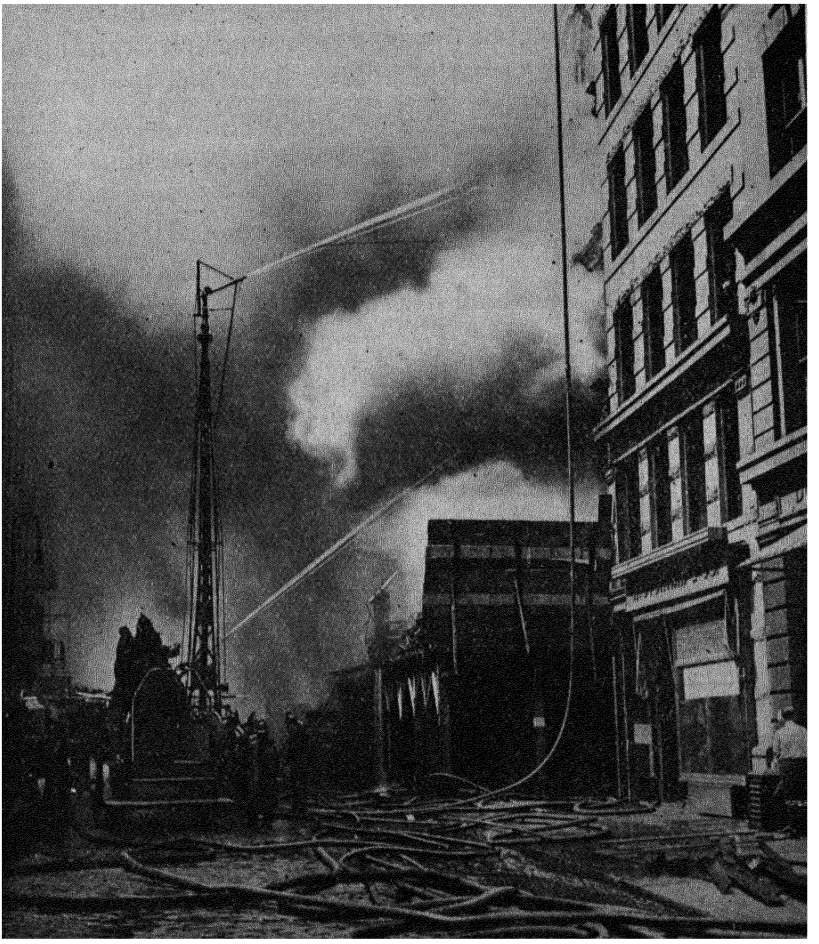


Photo from Wide World

MODERN FIRE FIGHTING

The dangerous work of the fireman has been partly given to machines.

partments composed of citizens who practiced fire-fighting and were on hand when fires were reported. In the large cities of to-day, however, it is necessary to have a regular trained and paid fire department that does nothing but put out fires and save lives and property. In New York City alone there are 6,500 trained fire-fighters, and they have prevented any serious fire in that city for many years.

The organization of a fire department is similar to that of the police, and the qualifications are about the same. The most important qualifications for a fireman are strength and courage, and the entrance examinations test these qualities. Firemen are rather poorly paid. They usually receive somewhat less than policemen. Their work is hazardous and uncertain; they may wait around for days with nothing to do, and then in a moment be called out to face death for hours.

Inspectors. — Building inspectors, sidewalk and street inspectors, are really specialized kinds of police officers. Some inspectors — electrical inspectors, for example — require special training; but usually the duties of an inspector can be learned in a short time. Because of this fact these positions are often subject to politics. Where civil service laws exist, however, examinations are held, and any person of average ability and fair education can pass them and be appointed. (At this point the student should read the section on " How Government Positions Are Obtained " in Chapter XXVI.) The rates of pay for inspectors in one of our largest cities, which we may use as an example, are as follows[1]:

[1] In reading this table of positions and salaries and in reading all those that follow in this and the next few chapters, we must remember that such matters change frequently. For the very latest information on any type of government work one should write to the Civil Service Commission of the United States or the state or the city concerned.

Sidewalk inspector	$1,740–$1,900 a year
Paving inspector	1,920– 2,100 a year
Street inspector	7.50 a day
Boiler inspector	1,980– 2,160 a year
Elevator inspector	2,100– 2,280 a year
Building inspector	2,100– 2,700 a year

In general these positions do not offer much opportunity for advancement.

State police. — State police departments are rather new. The Texas Rangers, established in 1901, were the pioneers.

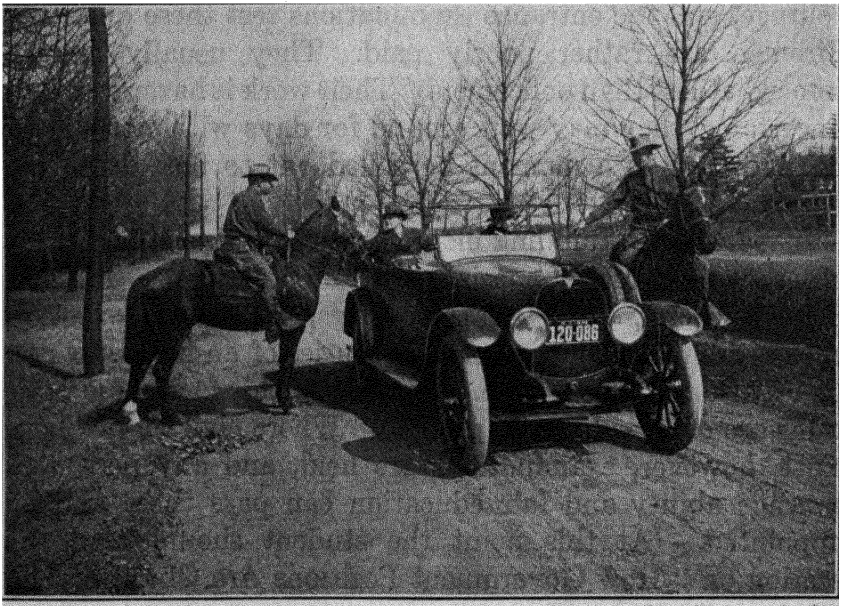


Photo by Brown Brothers

NEW YORK STATE POLICE ON DUTY

The Rangers are a body of mounted men whose principal duty is to patrol the Mexican border and prevent trouble there. In other states, such as South Carolina, Tennessee, Connecticut, and Pennsylvania, similar bodies are used to perform a variety of work. For instance, they suppress

disorders, often in connection with strikes; hunt criminals and watch for forest fires. They have the reputation of being very efficient, well organized, and well qualified. The requirements for entrance are high, and only the best qualified men are taken into the service. Those who wish to become state police must pass a rigid examination before they are accepted. For instance, the Texas Rangers are chosen for their proficiency in riding horses, in shooting, and in speaking Spanish.

The pay of state police varies in different states. In Connecticut, Texas, and Pennsylvania in recent years it was as follows:

Connecticut		Texas	
Superintendent of police	$4,000 a year	Captain	$1,800 a year
Captain	2,700 a year	Sergeant	1,200 a year
Lieutenant	2,300 a year	Private	1,080 a year
Sergeant	1,200 a year		
Policeman	5 a day		

Pennsylvania	
Commissioned officer	$1,800 to $2,400 a year
Non-commissioned officer	1,350 to 1,500 a year
Private	1,200 a year

The United States Army as a vocation. — The United States has had so few wars that soldiering has not been a popular occupation. Men who followed the line of least resistance were usually the ones who joined the army. But during the World War we were obliged to raise, equip, and train an army of four million men, while many more were in training ready to serve if called upon. Soldiering thus became a temporary vocation for millions. Since the war, however, the regular army has shrunk almost to its former size. The authorized strength of the regular army at the

ant time is 125,000; its actual strength is somewhat less than this number.

Before the World War the army consisted of the following services: Cavalry, Infantry, Field Artillery, Coast Artillery, Engineers, Quartermaster Service, Ordnance Service, Medical Service, Signal Service, and General Staff. The war introduced new methods and additional services, as follows: Air Service, Chemical Warfare, and Tank Corps.

Each state has a National Guard in which many young men enlist. The members of the guard are not in active service except when called upon. They receive pay while on duty. They are required to meet for drill and practice certain hours each week and possibly for summer camp (for which they receive pay from the federal government) and to serve when called upon for such emergencies as riots, fire, and flood. The state national guards in time of national distress are often called into federal service. At such times the members receive the same pay as regular-army men.

Getting into the army. — Boys who are interested in enlisting in the army as privates should apply to the recruiting officer nearest their home. There is such an officer in each of the large cities, and information concerning recruiting may be obtained at any post-office.

The American soldiers were the best paid and the best equipped of any troops engaged in the World War, and the government has continued its efforts to make army service attractive. At present, a boy who joins the army enlists for one or three years. He receives $21 a month and, if he wishes, he may save some of this, since the government furnishes food, clothing, medical service, and everything essential. The War Department now even undertakes to give soldiers an education. Instruction is given in special trades, so that if they leave the army they will have some

knowledge of the work of mechanics, bookkeepers, electricians, and of other occupations.

Promotion in the army is slow in peace times, but a man with a good education stands an excellent chance of being made a non-commissioned officer, and even of receiving a commission without having to go to West Point (the government school where men usually study for army commissions). It is a surprising thing to many people that education and experience in office work are more valuable in the army than mere physical strength. The army can get plenty of men with strong backs and weak minds, but it always needs men with well trained brains.

How army officers are made.—Most army officers are trained at the United States Military Academy at West Point. Each state at large is entitled to a maximum representation at the Military Academy of 4 cadets and each Congressional district 2. In addition, there are 180 cadetships allotted to the Army and the National Guard and 82 to the United States at large, 60 of these being filled by the President upon his own selection, 20 from among the honor graduates of honor military schools and 2 upon the nomination of the Vice-President. The age limits from all sources except the Army and the National Guard are minimum seventeen, maximum twenty-two, and from the Army and the Guard the minimum is nineteen, the maximum being the same. The course of instruction is four years and graduates are eligible for commission as second lieutenants. Complete information concerning the appointment of cadets may be obtained by addressing the Adjutant General of the Army, Washington, D. C.

In a recent year there were some 220 units of Reserve Officers' Training Corps in various colleges and schools throughout the United States. Any qualified college or

military school student is eligible for these training units, and in November, 1925, there were 120,874 students enrolled in them. In the five years from 1920 to 1925 almost ten thousand second lieutenants received commissions from these schools.

In addition to the above schools for training officers, there are four kinds of temporary army training camps, which are held for from fifteen days to three months each summer. These are known as the National Guard, Regular Army, Citizens', and Reserve Officers' Training Camps. Anyone who is interested in these camps may obtain detailed information concerning them from the Adjutant General, Washington, D. C.

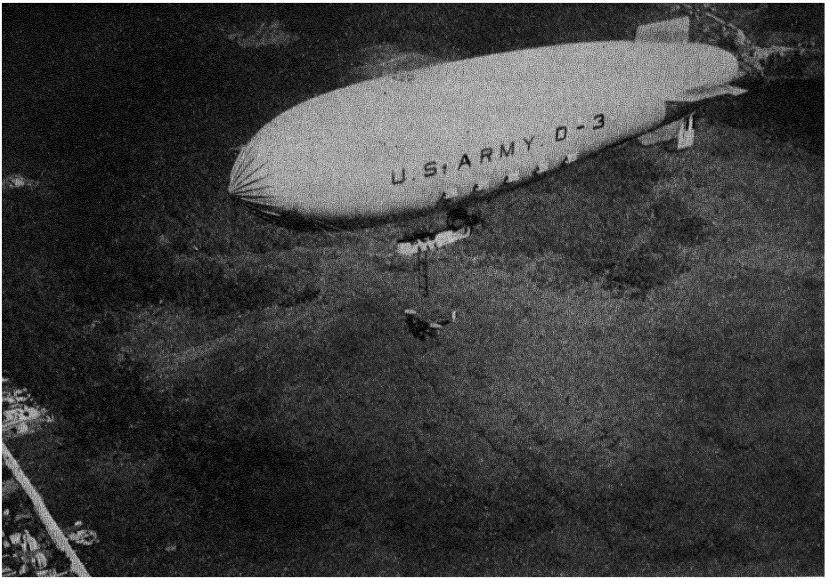
Enlisted men in the regular army are given an opportunity to take examinations for appointment as officers from the ranks. There is also in Washington, D. C., an Army War College where the most promising officers are sent to learn the science of war in its highest form. The best of these officers become members of the General Staff, which is the planning department of the army.

The United States Navy.—The history of the navy during the war was much like that of the army. It went through a period of rapid growth and furnished temporary occupations for thousands of men. At the close of the war it declined rapidly. The war, however, developed new types of work in the navy and brought it emphatically to the attention of Americans. Like the army, it furnishes a great vocational field for those who are attracted by it.

Many people have the wrong idea of the kind of life offered by the navy. They think navy life resembles the sea life of novels and ballads. As a matter of fact, in the navy of the present day one may need to know comparatively little of ropes and sails. He must be a specialist, and a list of navy positions looks much like a list of occupations in a large in-

dustrial plant. The navy uses such specialists as machinists, blacksmiths, carpenters, electricians, fuel men, radio operators, and aviators.

At present the navy consists of about 94,000 officers and men. Most of the officers for the navy are trained at Annapolis, admission to which is obtained in the same way as



Official Photograph, U. S. Army Air Service

AN EXCITING MOMENT IN THE AIR SERVICE

This shows the first contact ever established between airplane and airship in flight. It took place at Langley Field, Virginia.

entrance to West Point. Boys over seventeen without trades are taken into the navy at the pay of $21 a month. If the recruit has had training in any kind of skilled trade, he may receive $36 to $60 a month. Athletics and other forms of recreation are encouraged, and educational opportunities are offered here as in the army.

The Marines. — The marines were organized to furnish the navy with a force which could fight on land. They are the most active of the fighting forces of the government, because they are called to all parts of the world to protect American lives and property. If an American missionary is murdered in China, or if Mexicans threaten an American consulate, a battleship is sent and marines are landed to protect American interests. As a result, the marines have been fighting a good share of the time. In the recent war, marines did some of the most conspicuous fighting in France.

There are marine corps recruiting stations in most of the large cities in the United States. The pay of the marines is about the same as the pay in the army. Complete information about this service can be secured from the Commandant of the Marine Corps, Washington, D. C.

The Coast Guard. — The United States Coast Guard grew out of the Revenue Cutter Service, established in 1790, and the Life Saving Service, established in 1848. The function of the first was to prevent smuggling and protect the coast. The function of the second was to save ships and lives on the sea and lake coasts of the country. Both of these functions are now taken care of by the coast guard, which numbers about five thousand men. In the year ending June 30, 1925, 2,484 persons were rescued by members of the coast guard. The value of the ships and property saved from wreckage was twenty-three million dollars. In the late war, the coast guard was prepared to deal with submarines if they became a menace on our coasts. Recently the coast guard has had the added duty of preventing the smuggling of liquor.

In the coast guard, as in the army and navy, there are enlisted men and various grades of officers. In order to become a member of the guard one enlists much as he would in the army or the navy. After a three-year training course,

cadets are eligible for appointment as officers. The following schedule will give an idea of the personnel and the pay in the service of the coast guard:

Commandant	$6,000 a year
Captains	6,000 a year
Commanders	5,750 a year
Lieutenant Commanders	3,750 to 5,250 a year
Lieutenants	2,100 to 3,750 a year
Lieutenants (junior grade)	1,500 to 2,300 a year
Ensigns	1,500 a year
Cadets	780 a year
Warrant Officers	135 to 189 per month
Enlisted Men (7 grades)	21 to 157.50 per month

United States prohibition enforcement offices. — With the adoption of the Eighteenth Amendment and the passing of the Volstead law, in 1919 it became necessary to enforce prohibition, investigate violations of the law, make arrests and seizures and confiscate illegal liquor. This work was assigned to the Bureau of Internal Revenue in the Treasury Department, because that bureau has from the beginning of our government regulated distilleries in connection with the collection of the liquor tax. As the work became more arduous, a separate organization was formed, known as the Prohibition Unit, which now includes several thousand directors, state agents, inspectors, and prohibition agents scattered throughout the United States. In addition to the prohibition unit in the Treasury Department, the Department of Justice has a number of attorneys and investigators who prosecute violations of the Eighteenth Amendment. Most of the positions in the prohibition enforcement service are political.

Work in patent and copyright protection. — A special form of property protection is offered to inventors and authors by the United States government through patents and copy-

rights. To encourage the invention of new devices, the writing of books, etc., the government offers to inventors and authors the sole right to make and sell their product for a certain number of years.

The examination of the thousands of devices submitted for patents requires a large force of highly skilled examiners. These men must be familiar with all the fields of engineering, electricity, physics—in fact, with all the arts and sciences — in order to determine whether the article or process submitted is different from any in existence and therefore deserving of patent protection. These examiners are chosen from among those who have passed a rigid examination, and so their positions are not subject to politics. Applicants for examination must have training equivalent to that of a college graduate. From seventy-five to a hundred assistant examiners are appointed each year at beginning salaries of $1,800. Men who serve satisfactorily may be promoted to the following positions:

Principal examiner	$3,800 to $5,000 a year
Examiner in chief	5,000 to 6,000 a year
Commissioner of patents	6,000 to 7,500 a year

Weather Bureau work. — Protection against the dangers of flood, drought, heat, cold, and storms is furnished by the United States Weather Bureau of the Department of Agriculture, which sends weather forecasts and special warnings of storms or sudden changes in temperature all over the country. This protection is especially valuable to farmers and to shippers of perishable goods, such as fruit. It is also of great service to navigators on the lakes and coastal waters of the United States and to aviators.

The organization of the Weather Bureau consists of the central office at Washington, D. C., and more than 200 first

order stations and several thousand substations (substation observers receive nominal or no compensation) throughout the United States. Forecasts and warnings are issued from the five district forecast centers, Washington, Chicago, New Orleans, Denver, and San Francisco.

A partial list of positions in the Bureau follows:

Chief of Bureau	$6,000–$7,500
Senior meteorologist	5,200– 6,000
Meteorologist	3,800– 5,000
Associate meteorologist	3,000– 3,600
Assistant meteorologist	2,400– 3,000
Junior meteorologist / Senior meteorologist	1,860– 2,400
Observer	1,680– 2,010
Assistant observer	1,500– 1,860
Junior observer	1,320– 1,680

The Chief of Bureau is appointed by the President. All other positions are included in the civil service system, entrance being made through the lower grades (usually Junior Observers), by means of civil service examinations.

II. **The giving of justice.** — This service is carried on by —

A. Local governments, through —
   1. Justices of the peace, who settle minor disputes between individuals and try petty crimes and misdemeanors.
   2. Prosecuting officials, who investigate and prosecute crimes in the name of the state.

      Example: If Brown robbed a bank, the prosecuting attorney would try to have Brown arrested, convicted, and sentenced to prison. The case would appear in court as "State *v.* Brown" (*v.* means *versus* or against).
   3. Keepers of local prisons and reformatories.

B. City governments, through —
   1. Police courts, where there are —
      a. Police magistrates.
      b. Deputies.
      c. Matrons.
      d. Bailiffs and other employees.

2. Courts for special classes of cases, under special judges; e.g. Juvenile courts, with such officers as —
   a. Judges.
   b. Probation officers.
   c. Matrons.
3. City jails and reformatories, which employ —
   a. Superintendents.
   b. Guards.
   c. Cooks.
   d. Other helpers.
4. Psychopathic laboratories, where persons accused of crime are examined to determine whether some mental or physical weakness is the cause of the crime. These laboratories employ such helpers as —
   a. Psychologists.
   b. Examiners.
   c. Testers.
   d. Doctors.

C. State governments, through —
1. District and circuit courts, where more serious cases are tried, such as large law suits and crimes involving imprisonment in state penitentiaries. (These courts all have officers similar to those listed under city courts.)
2. A supreme court, where final decisions on cases appealed from lower courts are given. (Judges, bailiffs, and other court officers are found here also.)
3. Prosecuting attorneys (see above, under local governments).
4. Keepers of state prisons and reformatories.

D. The national government through —
1. Federal Courts — District, Circuit, and Supreme — where all violations of federal laws are tried. (Each court is presided over by one or more judges, and each court has a marshal, a clerk, and a number of deputies and assistants.)
2. The Attorney-General and District Attorneys, who investigate and prosecute all cases in which the United States government is interested.
3. Special tribunals for the settlement of disputes, such as —
   a. The Interstate Commerce Commission, which decides disputes between railroads and shippers. This commission consists of eleven commissioners and a large force of engineers, examiners, and clerks.
   b. The Federal Trade Commission, which hears complaints of unfair business practices, such as undue price raises, monop-

oly, etc. This commission consists of five commissioners and a number of attorneys, clerks, and special experts.

4. Federal prisons, where criminals are sent for violations of United States laws and an effort is made to improve their attitude toward society and teach them how to live without committing crime. Each prison has a warden, guards, matrons, etc.

Opportunities for Service in the Giving of Justice

The giving of justice ranks with the protection of life and property as the oldest and most important of governmental activities. This function is performed chiefly by judges and courts, but in the complicated life which we live to-day, the administration of justice calls for a great many specialists — prosecutors, investigators, commissioners, referees, guardians, parole officers, and psychiatrists.

A judgeship as a job. — In towns, villages, and rural districts, the justice of the peace is the most important official administering justice. When two people have a quarrel or a dispute that they cannot settle, they may bring it before the local justice who decides the rights of each. The justice may also try petty misdemeanors, such as drunkenness, assault, and petty thievery. It is not necessary that the justice of the peace be a trained lawyer, though it is desirable, of course, that he know something of the law.

In cities, justice is administered in the first instance by the police magistrate. He is not a member of the police department, but is so called because most of the persons arrested by police for violation of city ordinances are brought before him for trial. We have seen earlier that there are also a series of higher courts.

Judges in state and local courts, from the supreme court down to local justices, are almost always elected by the people for a term of years. This means that to be a judge one must in many cases " play politics." The term of office of a state

or local judge is comparatively short, and no judge can be sure of being reëlected. Consequently a judicial career is not one that can be definitely planned. The salaries for the most part are not large, but they vary greatly. Some justices of the peace, for instance, serve without pay, while



Photo by Brown Brothers

JUVENILE COURT IN SESSION

Courts especially adapted to children's cases are far more safe and helpful than courts for older and more serious offenders.

the chief justice of the municipal court of Chicago receives $12,000 a year.

Federal judges are appointed by the President, but politics play a part here also. Men appointed federal judges are usually prominent lawyers or judges of state courts who have the backing of influential politicians. Frequently the Presi-

dent takes the advice of the Bar Association, the great society of lawyers, in making appointments. The Chief Justice of the Supreme Court receives $15,000 a year, and the other eight members of the Supreme Court receive $14,500 each. The thirty-three Circuit Judges receive $8,500 each, and the 128 District Judges $7,500 each.

Prosecutors. — For every court in the United States there is an officer whose duty it is to investigate violators of the law and to bring the offenders to trial. In the local governments they are known as county attorneys, district attorneys, or prosecuting attorneys. For each state there is an attorney-general, the chief prosecuting officer of the state.

The federal government has a District Attorney appointed by the President for each of the eighty-one United States District Courts, and at the head of all these is the Attorney-General of the United States. Salaries vary from $4,000 to $10,000.

Like the judges of state courts, the state prosecutors are usually elected and subject to politics. The United States District Attorneys are appointed by the President, but their appointments, too, are often influenced by politics.

Investigators. — State and federal departments of justice employ a number of people to investigate particular violations of the law. The prohibition law required the appointment of a large number of special investigators. In the United States government, a woman is in charge of prosecution of prohibition cases. During the war both state and federal governments devoted much effort to the investigation and prosecution of those guilty of disloyal and seditious writings and speeches. Many aliens were deported on the ground of suspected disloyalty. Federal investigators receive from $3,000 to $9,000.

Other court officers. — Connected with every court there are a number of officers such as marshals, bailiffs, deputies, and probation officers, who carry out the orders of the court. The court sometimes appoints special officers such as referees and receivers to administer the affairs of bankrupt concerns; commissioners, executors, and other officers to dispose of property left in the court's hands; guardians to look after the rights of children; psychiatrists, neurologists, physicians, and welfare workers, who look into the mental health and family conditions of persons brought before the court. These officers, like the court employees discussed above, are paid widely different amounts and are usually appointed without examination.

III. **Education.** — Carried on by —

A. Local and city governments through such agencies as —
   1. Public elementary and high schools.
      Example: Your own school.
   2. Public libraries.
      Example: The library of your own town or city.

B. State governments, through such agencies as —
   1. State colleges, normal schools, and universities.
      Examples: Pennsylvania State College.
      Iowa State Teachers College.
      University of California.
   2. Experiment stations and extension courses.
      Examples: Boys and girls corn clubs.
   3. Special schools for defectives.
      Example: Ohio School for the Blind.

C. The National government, through such agencies as —
   1. Public schools in the District of Columbia and the territories and schools for Indians.
   2. National libraries and museums.
      Examples: Library of Congress.
      Those administered by the Smithsonian Institution.
   3. Boards, bureaus, and commissions which study problems and advise state and local educators.
      Examples: United States Bureau of Education.
      Federal Board for Vocational Education.

Opportunities in Educational Work

More people are employed and more money is spent by the governments — local, state, and national — for education than for any other governmental activity. The number of teachers in public schools and other government-supported schools is not far from a million. In 1921, about 35 per cent of all the money expended by states went for education. The amount is steadily increasing, because the people demand more and better schools and the number of pupils gets larger every year.

The opportunities for working as teachers in public schools, colleges, and universities have already been spoken of in Chapter XX. There are, however, a few special opportunities in government schools which should be mentioned. The federal government is responsible for the education of the Indians and the inhabitants of Alaska, Hawaii, the Philippines, Porto Rico, the Panama Canal Zone, and other territories. As far as possible, native teachers are employed in the island possessions; but in none of them are there enough qualified natives, and so the government must find teachers in the United States to go to these places. The Department of the Interior is responsible for Indian schools and for the schools of Alaska. The Bureau of Insular Affairs in the War Department furnishes information about teaching positions in Porto Rico, the Philippines, and the Canal Zone. Hawaii is a territory which has a school system modeled after the state systems in the United States. The Superintendent of Public Instruction, Honolulu, Hawaii, furnishes information regarding these schools. Some people desire to become acquainted with the mode of life in those islands. An idea of the pay for teaching in these places may be gained from the following schedule:

Territory	Position	Salary
Philippine Islands	Teacher	$1,000 to $1,500 a year
Panama Canal Zone	High-school teacher	200 to 240 a month
	Grade-school teacher	166 to 186 a month
American Indian Schools	Supervisor	3,000 to 3,600 and traveling expenses a year
	Superintendent	2,100 to 3,300 a year
	Principal	1,500 to 2,400 a year
Alaska	Teacher	1,200 to 1,860 a year
	District superintendent	2,700 a year
	Teacher	1,320 to 2,360 a year [The Indian school positions also give quarters, fuel, and light]

Public library and museum workers. — There are about 1,200 public libraries in the United States, owned and operated by state, city, county, and village governments. The opportunities for trained librarians have been discussed in Chapter XX.

Museum workers. — In the various government museums, employment is given to a number of specialists. The following positions in the National Museum in Washington are typical:

Head curators	$5,200 to $6,000 a year
Curators	3,800 to 5,000 a year
Assistant curators	2,400 to 3,600 a year
Associate curators	2,400 to 3,600 a year
Aids	1,860 to 2,400 a year
Preparators	1,140 to 2,100 a year
Taxidermist	1,500 to 2,400 a year
Osteologist	1,860 to 2,400 a year

IV. **Promotion of health and welfare.** — Carried on by —

A. Local and city governments, which do such things as —

1. Dispose of sewage, garbage, and other nuisances which produce disease.

   Example: The street cleaning department of your town.

2. Prevent the spreading of contagious diseases by establishing quarantines.

Example: Medical supervision of schools.

3. Furnish free medicine and hospital care for those who cannot afford to pay.
   Examples: Free vaccination against smallpox.
   City hospitals and dispensaries.
4. Inspect houses, factories, dairies, groceries, etc., to prevent disease.
   Example: Has your city a safe milk supply?
5. Provide a supply of pure water.
   Example: Your city water works.
6. Provide public parks and playgrounds.

B. State governments, which do such things as —
1. Locate sources of disease by collecting vital statistics.
   Example: The state board of health finds out by reports from various localities whether there is a smallpox epidemic in any part of the state and then warns other localities.
2. Examine and license doctors, dentists, nurses, druggists, etc.
   Example: Your local drug store has a license showing that the druggist has passed an examination in pharmacy.
3. Inspect foods, drugs, slaughter-houses, etc., to prevent unhealthful conditions.
   Example: The state food inspector may condemn and destroy a supply of salmon if he finds it contaminated.
4. Maintain hospitals and institutions for certain diseases.
   Examples: Illinois Eye and Ear Infirmary.
   Iowa Tuberculosis Hospital and the similar institutions in your state.

C. The national government, which does such things as —
1. Inspect all persons and goods coming into the country to prevent their bringing in disease.
   Example: Inspection of immigrants at Ellis Island for trachoma.
2. Inspect foods, drugs, and meats which may be shipped from one state to another.
   Example: The Food and Drugs Laboratory at Washington.
3. Maintain a public health bureau to study diseases and inform people all over the United States how to avoid and cure them.
4. Furnish money to the states for the protection of public health.
   Example: Child welfare work in the various states.
5. Study causes and methods of preventing disease through army engineers and medical department.
   Example: The work of General Gorgas in preventing yellow fever in the Canal Zone.
6. Establish Veterans' Hospitals.
7. Look after the interests of the American Indians.

Opportunities in Public Health and Welfare Work

Modern knowledge of germs and the possibility of preventing disease has led the government to realize that promoting public health is almost as fundamental as protecting the lives and property of citizens from foreign invasion, robbers, or fires. In recent years the public health work of the government has increased remarkably, and the opportunities have multiplied many times. Many kinds of workers are engaged in this work.

Governments employ medical men. — First of all, governments require thousands of doctors. City and county hospitals; various kinds of state institutions for mentally and physically defective people; and national institutions such as army and navy hospitals, the hospitals in the District of Columbia and the territories, and the great number of veterans' hospitals where the wounded from the World War are still being taken care of — all these give employment to many doctors. American army doctors have made a great reputation for the discovery of causes of disease and methods of curing disease. One army doctor, General Gorgas, by conquering yellow fever, malaria, and typhoid in Cuba and in the Panama Canal Zone attracted attention all over the world. The qualifications, the duties, and the opportunities are not different from those discussed in the chapters on "Professions." The pay of government physicians is generally smaller than that of successful private practitioners, but many graduates in medicine like to go into government service for a few years to get experience and a clientele.

Laboratory workers. — No less important aid than the care of sick and wounded is the work of bacteriologists, chemists, pathologists, and others who are continually studying

the nature and causes of disease bacteria in their laboratories. It is to them that we owe the development of preventive medicine, such as inoculation against typhoid, diphtheria, and smallpox. Every large city has a force of chemists who analyze samples of water, milk, and food. The laboratory of a modern hospital is more important than the operating room, because it holds the possibility of saving many more lives. In the hygienic laboratories in Washington germs are cultivated and studied, and the results of these investigations are made known to the medical profession all over the country.

The following positions and salaries in the public health laboratories of the federal government will illustrate the opportunities for government laboratory workers:

Laboratory assistant	$1,560 to $2,400 a year
Pharmacologist	2,100 to 3,600 a year
Chemist	2,040 to 4,200 a year
Bacteriologist	1,860 to 4,200 a year
Chief of division	6,000 to 7,000 a year

All of these employees are chosen and promoted by examination. The Surgeon General and the higher officials of the Public Health Service are appointed by the President from among highly qualified physicians and laboratory men.

Nurses are needed. — Government nurses are found wherever government doctors are. In addition to the hospital nurses, we find field nurses in every large city, who travel about the city, visiting homes where their help is needed, inspecting school children, giving advice on the care of the sick, etc. As in the case of doctors, government nurses often do not make as high salaries as those on private duty. The qualifications and training for government service are the same as for private service. (See Chapter XX.)

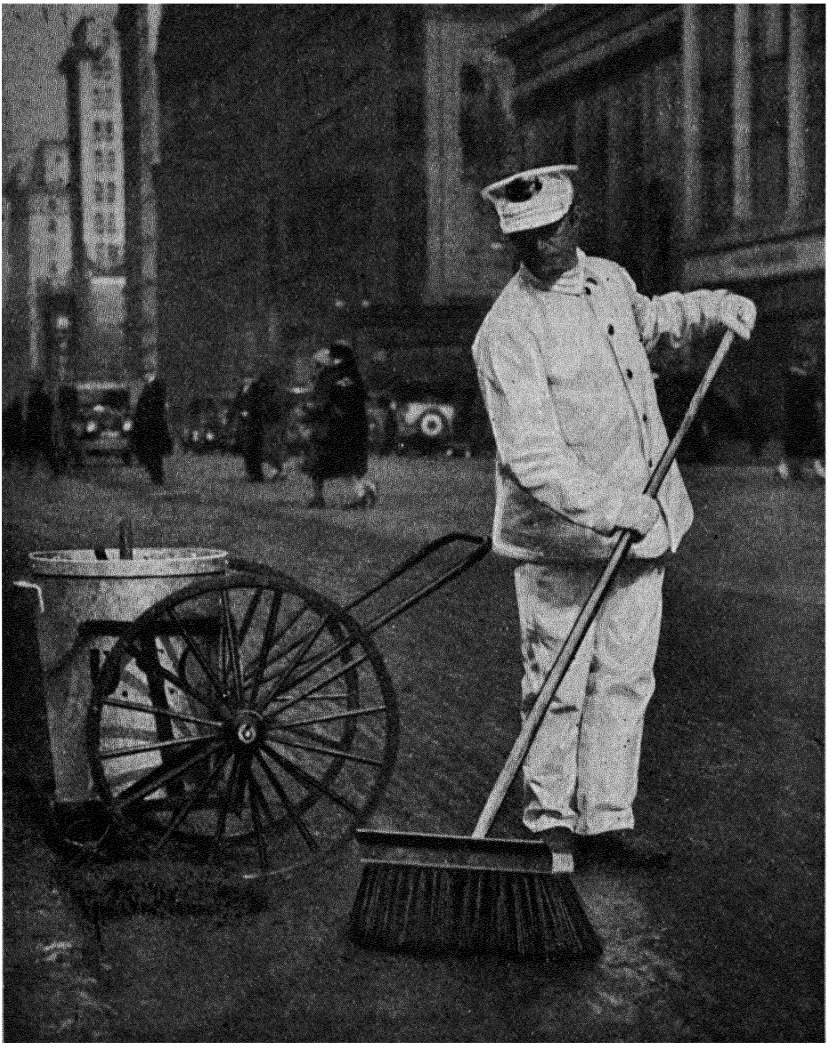


Photo by Ewing Galloway

A STREET SWEEPER

This humble occupation contributes perhaps as much to the protection of health as any known.

Non-medical health work is important. — It is not necessary to be a physician, a trained laboratory worker, or a nurse, to engage in public health work. Persons without medical training may be employed as sanitary inspectors, food and drugs inspectors, smoke inspectors, and inspectors of plumbing and in similar positions. Some of these officials travel about the city or the state observing unsanitary conditions and reporting them to the health department, which takes measures to end them. Prevention of disease is sought, not only by quarantines and sanitary measures, but by furnishing opportunities for exercise, recreation, and fresh air. Parks, playgrounds, swimming pools, gymnasiums, restrooms, are all looked upon as necessary governmental institutions. These give employment to —

Attendants
Directors of playgrounds
Teachers
Life guards

Much non-medical work is required also in the hospitals, sanitaria, asylums, and homes maintained by the government. Superintendents, stewards, guards, teachers of various kinds, cooks, and dietitians are a few of the numerous governmental workers in the field of health and welfare.

Working for Indian welfare furnishes vocations. — As the white people spread over the American continent and took the land of the Indians, the government felt obliged to take care of the few Indians who were not destroyed by the process. As a result the United States government has developed a large welfare work in the Office of Indian Affairs of the Department of Interior. About 225,000 Indians still remain on reservations under the care of the government. The Indian office takes care of their land and money, provides schools, food, and supplies, looks after their health,

and prepares those who wish to be citizens. This work requires a large force of superintendents, farmers, purchasing agents, medical men, and teachers of all kinds. These employees are selected by examination.

V. **Aiding and regulating transportation.** — This is carried on by —

A. Local and city governments, through such agencies as —
   1. County engineers and road officials, who lay out, construct, and maintain county roads and bridges.
   2. City street departments, which lay out, construct, and maintain streets and alleys.

B. State governments, through such agencies as —
   1. State highway departments, which construct and maintain state highways, bridges, and canals.
   2. Public utilities commissions, which, for example, regulate the rates of railways and interurban lines.

C. The national government, through such agencies as —
   1. The Bureau of Public Roads, which advises the state and local governments how to build roads and bridges.
      Example: The road laboratory in Washington tests various road materials to see which are the most satisfactory for use.
   2. Engineers of rivers and harbors, who improve rivers and harbors.
      Example: Great care is taken to maintain a five-foot channel in the Mississippi River to facilitate travel.
   3. The Coast and Geodetic Survey and the Bureau of Lighthouses, which chart the coasts, erect lighthouses, place buoys, etc.
      Example: The Bureau of Lighthouses maintains the lights of Sandy Hook and other harbors.
   4. The Alaskan Engineering Commission, which builds and operates railroads in Alaska.
   5. The Interstate Commerce Commission, which regulates railroad rates between states.
      Example: It regulates the fare from New York to Chicago.
   6. The Bureau of Navigation, the Steamboat Inspection Service, and others, which promote safety in transportation, both by railroad and by water.
      Examples: It is required that all trains shall have air brakes; that there shall be lifeboats on all vessels; and that ships shall not carry too many passengers.

Opportunities in Transportation Work

Road building. — One of the oldest of governmental enterprises is the construction and maintenance of roads, highways, and bridges. The national government in the early days undertook the construction of several great highways. One famous road was the Cumberland Highway through the Allegheny Mountains. Occasionally a state built a highway between important points in the state. But road building was left for the most part to the local governments, chiefly the county. In general, the work was poorly done. The county often permitted farmers to build and maintain the roads in place of paying their taxes. The farmers put in as little time as possible, and their work suffered from lack of supervision.

The automobile has revolutionized the road-building activities of governments. In hard-road building the states lead. In the past ten years the expenditures of states for roads have increased more rapidly than for any other purpose. In 1924 there were 3,002,916 miles of highway in the United States built and owned by the public. Of this nearly 500,000 miles have been surfaced, or graded and drained. An outline of the organization of the Missouri Highway Commission will indicate the kinds of employment in this branch of activity:

State Highway Commission
- Five members appointed by governor
- Secretary
- Chief engineer
- Legal advisor

Construction Division

- Engineer of construction
- Ten areas, each having —
  - Division engineer
  - Assistant division engineer
  - Constructing engineer
  - Project engineers
  - Maintenance engineer
  - Inspectors
  - Instrument men

Bureau of Surveys and plans
- Engineer of surveys and plans
- Right of way engineer
- Designers
- Computors
- Draftsmen
- Blueprint operators

Bureau of Bridges
- Bridge engineer
- Asst. bridge engineer
- Chief draftsman
- Designers
- Plan-checkers
- Steel inspectors

Division of Materials and Tests
- Engineer of materials
- Asst. engineer of materials
- Laboratory engineer
- Geologist
- Chemists
- Chief material inspector
- Field inspectors

Bureau of Maintenance
- Engineer of maintenance
- Asst. engineer of maintenance
- Engineer of marking and signs

Division of Equipment
- Superintendent of equipment
- Asst. supt. of equipment
- Record clerk
- Order clerk
- Invoice clerk
- Chief mechanic
- Electrician

The Bureau of Public Roads in Washington is an engineering bureau which coöperates with the state highway departments. It also conducts researches and experiments in road building; and is prepared to give advice to state and local highway authorities on the best materials and methods to use. Positions in this bureau are subject to civil service examination and may be illustrated by the following:

Draftsmen	$1,500 to $2,100 a year
Testing engineers	2,400 to 4,000 a year
Highway engineers	2,400 to 4,200 a year
Bridge engineers	2,400 to 4,200 a year
Chief of bureau	6,500 a year

Other construction work that aids transportation. — Other work of the national government in aiding transportation includes the dredging of rivers and harbors, the removal of sunken vessels and other obstructions to navigation, the building of bridges across navigable streams, and the construction of levees, dams, canals, and locks. This work is

done mainly by the War Department engineers, and it resembles the work of engineers in the employ of private corporations. Sometimes the work is done under private contract, with the War Department engineers supervising. At other times the government hires workers and does the work itself. The greatest engineering feat ever undertaken by a government to aid transportation, and one of the greatest engineering feats in the history of the world, was the building of the Panama Canal. After many private enterprisers had tried and failed, the United States government carried this enterprise through. The work was under the direction of Colonel George Goethals, an army engineer. About forty thousand engineers, draftsmen, machinists, sanitary engineers, and laborers worked directly for the government in the building of the canal. The operation of the canal and of the Panama Railway, stores, restaurants, schools, and other operations now requires the services of about nine thousand persons, including engineers, lockkeepers, railroad workers, storekeepers, cooks, and other workers. Practically all positions in the Canal Zone are filled by civil service examination.

Some cities have done much work in aiding transportation. The greatest system of bridges in the world was designed and built by New York City engineers to join Long Island with the mainland.

Coast and Geodetic Survey vocations. — The Coast and Geodetic Survey in the Department of Commerce surveys the coasts of the United States and its island possessions and prepares charts for the use of navigators. Its work includes deep-sea soundings, observation of currents and temperatures in the sea, magnetic observations, and determination of geographic positions by latitude and longitude. It prepares tables showing the tides for a year in advance

and also issues weekly " notices to mariners " containing information necessary for safe navigation.

Entrance into the service of this survey is by examination. After six months' service, successful employees receive commissions, similar to those of naval officers, and with about the same pay. These coast and geodetic survey officers are usually college graduates and are specially trained in mathematics, physics, and engineering. Salaries run from $1,200 to $5,000 a year.

Lighthouse service. — The Bureau of Lighthouses in the United States Department of Commerce is charged with the construction and maintenance of lighthouses and other aids to navigation on the sea and lake coasts of the United States. At the head of this service is a commissioner appointed by the President, whose pay ranges from $6,000 to $7,500 a year. There is also a chief constructing engineer, a deputy commissioner and a superintendent of naval construction with salaries from $5,200 to $6,000 a year, and many assistant engineers who receive from $2,400 to $5,000. Some of the other positions in this service are:

Superintendents of lighthouses	$5,200 to $6,000 a year
Lighthouse keepers	1,370 (average)
Lamp-lighters (depending on number of lights attended)	12 to 1,500 a year
Masters of lightships and tenders	1,560 to 3,060 a year

There are about fifty-five hundred of these. Three thousand of them are subject to civil service examinations, and twenty-five hundred are filled without examination.

The regulation of navigation gives openings. — Two other bureaus of the Department of Commerce are concerned with the enforcement of laws regulating navigation. The Bureau of Navigation has charge of the measurement for tonnage, numbering, and documenting of all American merchant

vessels and yachts and it controls their entrance and clearance. It supervises the shipment and discharge of merchant seamen and the collection of tonnage tax and enforces the laws governing radio communication. The Steamboat Inspection Service inspects the hulls, boilers, and equipment of steamers; issues certificates; examines and licenses marine engineers; regulates the passenger allowance of steamers; issues regulations to prevent collisions; and investigates marine casualties.

At every large port the Bureau of Navigation maintains navigation inspectors at about $4.00 a day; radio inspectors at $2,100 to $4,000 a year; shipping commissioners at $2,100 to $5,000; and various deputies, assistants, and clerks. The steamboat inspection service includes an inspector-general, who receives $6,500 a year, and inspectors, at salaries of $2,100 and upward to $3,800. The supervising inspectors are politically appointed, but all other positions in this service are subject to examination.

Government railway work. — There are six examples of government-owned railroads in the United States. The largest of these is the system of railroads in Alaska. Here the government is engaged in the actual construction and operation of railroads and terminals as well as of telegraphs, telephones, wagon roads, and mines. Over five hundred miles of government railroad are in operation, and many engineers, mechanics, and railroad experts are employed. The salaries paid to Alaska engineers are the highest of any in the government service outside the President, the diplomatic service, and a few high positions in Washington. The chief engineer of the Alaskan Engineering Commission receives $15,000 a year, and his assistant receives $7,500. Other national government railroads are the Panama Railroad, which was built and operated for the use of the canal

workers; the Boise and Arrowrock Railroad, nineteen miles in length; and the Yuma Valley Railroad of twenty-three miles operated by the Reclamation Service. Cincinnati has built a railroad more than three hundred miles in length through Kentucky and Tennessee to develop its trade with the South. The state of Georgia owns a railroad 136 miles in length from Atlanta to Chattanooga.

Fifteen American cities own and operate their street railways — among them the large cities of Detroit, San Francisco, and Seattle. The occupations and opportunities furnished by these enterprises are the same as those in private transportation companies (see Chapter XV).

The regulation of carriers results in important positions. — For the most part, however, railroads, telegraphs and telephones, street railways, and other carriers are owned and operated by private companies. But these common carriers are subject to a great deal of governmental regulation. They cannot charge whatever fares or rates they please; they cannot abandon their lines or take off trains without the consent of the government. These things must be done in the interests of the public which uses the carriers.

The regulation of these public carriers is mostly in the hands of state agencies called public service or public utilities commissions and of a federal agency known as the Interstate Commerce Commission. These positions are obtained by appointment of governors or the President. All of these agencies employ engineers who are familiar with railroad problems; inspectors to watch the operation of the carriers; and statisticians, lawyers, accountants, and many clerks to collect data, estimate the earning power of the carriers, and ascertain what rates should be charged. Most of the positions are filled by examination.

One of the important duties of these commissions is to

insure that transportation shall be safe for the public. They have performed this duty well. Inspectors are sent out to see that trains are equipped with such devices as air brakes, automatic couplers, and spark arresters. When an accident occurs, the government sends an official to determine the cause. This work gives employment to engineers and inspectors.

See also VII and VIII.

VI. **Aiding and regulating communication.** — This is done mostly by —

A. Local governments, through such agencies as —
   1. Departments of weights and measures, which enforce the laws regarding these things.
      Example: Your grocer could be arrested and fined if guilty of having short weights.

B. The state government, through such agencies as
   1. Public utilities commissions, which regulate rates of communication.
      Example: The Missouri Public Service Commission fixes telephone rates within that state. A similar commission in your state probably does the same.

C. The national government, through such agencies as —
   1. The Bureau of Standards, which establishes a system of standard weights and measures.
      Examples: The pound, the bushel.
   2. The Treasury Department, which establishes a standard unit of money.
      Example: The dollar contains 25.8 grains of gold of .900 fineness.
   3. The Interstate Commerce Commission and the Department of Commerce, which regulate certain aids to communication, such as cable rates and codes, radio wave-lengths, and telegraph charges.
   4. The Alaskan Engineering Commission, which establishes and operates telegraph and telephone systems in Alaska.
   5. The Government Printing Office, which operates a printing plant and distributes documents.
   6. The Post-Office Department, which establishes and operates the national postal service.

Opportunities in the Communication Work of the Government

Communication between individuals requires a set of symbols or standards which both understand. For instance, if you wish to inform your neighbor that you have some land to sell, you tell him that you will sell a hundred acres of land for a hundred dollars an acre. It is easy for you to make him understand your proposition because the government has established a standard measure for land (the acre) and a standard measure of value (the dollar). Our dollar is 25.8 grains of gold of a certain definite fineness. We use this standard whenever we talk about prices.

Besides the dollar and the acre, the government establishes many other standards to make communication easy. There are, for example, a standard yard, a standard bushel, and a standard gallon. As the national government deals with communication so much more than the other governments do, we need only consider the vocational opportunities that it offers in communication.

The Bureau of Standards and its work. — The creation and preservation of standards requires scientific accuracy. The chief agency of the government for making and preserving standard measurements is the Bureau of Standards in Washington. It has been called " the house of accuracy." Hundreds of scientists who work with the most delicate of instruments are employed here. They make minute and accurate measurements, analyze materials, and perfect methods of weighing and measuring. This bureau gives employment to such specialists as the following:

Director	$6,500 a year
Physicists	$1,860 to 6,000 a year
Chemists	1,860 to 6,000 a year
Laboratory assistants	1,320 to 3,000 a year
Aids	900 to 1,500 a year

With the exception of the director, these workers obtain their positions through civil service examinations.

Agencies for regulating communication by words. — Communication by words is carried on by telephone, telegraph, cable, radio, and mail, and these are all regulated by the government. The rates for telephone, telegraph, and cable messages are regulated by the government, as is the extension of lines or any important change in service. For example, no one can set up a radio broadcasting station without permission of the Secretary of Commerce, who assigns wave-lengths and makes other regulations.

Except the mail service, government regulation of communication furnishes vocational openings that are mostly clerical and legal (see Chapter XIV and Chapter XIX for discussion of these classes of work).

Communication by printed material. — One of the important activities of governmental units in aiding communication is the printing and distribution of reports and documents of various kinds. The Government Printing Office in Washington, D. C., is the greatest printing establishment in the world. While Congress is in session, a daily report is printed and distributed, containing every word spoken on the floor of both House and Senate in the day. This is known as the Congressional Record. In addition to this, a long list of government reports and documents is published and distributed. State and city governments are printers and publishers on a smaller scale.

The printing activities of governmental units give employment to many thousands of printers, binders, electrotypers, engravers, pressmen, compositors, linotype operators, and machinists. In the departments where material is prepared for publication, numerous editors, editorial assistants, proof readers, illustrators, and other specially qualified men

and women are needed. These positions and the pay attached to each are similar to those mentioned in Chapter XIV. Electrotypers and pressmen receive about eighty cents an hour; linotype operators, bookbinders, compositors, and proof readers receive about seventy-five cents an hour.

The Postal Service furnishes a great vocational field. — The United States Postal Service, with nearly 51,000 post-offices, over 1,500,000 miles of postal routes, 350,000 employees, and annual receipts of approximately $600,000,000, is the largest single enterprise in the world, either business or governmental. Its activities have expanded from the mere carrying of the mail to include a great banking service, facilities for sending money, an enormous express business, and the development of commercial aviation.

Postal employees are distributed as follows:

Employees of Post-Office Department in Washington	1,890
Postmasters and assistant postmasters	53,458
Post-office clerks, carriers, and other employees	239,753
Rural carriers	45,007
Railway mail clerks	21,569

With the exception of postmasters in the large cities who are appointed by the President, all these workers are selected by competitive examination and serve during good behavior.

The railway mail service has been called the backbone of the postal system. Practically all first class mail is sorted in mail cars, which greatly facilitates delivery. Mail clerks must be familiar with from five thousand to twenty thousand post-offices, be able to tell on what railroads they are located, through what junctions the mail must pass, and many other details. One clerk has a record of handling seventeen thousand cards at the rate of sixty a minute without a mistake.[1]

[1] Frederick J. Haskin, *The American Government*, p. 134.

The rural free delivery service provides free delivery of mail to over six million families. Although the work of most rural carriers is not difficult, some of them have great obstacles to overcome. The Uintah Valley in Utah is surrounded by high mountains, and no railroads enter this region. Mail is carried to the five thousand inhabitants in twenty-six huge trucks. In winter the department must use great caterpillar trucks to plow the way through the deep drifts. An Eskimo carrier in Alaska runs six hundred miles beside his dog sled to deliver the United States mail.

Air mail service was inaugurated in 1918 and now covers a large part of the country. The transcontinental route is now in continuous operation, the trip from coast to coast being made in thirty-four hours. Forty-six pilots and 571 mechanics, clerks, and others are employed in the air mail service.

An act of Congress February 28, 1925, fixed the salaries of post-office employees as follows:

Postmasters (four classes, according to the receipts of the offices). Salaries run as high as	$8,000
Inspectors	$2,800 to 4,500
Clerks at division headquarters	1,900 to 2,600
Assistant postmasters (paid according to receipts of the offices)	2,200 to 4,800
Superintendent of mails	2,400 to 4,700
Foremen	2,500 to 2,700
Postal cashiers	2,900 to 4,300
Money order cashiers	2,600 to 3,900
Bookkeepers	2,400 to 3,300
Station examiners	2,600 to 3,000
Clerks and carriers (five grades)	1,700 to 2,300
Substitute carriers	65 cents an hour
Superintendents, motor vehicle department	2,400 to 5,000
Chief mechanics	2,400 to 3,000
General mechanics	1,900 to 2,300
Driver mechanics	1,600 to 2,000

Railway mail service	
Division superintendents	$4,500
Assistant division superintendents	3,600
Chief clerks	3,300
Railway postal clerks (seven grades)	1,900 to 2,700
Substitute postal clerks	1,850
Rural mail carriers (paid according to number of miles traveled)	720 to 1,800

VII. **Manufacturing and construction activities**, which are carried on by —

A. Local and city governments, through —
   1. Water works departments, which construct and operate their own water works and sewers.
      Example: The Detroit water works system, and perhaps one in your own city.
   2. Departments of public works which construct their own public buildings.
      Example: Your county courthouse, city hall, and school buildings were built by governments.

B. State governments, through —
   1. Departments of public works, which construct their own buildings, monuments, etc.
      Examples: The state capitol at St. Paul; the Lincoln tomb and museum at Springfield, Ill.

C. National government, through —
   1. Navy yards and arsenals, which build battleships, guns, shells, etc.
      Example: The navy yard at Charlestown, Mass.; the United States arsenal at Rock Island, Ill.
   2. United States mints, which coin money.
   3. Bureau of Engraving, which prints currency, bonds, and postage stamps.

Opportunities in Manufacturing Activities of Government

The manufacturing and construction activities of the government are not different from those in the business world, and the description of occupations in Chapters XV and XVI would apply also to government. We have de-

scribed a great many of the manufacturing and construction activities of government in connection with other services, particularly when describing the transportation work of government, and we shall discuss other activities in future sections. Three rather special kinds of work only will be studied here.

Work in supplying water and disposing of sewage. — One of the greatest manufacturing enterprises of government is the supplying of pure water. Where people live in crowded groups, water can best be furnished by public enterprise. Thus, furnishing water is almost always a government undertaking. Sometimes it involves the construction of great dams and reservoirs, filtration plants, pumping stations, and many miles of conduits and pipes. The New York City water works is the greatest municipal enterprise in America. It is valued at $367,000,000 and serves six million people. The series of dams and reservoirs in the Catskills and the vast system of tunnels, aqueducts, and inverted siphons over mountains and rivers form one of the great engineering achievements of the world. The construction and operation of such works offer many and varied occupations.

A similar description of the work of almost every large city in the disposal of its sewage might be made. Chicago, for example, has constructed a canal wide and deep enough for ocean vessels and nearly forty miles long. This canal causes the Chicago River, which is used for drainage purposes, to flow into the Mississippi River rather than into Lake Michigan. In this way the lake, from which Chicago's water supply is derived, is kept pure.

Construction of public buildings, navy yards, arsenals, and docks. — For carrying on its work the government builds a great many structures. Sometimes this construc-

tion is done directly and sometimes through contracts with other builders. Among the buildings are the postoffices scattered over the country and the many public buildings in Washington. The largest office building of the United States government was built by the national government during the war to house the Navy Department and the Munitions Office of the War Department.

The national government is also a great builder of navy yards, docks, and arsenals. One notable example is at Pearl Harbor, Hawaii, where the navy has been engaged for ten years on the construction of a thousand-foot dry dock capable of accommodating the largest vessel afloat. Another is the radio station at Annapolis, Md., at the time of its construction the greatest high-power radio station ever built.

Within the navy yards, docks, and army arsenals there is carried forward work almost exactly like that found in a manufacturing plant. The navy is prepared to design, build, fit, and repair all of its own ships, guns, and ammunition.

For all such tasks, mechanics and workmen of every kind are needed. They work under the supervision of government engineers. The conditions of work and pay are similar to those in private manufacturing plants.

Vocations in the manufacture of money, stamps, and securities. — The coinage of money and the printing of paper currency are two of the great manufacturing enterprises of the government. At the United States mints at Philadelphia, San Francisco, and Denver, gold and silver are turned into coins. The Bureau of Engraving in Washington is a huge factory for producing paper money, postage stamps, bonds, and all government securities. The bureau employs the most expert designers, engravers, plate-printers, and other artisans, besides a large force of women workers

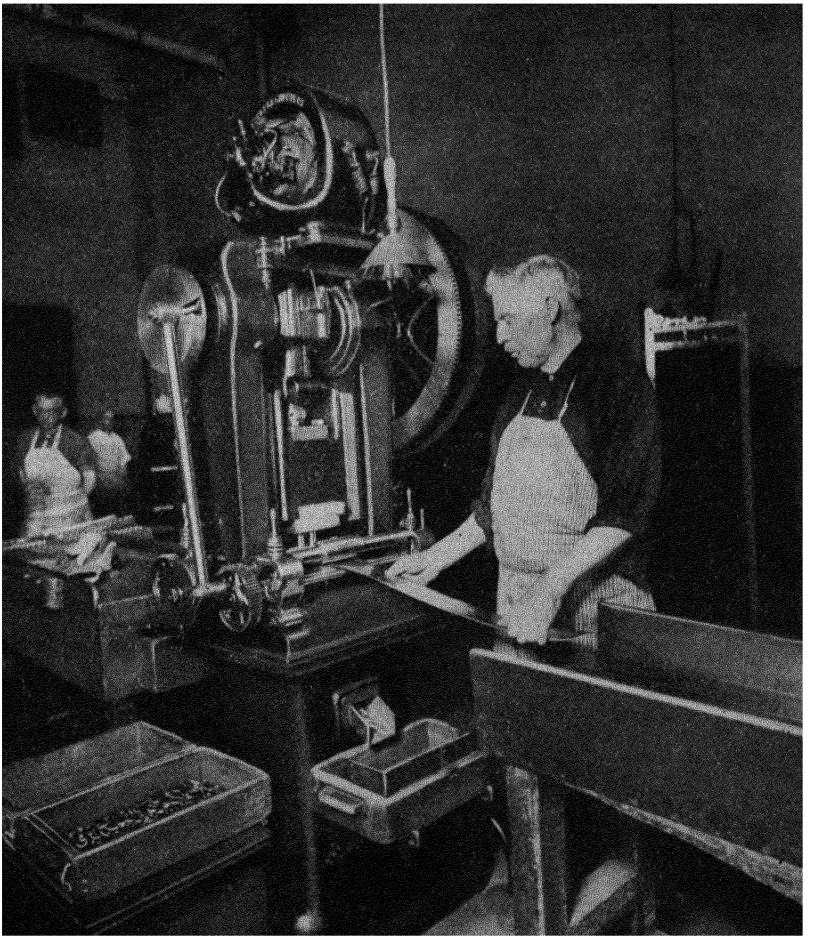


Photo by Brown Brothers

A Minting Machine

The work of this machine is cutting twenty dollar gold pieces.

who count and examine the printed securities, and printers' assistants who aid the printers in their respective lines. Every effort is made to make the products of this bureau hard to counterfeit, and the Treasury Department employs a group of men, known as the Secret Service, to detect counterfeiting.

The United States mint at Philadelphia will serve as an illustration of the workers employed in making money and securities. With the exception of the higher positions these places are obtained through civil service examination.

Superintendent	$5,200 a year
Engraver	4,000 a year
Assayer	3,300 a year
Cashier	2,800 a year
Skilled workmen, machinists, toolmakers, etc.	$4.75 to $8.00 a day

VIII. **Conservation of natural resources**, carried on by —

A. Local and state governments, through such agencies as —
   1. Agricultural schools, which teach farmers the best methods of using their land.
      Examples: The agricultural colleges of Wisconsin, Texas, and Pennsylvania.
   2. Forest-preserve and park boards, which control certain areas for public use.
      Example: Cook County Forest Preserve surrounding Chicago.
   3. Game and fish wardens, who protect fish and game from extermination and replenish the lakes and forests with fish and game.
      Example: The game wardens of your state.

B. National government, through such agencies as —
   1. The Department of Agriculture, which advises farmers on such matters as soils, seeds, fertilizers, plant diseases, care of animals, and how to grow new crops.
   2. The Forest Service, which patrols the national forests for timber thieves and forest fires; plants new trees; supervises cutting of trees.
   3. The Reclamation Service, which builds dams and irrigation systems and reclaims millions of acres of desert land.
   4. The Geological Survey, which locates valuable mineral lands and water-power sites, has them withdrawn from sale, and,

together with the Federal Power Commission, provides for the conservation of water.

5. The Bureau of Mines, which studies methods of mining and gives advice on how to prevent accidents, how to get out the most mineral, and how to burn coal and oil most efficiently.
6. The National Park Service, which supervises and protects the national parks.

   Examples: Yellowstone, Yosemite, and Glacier National Parks.
7. The Bureau of Fisheries, which protects Alaskan salmon and seals and propagates and distributes fish for United States streams and lakes.

Opportunities in the Conservation of Natural Resources

The preservation and development of the great natural resources — land, water, forests, plants and animals, minerals, and oil — is a task that very often must be carried on by a governmental unit. Some of these resources in particular, when left to private development, have been rapidly and, many believe, wastefully exploited. Much conservation must be done by the states. The federal government is limited to the land which it owns, and that is a relatively small amount. In the federal domain, which includes Alaska, the national government is doing excellent work in the preservation of forests, minerals, water power, and soils.

The United States Department of Agriculture is a large employer in its conservation work. — The United States Department of Agriculture is a great agency for the conservation of plant and animal life, soils, crops, foods, and everything pertaining to the life of a farmer. In the Bureau of Plant Industry there are botanists, pathologists, and other scientists who experiment on new plant varieties, remedies for plant diseases, etc. The Bureau of Animal Industry investigates the manufacture of dairy and meat products and seeks to eradicate animal diseases. The Bureau of Soils has chemists and soil experts who analyze soils and ad-

vise farmers what crops to plant or what fertilizers to use. The Bureau of Markets has experts who study and advise farmers and others how to grade, pack, ship, and sell their crops to the best advantage.

Some of the occupations found in the Department of Agriculture are the following: Agriculturist, Agronomist, Animal husbandman, Agricultural engineer, Expert farmer, Horticulturist, Plant introducer, Plant propagator, Seed botanist, Soil scientist, and Specialist in fruit marketing. For each of these occupations there are several grades. The grades and rates of pay in this service are:

Grade 1	Junior	$1,860 to $2,400 per annum
Grade 2	Assistant	2,400 to 3,000 per annum
Grade 3	Associate	3,000 to 3,600 per annum
Grade 4	Full professional	3,800 to 5,000 per annum
Grade 5	Senior	5,200 to 6,000 per annum
Grade 6	Chief	6,000 to 7,500 per annum

These positions are filled by civil service examination.

Forest Service is fascinating work to many. — Nearly 160,000,000 acres of land have been set aside as national forests. Forest supervisors guard these timberlands, each having about one million acres in his care. Under the supervisors are rangers, who patrol the forests on foot or on horse, watching for forest fires, timber thieves, and other dangers. United States forests are sometimes leased to cattle- and sheep-owners, and, under approved conditions, timber may be cut and sold. The forestry service supervises the leasing of the forests for grazing or lumbering. They also replant lands from which the trees have been burned.

Sixteen states and 195 municipalities have established public forests, with an area of about 4,500,000 acres. The Cook County Forest Preserve, which forms a belt of wood-

land with lakes, rivers, and hills on three sides of the city of Chicago, is a good example of local government forests. State and municipal forests are administered like the national forests, by such workers as forest rangers, botanists, and timber-gaugers.

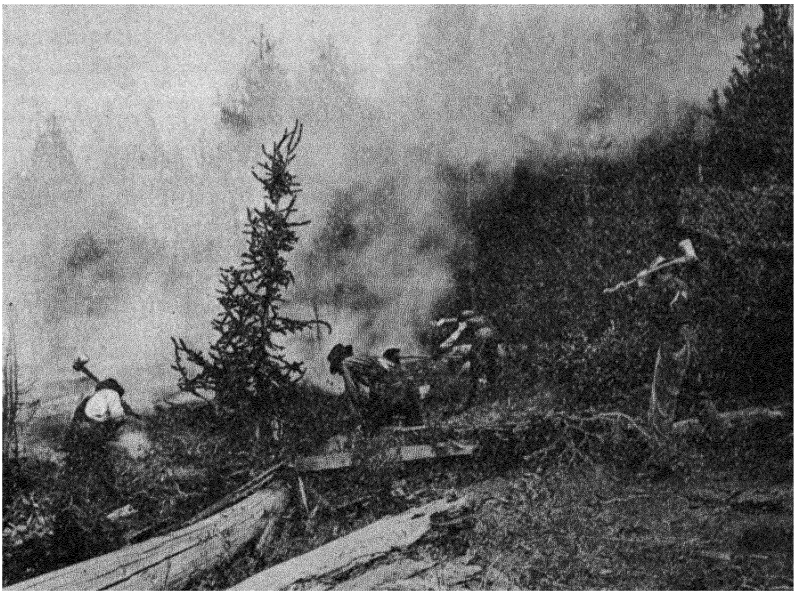


Photo from Wide World

FIGHTING A FOREST FIRE

This shows one of the exciting and strenuous duties of forest rangers. "Fire lines" are made by clearing the ground of brush and débris.

The Forest Service offers a definite career for young men between the ages of 21 and 35. A man with the equivalent of a high-school education and the requisite field experience may enter the non-technical National Forest work as a Forest Ranger through competitive civil-service examination at a salary of $1,620 to $2,040 a year and may be promoted to Senior Forest Ranger at $2,000 to $2,400 a year. Young

men with scientific and technical training in forestry may enter through the Junior Forester examination at a salary of $1,860 to $2,400 a year, and may be promoted through the following ranks:

Assistant forester	$2,400 to $3,000
Associate forester	3,000 to 3,600
Forester	3,800 to 5,000
Senior forester	5,200 to 6,000
Chief of Forest Service	6,000 to 7,500

The Reclamation Service. — The great irrigation dams, reservoirs, tunnels, and ditches of the West are the work of government engineers in the Bureau of Reclamation. A foreign official who visited this country in 1918 declared the work of these engineers to be the "wonder of the world."

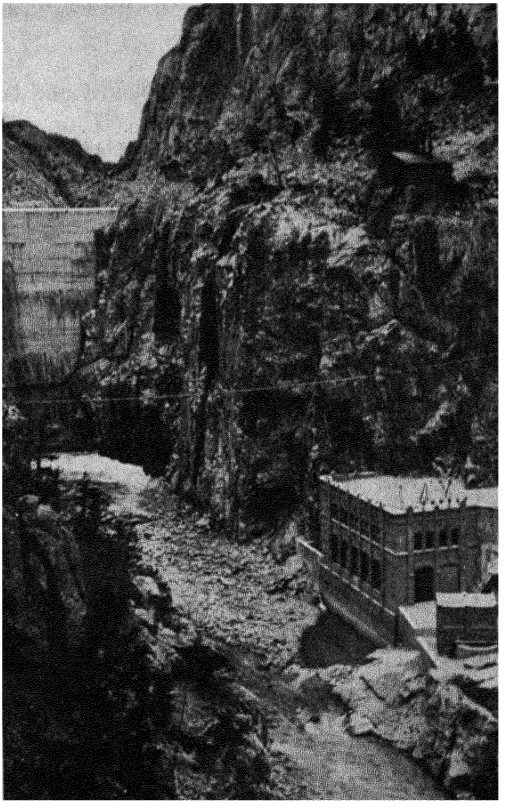
In its task of reclaiming the dry lands of the West, the United States Reclamation Service has constructed 100 storage and diversion dams, 29 miles of tunnels, 10,000 bridges, 15,000 miles of canals, ditches, and drains, 700 miles of pipe line, 21 hydroelectric power plants, and 1600 miles of electric transmission lines. Almost 2,000,000 acres have been transformed from desert to intensely cultivated farms, whose average returns per acre are about double those of the rest of the country. In this work the government employs many kinds of engineers and other helpers. The following schedule shows typical reclamation workers, together with their salaries:

Commissioner	$7,500 a year
Chief engineer	6,000 a year
Director of reclamation economics	6,000 a year
Designing engineer	5,400 a year
Electrical engineer	4,800 a year
Consulting engineer	20 to 25 a day
Project superintendents	3,100 to 4,800 a year
Superintendent of irrigation	1,800 to 3,600 a year
Ditch riders	1,440 a year
Watchmen	720 to 1,080 a year

Practically all are chosen by civil service examination.

The Geological Survey offers interesting work for trained men. — The conservation work of the Geological Survey includes the investigation of mineral, oil, and water resources of the federal domain and the classification of public lands so that leases can be made wisely. Geologists, mineralogists, oil geologists, and other scientists are employed in this work.

Another branch of the survey's work is the making of a great topographic map, which when finished will cover the entire United States. This map will show every elevation and depression, road, stream, town, village, and other features. Forty-five years have already been spent on this map, and it is estimated that twenty more years at least will



Courtesy U. S. Reclamation Service

A GREAT GOVERNMENT DAM AT SHOSHONE, WYOMING

Such a work calls for many government engineers and other workers. Its completion results in many want gratifying goods — the results of electrical power and irrigation.

be required to complete it. Hundreds of topographic engineers are at work on this project, which will cost $50,000,000 for the mapping alone, in addition to nearly an equal amount to be contributed by the states in coöperation with the federal government.

Typical positions in the Geological Survey are given below:

Director	$6,000 to $7,500 a year
Branch chiefs such as chief geologist and topographic engineer	5,200 to 6,000 a year
Scientists, such as geologists and chemists	3,800 to 5,000 a year
Associate scientists and engineers	3,000 to 3,600 a year
Map engravers and printers	1,320 to 3,000 a year

Except the director, who is appointed by the President, these positions are filled by civil service examination.

Conservation of water gives work in reclamation. — Because of its authority over navigable waters in the United States, the federal government has power to regulate the production of water power on navigable streams. This is under the direction of a Federal Power Commission. At the head of this bureau is a commissioner. He is aided by engineers. The power commission uses the engineers of the War Department to investigate the utilization of water resources and the location, capacity, cost, and development of the water-power sites and to determine whether the power can be utilized by the United States government. If the government cannot use it, a water-power site may be leased for a period not to exceed fifty years, under the supervision of the power commission.

Working for conservation in the Bureau of Mines. — The Bureau of Mines is interested in the promotion of safety and health in the mining and metallurgical industries of the country. Mine accidents are investigated and methods of preventing them are studied and experimented with. Mine

rescue cars are sent to places where fires or explosions have occurred, and first aid is given to the injured. In this bureau mining engineers are employed, and also chemists with special knowledge of gas, coal, petroleum, and explosives. Fuel engineers study the most economical ways of carrying on mining and of burning coal and oil. Bulletins on these topics are distributed to those interested.

The following illustrates the persons employed by the Bureau of Mines:

Director	$6,000 to $7,500 a year
Assistant director, Technologic branch	5,200 to 6,000 a year
Chief, Economics branch	5,200 to 6,000 a year
Senior chemists, Senior engineers (mining, fuel, petroleum, explosives)	5,200 to 6,000 a year
Chemist, Engineers (mining, petroleum, fuel, explosives)	3,800 to 5,000 a year
Associate chemists, Associate engineers (mining, petroleum, fuel, explosives)	3,000 to 3,600 a year
Assistant chemists, Assistant engineers (mining, petroleum, fuel, explosives)	2,400 to 3,000 a year
Junior chemists, Junior engineers (mining, fuel, petroleum, explosives)	1,860 to 2,400 a year

With the exception of the director, all are chosen by civil service examinations.

Work in the National Parks Service. — The national government has reserved for public use sixty-three national parks and many national monuments which are visited annually by scores of thousands of tourists. Forty-three of these are administered by the National Park Service of the Department of Interior. Some of the best known are Yellowstone, Yosemite, and Hot Springs, Arkansas. Seven are national military parks, under the War Department. The Battlefield of Gettysburg is an example. Eleven national monuments are under the Department of Agriculture, also a buffalo range in Montana. For each of

the great parks and monuments there is a superintendent and a staff of guides, watchmen, and other employees. In the National Parks under the jurisdiction of the Department of the Interior pay is as follows:

Superintendents	$1,860 to $5,000 a year
Chief clerks	2,100 to 3,000 a year
Purchasing agents	1,680 to 1,860 a year
Park rangers	1,500 to 1,680 a year
Cooks, waiters, teamsters, laborers, etc., at local per diem rates.	

Most of these places are filled by examination.

Conservation of animals and fish calls for helpers. — Every state has a force of fish and game wardens to protect fish, birds, and other animals from extinction. Most states also have propagating stations where fish eggs are hatched and distributed to the streams of the state.

The federal government likewise is interested in the protection of wild-animal life. The Bureau of Fisheries in Washington has charge of the fisheries of Alaska, including fur-bearing seals. It also breeds millions of food fish and distributes them in tank cars to all parts of the United States. The Biological Survey of the Department of Agriculture has charge of the conservation of birds and other animals which are beneficial or harmless. It studies the habits of wild birds and other animals, experiments in fur-farming with a view to conserving the fur-bearing animals, conducts trapping and poisoning operations against injurious rodents and predatory animals, and coöperates with the states in the conservation of game.

The Bureau of Fisheries employs such people as

Scientific and technical assistants	$2,400 to $3,800
Superintendent of fish distribution	2,500
Superintendents of fish cultural stations	1,860 to 2,100
Fish culturists	1,140 to 1,320

The higher positions are filled by promotion and the lower ones from the civil service lists.

The Biological Survey offers such positions as —

United States game warden	$2,100 to $2,700 a year
Reservation warden	1,140 to 2,100 a year
Junior biologist	1,860 to 2,400 a year
Scientific aid	1,500 to 1,860 a year
Junior predatory animal inspector . .	1,500 to 1,860 a year
Assistant predatory inspector . . .	1,860 to 2,400 a year

These positions are filled by civil service examinations.

IX. **Conducting relations with foreign countries.** This is exclusively the function of the national governments, which maintains —

A. A Diplomatic Service.
B. A Consular Service.
C. Commercial attachés.
D. A Bureau of Immigration.

Diplomats and consuls. — The United States government is represented in foreign countries by diplomatic officials. In the largest countries they are known as ambassadors; in the smaller ones they are called ministers. The post of an ambassador is an embassy; a minister's post is known as a legation. The duty of diplomatic officials is to observe whatever may be of interest to the United States government, such as rumors of war or alliances between foreign countries. Communications from the government of the United States to a foreign government are transmitted through our ambassador or minister. The Diplomatic Service is also charged with the negotiation of treaties and the protection of the interests of American citizens abroad.

The United States at present has about fifty embassies and legations in foreign capitals, each with counsellors and secretaries. The ambassadors and ministers are appointed by the President, usually as a reward for their services to

the party. They must be wealthy men, because the cost of living and entertaining abroad is more than their salaries. The consent of the Senate is necessary.

Our government maintains consular offices in about six hundred foreign cities. In the consul's offices are clerks and other helpers. A consul is expected to protect American citizens abroad; to take charge of the estates of Americans who may die abroad; to settle disputes between American masters and seamen; to receive the papers of American vessels arriving at foreign ports; to certify to the correctness of invoices of merchandise exported to the United States, and to report opportunities for American commerce in foreign countries.

In 1924 the diplomatic and consular services were combined. A person who desires to enter the foreign service of the United States takes an examination and receives an appointment as "foreign-service officer." After a year's training and instruction in the State Department at Washington, he is assigned either to a consular or a diplomatic post, depending upon his wishes and his qualifications. The entrance salary is from $1,500 to $3,000, and promotions are fairly regular up to $9,000. In the consular branch, a man may be promoted to the highest rank, consul-general; in the diplomatic branch he may go as high as secretary of a legation or embassy. The ministers and ambassadors are still political.

The law which combined the diplomatic and consular services sought to make foreign service a more attractive career by providing higher salaries and regular promotion. It also made provision for funds for the necessary expenses of the offices, such as the entertainment of foreign officials, and for a system of retirement allowances at the age of sixty-five.

Commercial attachés. — In the most important foreign cities, our government has commercial attachés and trade commissioners, employees of the Department of Commerce, whose special duty is to observe and report upon trade conditions and opportunities for American commerce. The reports of these officials and of the United States consular offices are printed in a daily bulletin and distributed among American manufacturers and shippers. By this work American commerce has been expanded in many foreign countries. Salaries of commercial attachés run from $6,000 to $8,000, and of trade commissioners from $4,000 to $6,000. There are also assistant commissioners paid from $3,000 to $4,000, and clerks, paid from $2,000 to $2,700. Both commercial attachés and trade commissioners are appointed by the Secretary of Commerce, after special examination.

The Bureau of Immigration. — An activity of our government which has an important effect on our relations with other countries is the examination and admission or rejection of immigrants. Before the World War, immigrants were coming to the United States at the rate of a million a year. The latest immigration law (1924) limits the number to about 150,000 a year, but the examination and admission of these is still a large undertaking. The work of the Bureau of Immigration is divided among thirty-five districts, each with a commissioner and a number of inspectors, interpreters, guards, and other employees. By far the most important of these districts is the port of New York, for about two thirds of our immigrants are admitted at the Ellis Island station. The positions at Ellis Island show the kinds of work found in the immigration service, a branch closely associated with our internal welfare and our foreign relations. The commissioners are politically appointed; other officials are chosen by civil service examination.

POSITIONS AT ELLIS ISLAND

1	Commissioner	$6,500
1	Assistant commissioner	4,200
1	Superintendent	3,500
1	Plant engineer	3,000
11	Inspectors in charge	$2,400 to 3,500
74	Inspectors	1,860 to 2,740
92	Clerks	1,320 to 2,220
23	Interpreters	1,440 to 2,100
16	Matrons	1,140 to 1,440
72	Guards	1,140 to 1,620
64	Laborers	1,200 to 1,320
13	Charwomen	1,080 to 1,200
83	Engineers, firemen, and similar workers.	

QUESTIONS AND PROJECTS

1. To get certain things done is the only reason for having government. Explain this carefully and fully as to one who has not taken this work.

2. Look carefully at the list of service activities of the government at the beginning of this chapter. Why can each of these be handled better through government than through private enterprise?

3. Read carefully Section 8 of the Constitution of the United States (see Chapter XXI). Is this an example of the way in which public enterprise gives a government power to do certain things for the citizens of a country? Can you find in Section 8 the authority for carrying on each of the service activities that have been mentioned?

4. What are the important administrative tasks of government?

5. Read the first two paragraphs and the last paragraph of Section 8 of the Constitution. Do these give the United States government power to carry on the administrative tasks necessary for government service?

6. Who are the important officers in preserving peace and protecting property in the local, state, and national governments? What can be said for and against this type of work as a vocation?

7. What branch of the army service seems most attractive to you? Why?

8. Can you explain why a modern navy requires so many specialized workers?

9. Who are the United States Marines?

10. Why is it said that if a man wants action in the United States Army he should join the Marines?

11. What is the work of the United States Coast Guard? Why is its work particularly interesting and attractive at the present time?

12. Explain how patents and copyrights protect property interests. Do the same for the Weather Bureau.

13. If we had not put the giving of justice in the hands of governmental units, in what other way might we have it carried on?

14. Have a member of your class make a visit to your city hall, county courthouse, and police station and learn the names of those who "give justice."

15. What reasons can you give for having special juvenile courts?

16. What do you understand to be the difference between a jail and a reformatory?

17. Years ago people thought that the only way of dealing with criminals was by punishing them. Now we attempt to reform them and make them able to live normal lives. Has the latter method any advantage to society? Do you think it is more "just"?

18. Can you explain why a psychopathic study of a criminal may be necessary in order to do justice?

19. Show why efforts to reform criminals, to educate them, and to examine them carefully before or during a trial open new and interesting vocations in the giving of justice.

20. Give an example of a case that you believe might better be tried in a local or state court than in a national court.

21. What names are given to the attorneys who represent local governments? State governments? Our national government?

22. Explain the use, in giving justice, of the Interstate Commerce Commission. The Federal Trade Commission.

23. It is sometimes said that the two bodies mentioned in question 22 are semi-judicial bodies. Explain this.

24. Why is it important that a judge should feel free from political influence? List other officers than those mentioned in the questions who aid judges and prosecutors in giving justice.

25. Education furnishes the largest opportunity to work for government. It is also said that education furnishes the most important opportunity to work for government. Explain both statements.

26. Review the questions dealing with teaching and public library at the end of Chapter XX.

27. List three reasons why vocational opportunities in public health work have increased in recent years.

28. List the most important forms of vocations in public health work.

29. Give the advantages and the disadvantages of working as a physician for a governmental unit rather than as a physician in private practice. Do the same for nurses.

30. What vocations mentioned under "Welfare Workers" exist in your town or city? What attractive features can you see in this kind of work?

31. Why should the supervision of Indian affairs be viewed as welfare work?

32. What types of vocations does the care of the Indians provide?

33. What reasons can you give why it is better for roads to be constructed and maintained by government than by private enterprise?

34. Compare the occupations in government transportation work with the engineering occupations discussed under "Professions." What types of work do you notice in either list that are not in the other?

35. It is sometimes said that the service of a lighthouse is the best example of a service that would not be performed by any business man. Explain why one would not go into the lighthouse business.

36. Of what value to citizens is the Coast and Geodetic Survey? What attractive features can you see in this work?

37. Can you see any reasons why the United States government should build railroads in Alaska and the Panama Canal Zone, while those in continental United States are in almost every case privately owned?

38. Have one or two students in the class report on the arguments for and against city ownership of street railways. (This information can be secured from your city library.)

39. Are the vocational opportunities on a street railway different when it is governmentally owned from those when it is privately owned?

40. What is the Interstate Commerce Commission? Do you see more reason for having such a commission than for having a grocery store commission?

41. What results can you list that have come from regulation of carriers?

42. Communication between individuals requires a set of symbols or standards which both understand. Explain.

43. Give five examples of symbols that you and your friends understand and that aid you in communication.

44. Give five examples of the way in which the Bureau of Standards is of use to you.

45. What type of work does the Bureau of Standards offer?

46. Suppose you wish to sell a horse. Show the difficulties you would have if there were no unit of money.

47. What vocations other than those in the postal service can you see in government communication work?

48. Give two examples of good results from having the United States government control radio broadcasting stations.

49. Of what use is the postal service to you? To the business man? To the national government?

50. Look at the list of postal employees mentioned on page 498. With how many of these types of employment are you familiar? Write to the

Post-Office Department, Washington, D.C., for detailed information concerning the jobs it offers and the pay and requirements for each.

51. Is there air mail service to and from your city? If so, to and from what points?

52. What attractive and what unattractive features can you see in work in the postal service?

53. In the manufacturing activities of government the work is the same as in the manufacturing activities of business men. The only difference is in the organizers. Explain what this means.

54. What are the most important types of manufacturing work carried on by the government?

55. What kinds of governmental construction work seem to you most interesting and attractive? Which seem of special use to the citizens of the United States?

56. What is meant by conservation of natural resources?

57. Why is such conservation important to all of us?

58. Why might men who own a forest or a coal mine exhaust it more rapidly than we believe for the best interest of the nation?

59. Describe the work of the Forest Service.

60. What are the duties of the forest ranger? What are the educational requirements and salaries for this work? What is there about it that attracts young men?

61. What kind of work does the Reclamation Service do?

62. Is it always wise to reclaim dry or swamp land, no matter how much it costs to do it? Why or why not?

63. What are some of the vocational opportunities in the Reclamation Service?

64. Why should the United States government carry on the work done by the Geological Survey? Does such work interest you as a career? What type of vocations does it offer?

65. For what reasons is it desirable that the United States government control the production of power on navigable streams?

66. With what work are fish wardens and game wardens concerned?

67. Have some member of your class write to the Department of the Interior, Washington, D. C., for full information about the opportunities for work in the national parks.

68. What is a United States ambassador? minister? consul? commercial attaché? What are the duties of each?

69. How does one become an ambassador? A minister? A consul?

70. What steps might one take who is interested in entering the consular service? What attractions can you see in this work?

71. The regulation of immigration is one of the most delicate questions that arise in our relations with foreign countries. Explain why.

72. Have one or two members of your class present a report on the question: Should immigration to the United States be less restricted than it is at present?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part V.

CHAPTER XXV

THE ADMINISTRATIVE ACTIVITIES OF GOVERNMENT AND THE VOCATIONAL OPPORTUNITIES THEY OFFER

In the last chapter we studied at some length the great services carried on by governmental units in helping us to gratify our wants. That study gave us a basis for seeing many vocational opportunities in the *service activities* of government.

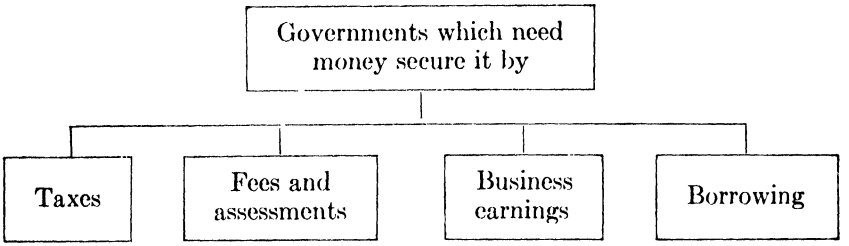
To perform these services, governments find it necessary to do other things, which may be called *administrative tasks.* Raising money for its work — financing government work — is important among these. In addition to financing, governments need to buy supplies; sell and lease certain property; hire workers; and gather, record, and keep information of many sorts. All of these are *administrative tasks* of government. In this chapter we shall show that there are many opportunities for useful work in the administrative tasks of government.

Government's Task of Securing Funds, and Vocational Opportunities in This Work

Sources of government income. — Since governments spend money, funds must be secured.

Governments use four main methods for raising funds. These are (1) taxes; (2) fees and assessments; (3) business earnings; (4) borrowing.

These important methods of obtaining funds may be shown by a chart:

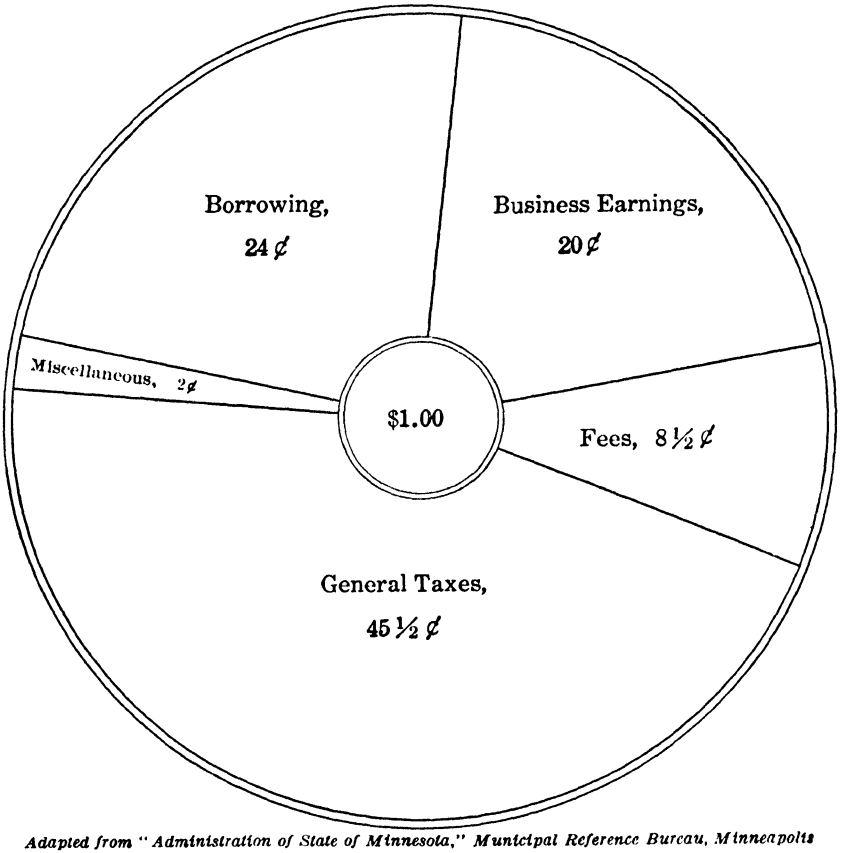


Let us now look briefly at each of these sources of government funds.

Taxes are of first importance. — We all derive benefits from the services of government, but it is always difficult to determine just how much good each one of us derives from these services. Let each one, for example, ask himself these questions: How much protection do I receive from the laws, the courts, and the police officers? How much a year is the service of the army and navy worth to me? Is the city fire department of service to me; and if so, how much a year are its services worth? No doubt we all feel that these things are necessary, but we have trouble placing a value upon them. Our *taxes* pay for these and similar protections and services. A tax is a payment that a government requires of one to help pay the costs of governmental services, which payment has no definite relationship to any particular benefit received by the individual who pays the tax. Taxes furnish a large part of the income of all units of government.

Fees are payments for special acts. — A *fee* is a payment to a government for some *special* service or benefit given by the government. Examples of fees are the sums paid by automobile owners for licenses and by groups for permission to organize corporations.

An *assessment* is a special kind of fee. An example of an assessment is the payment required of property owners when streets or sidewalks are laid.

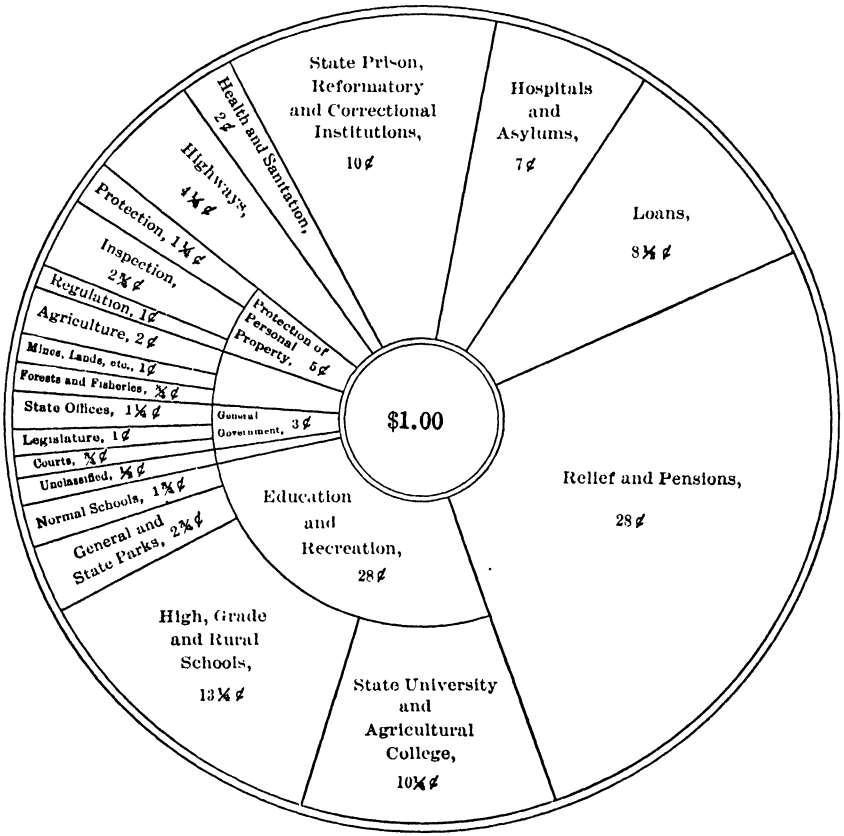


Adapted from "Administration of State of Minnesota," Municipal Reference Bureau, Minneapolis

How One State Secures the Money Required to Carry on its Governmental Work

Business earnings produce some revenue. — Some cities operate street-car lines, water systems, or other services, for the use of which charges are made just as they would be made by any business firm. The national and state

governments sometimes sell or lease land or rights to minerals, timber, and oil. Such ventures often bring profit to the unit of government concerned. It is seldom, however,



Adapted from "Administration of State of Minnesota," Municipal Reference Bureau, Minneapolis

HOW ONE STATE SPENDS THE MONEY REQUIRED TO CARRY ON ITS GOVERNMENTAL WORK

that our governmental units try to derive revenue from their business ventures. Nationally owned lands, forests, and mining property, however, have at times brought the government considerable money.

Borrowing is sometimes important. — There is probably not a government in the world, certainly not a national government, that has not borrowed large sums of money. To help defray the expenses of the World War the United States borrowed nearly twenty-five billion dollars. England, to fight the World War, borrowed over thirty-five billion dollars.

It is easy for a government to borrow, and if it forms the habit of doing so, government officers are likely to become extravagant and wasteful.

Government budgets are used to control expenditures. — The best plan to check wasteful expenditures by government officers and to make sure that a government will live within its income is what is known as the *budget*. Wise business men and intelligent housewives also make use of budgets. A budget for a housewife is usually an estimate of income for a year and then a planning of expenditures so that the income will not be exceeded.

Government budgets are usually planned the other way around. An estimate of necessary expenditures is made.

A Household Budget for a Family of Four for 1925

Income	
Father's salary	$2,600
Income from investments	400
	$3,000
Distribution	
To be saved, 10%	$300
Operating expense (rent, taxes, upkeep, telephone, light, heat, etc.), 33⅓%	1,000
Food, 20%	600
Clothing, 16⅔%	500
Health (doctor, dentist, etc.), 2⅓%	70
Advancement (education, books, etc.), 14⅔%	440
Luxuries (theater, jewelry, candy, etc.), 3%	90
	$3,000

A plan for securing the funds to meet these expenditures is then devised. No one is allowed to spend more than the amount apportioned to him. As long as planned expenses and planned income are kept equal, the budget will be balanced.

ESTIMATED FEDERAL BUDGET FOR 1926[1]

Estimated receipts	
1. Internal revenue receipts, from income and profits taxes and other sources	$2,600,875,000
2. Customs receipts	535,000,000
3. Miscellaneous receipts, from such sources as sale of government property, public-domain returns, rent of public buildings and grounds, fees, etc.	505,420,092
Total receipts	$3,641,295,092
Estimated expenditures	
1. Current expenses, including equipment	$878,910,265
2. Non-administrative expenses, such as pensions, interest on public debt, agricultural extension work, etc.	1,498,453,827
3. Construction work on rural post roads, rivers and harbors, Panama Canal, forest road construction, public buildings, etc.	197,514,723
4. Other expenses	692,672,563
5. To be applied to the reduction of the public debt	373,743,714
Total expenditures	$3,641,295,092

WORKERS IN SECURING GOVERNMENT FUNDS

Every governmental unit uses a large number of workers in the collection, care, and expenditure of funds. As the outline below shows, this work is done by—

1. Local governments, through —
   a. Assessors, who estimate the value of every man's property.
   b. Collectors, who collect the taxes levied against property, incomes, businesses and professions, etc.

[1] Compiled from *Message of the President of the United States Transmitting the Budget for the Fiscal Year Ending June 30, 1926.*

c. Treasurers, who receive the money collected in taxes, are responsible for its safe keeping, and pay it out when ordered to do so.
d. Auditors, who examine the books of assessors, collectors, and treasurers and approve bills and claims for payment.

2. State governments, through —
   a. Assessors and collectors. The same officers who assess and collect local taxes perform this service for the state.
   b. A state treasurer, auditor, or comptroller. His functions are similar to those of the local treasurer and auditor.
   c. A budget officer, who prepares the estimates of revenue and expenditure, to see that the state is not spending more money than it will collect.
3. Federal government, through —
   a. Appraisers of customs, who decide the amount of duty to be collected on imported merchandise.
   b. Collectors of customs and internal revenue, who collect revenue due the government.
   c. The Treasurer of the United States, who has custody of all national funds.
   d. The Comptroller of the Currency who, with other Treasury officials, supervises the borrowing transactions of the government.
   e. The Budget Bureau, which makes estimates of necessary government expenditures.
   f. The General Accounting Office, which audits all government accounts and must approve all expenditures before the money is paid out.

This outline shows that all types of governmental units use certain kinds of workers and, as a result, offer certain vocational openings. Assessors, collectors, treasurers, and auditors are needed by all units. Let us look at the work done by this financial personnel, so that we may consider it in the light of vocational opportunity.

Assessors are at the beginning of tax fixing. — One of the important kinds of financial workers, especially to local and state governments, is the tax assessor. In most cases the tax assessor is elected to office and so is subject to party politics. This is unfortunate at times, for it places men with party influence in office when they lack the knowledge

and skill required. Persons who would prepare for an assessor's job by a thorough study of taxation could give valuable service to a governmental unit. An election to the office of assessor often leads to further and more important political service. The pay for this work ranges from $1,000 to $5,000 a year.

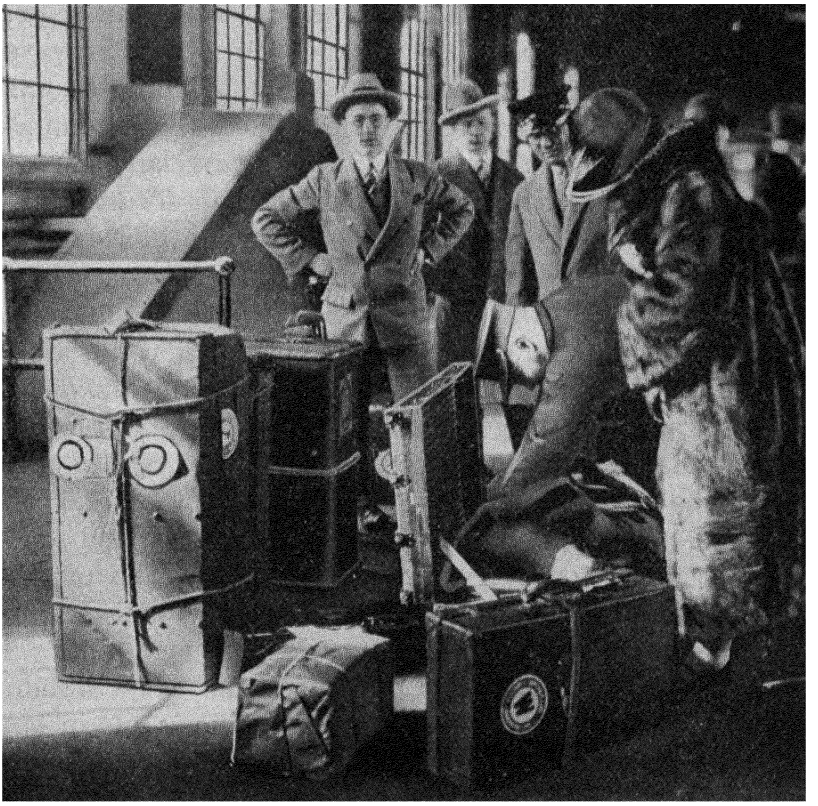
A special type of assessor is the United States customs appraiser, who has charge of the classification and valuation of all imported merchandise. An appraiser is stationed at each chief port of entry to the United States. The appraiser at the port of New York has under him a large number of deputies, assistants, analysts, assayers, weighers, gaugers, and other employees. They are appointed through civil service examinations.

Collectors. — Every unit of government needs someone to collect the taxes assessed. This work requires a number of clerks in every city, county, and state, in addition to the collector and his chief assistants. The tax collector, like the assessor, is usually elected. Some idea of the personnel employed in collecting funds for the government can be given by describing, as an example, the organization for collecting United States taxes.

The taxes due the United States government are collected by two branches of the Treasury Department — the Bureau of Internal Revenue (which collects taxes within the United States) and the Division of Customs (which collects import duties). About 35,000 employees are engaged in the work of collecting federal taxes. With the exception of the collectors and their chief assistants, who are appointed by the President, these employees are chosen from those who have passed civil service examinations.

The Bureau of Internal Revenue is divided into some sixty-five districts, each in charge of a collector. Under the

collector are a number of deputy collectors whose salaries range from $600 to $3,600 a year; clerks and bookkeepers whose salaries run from $900 to $4,000 a year; and a num-



CUSTOMS INSPECTORS AT WORK

Photo by Brown Brothers

ber of messengers, janitors, and minor employees. The office of the Collector of Internal Revenue at Louisville, Kentucky, for example, is divided into the following kinds of work: income tax division, cashier's division, bookkeeping division, sales tax division, and miscellaneous tax division.

The Customs Service is divided into forty-nine customs collection districts, each under a Collector of Customs. The most important of these is the Collector of the Port of New York, who receives a salary of $12,000 a year. Under the Collector are three important officials: the Appraiser, who ascertains the value of imported merchandise; the Surveyor, who inspects, weighs, measures, and gauges imported products; and the Comptroller, who examines the accounts of the Collector. Each of these officials has a large force of clerks, examiners, inspectors, and other assistants. The number of employees in the customs service in New York City alone is more than three thousand.

The positions in the Customs Service are so nearly like those in the Bureau of Internal Revenue that the above illustration will serve for both of these departments.

Treasurers care for governments' funds. — When government funds are collected, someone must take care of them. This is the work of treasurers. They receive the funds, care for them, pay them out on order of the auditor, and render exact accounts for every penny expended. The office of treasurer is much sought after, for it requires little training and often brings much prestige. County, city, and state treasurers are elected. The pay runs from a few hundred dollars a year in small villages to many thousands in large cities and states.

The head of the Treasury of the United States is an official of great importance. He has much to do with planning the way in which revenue can best be raised. He is appointed by the President and receives $15,000 a year. Under him are all the other financial workers of the United States government.

Auditors and comptrollers are valuable checks on activities. — Auditors and comptrollers are necessary in every

type of government. They must examine every account, every bill, and every claim. These officers should be skilled accountants. In cities, counties, and states auditors are elected to office, and the pay ranges from a few dollars to many thousands. These jobs should therefore be considered in the light of what was said in Chapter XXIII.

The great auditing office of the United States government is known as the General Accounting Office. At its head is the Comptroller-General of the United States, who is appointed for a term of fifteen years and receives $10,000 a year. Under him are forty or more expert accountants and auditors, who are paid from $2,000 to $6,000 a year. They are selected for this work for their experience and fitness.

Clerical workers are as important in governments as in business. — In every division of government financial work — assessing, collecting, keeping funds, and checking accounts — a great many clerical workers are needed. These, however, will be discussed in the following section.

Other Administrative Tasks of Government

Besides the raising of funds, the administrative tasks of government include —

1. Purchasing of materials for governmental use,
2. Selling and leasing government products and services,
3. Employing governmental workers and looking after their welfare,
4. Keeping governments informed of their own activities through systems of records.

These tasks are not essentially different from those of the business man which we examined in Chapters X, XIII, and XVII; but it may be well to point out how the government performs these tasks and to discuss the opportunities arising from them.

Purchasing, selling, and leasing. — Governments are enormous purchasers of materials, supplies, and equipment. Governmental purchases include almost everything from a paper of pins to a $25,000,000 battleship. Food must be bought in great quantities for the army and navy and for the numerous government hospitals and institutions. Fuel is used by every governmental unit. Office supplies and equipment, chemicals and laboratory supplies, building materials — in fact all things that are needed by a business organization — are needed by the government. The methods and the personnel used in governmental purchasing are very similar to those of business enterprise. Both employ purchasing agents, inspectors, checkers, property clerks, and various other employees.

The United States government, which at one time owned all the land in this country outside the thirteen original colonies, still sells some land, but it is the policy of the United States not to sell valuable forest or mineral lands. These may be leased and used under governmental supervision. This work gives employment to a number of real-estate experts, most of whom are in Washington. This work has been mentioned under " conservation."

Cities and other local governments sell water, electricity, gas, and other necessities to the public. This work does not need salesmen, as the prices are usually fixed by law. Many governmental units publish and sell books, maps, reports, and other documents of value to farmers, merchants, professional men, and other citizens. This work calls for writers, printers, and other workers.

As we have seen earlier, one of the main differences between government and business is that governments do not usually do things for financial profit. Governmental selling and leasing, therefore, are only incidental to other

activities, such as the conservation of resources, the giving of information, or the furnishing of some public necessity. Consequently the work of salesmen is not so important in government as in business, and the opportunities are much fewer.

There are many jobs in planning jobs for others. — The selection, hiring, training, promotion, and management of governmental employees is another administrative task which requires the services of special kinds of government workers. In the next chapter we shall see something of how the government selects its employees and looks after their welfare. Here we are looking only at the occupations and opportunities connected with government employment management, or "personnel work" as it is now commonly called.

The government agency which looks after the employment of government workers is usually known as the Civil Service Commission. In the state of Maryland it is called the Employment Department. In the city of St. Louis it is called the Efficiency Board. Whatever the name may be, the work of all these agencies is similar. The United States Civil Service Commission will serve as an example of the activities of a "personnel" agency. This body consists (1926) of three members (two men and a woman) appointed by the President for four years. With a staff of about five hundred examiners, clerks, and other employees, the agency occupies a six-story building in Washington. It is the duty of the workers to classify all of the 550,000 employees of the United States government, to hold examinations and, whenever a new appointment is to be made, to certify the names of those who pass with the highest marks. The commission has twelve district offices in various parts of the country, and 3,000 local examining boards, which pre-

pare and mark examinations for positions in their localities. For example, if a mail carrier were needed in your city, the district secretary of the Civil Service Commission would announce an examination, the local examining board would prepare and mark the questions, and one of the men who passed with the highest group would be appointed.

Counting national, state, and city, there are in the United States between 350 and 400 civil service commissions. All of them require examiners and clerks. Some of them employ psychologists, efficiency experts, statisticians, and other experts to help in the preparation of examinations and the management of the government's personnel. In addition to these, every government department or bureau has an appointing officer who makes appointments, keeps a record of performance, and arranges for promotions, transfers, vacations, and sick-leaves. If the bureau or department is a large one, the appointing officer may have a number of assistants for such work as making out pay rolls, keeping records of attendance and vacations, and investigating the character of applicants. These officials have various titles, such as personnel officer or personnel clerk. In recent years the government has been paying a great deal of attention to the methods of selecting and managing its employees, and the opportunities for personnel workers are steadily increasing.

The government's task of communicating and of keeping itself informed opens thousands of clerical positions. — If you have visited one of the offices in your city hall or courthouse or in the state or national capitol, you have probably seen many men and women working at typewriters, mimeographs, addressographs, and adding-machines. Others were working at large books or ledgers. Others were making notations on cards or putting away papers in filing-cases. They were all engaged in the important work of communi-

cating for the government. Some deal with communications from the government, and others are keeping the government workers informed. Without these workers the service activities would be carried on with great confusion and waste, if at all. In fact government planners send and gather information just as a business man does, and they do it in much the same way. This task of government communication calls for the same work as business communication. (Look carefully at Chapter XVI.)

The more governments undertake in the way of service activities, the more important becomes this task of communication. When a British visitor called at the State Department in 1790, he found that it consisted only of Mr. Jefferson (the Secretary of State) and two clerical assistants. Now clerks form the largest class of government employees. In fact, in the national government almost half of the total number of employees are clerks of one sort or another.

Government clerks are organized like those in business. — These clerks are for the most part grouped into large office forces. For example, one large group of clerical workers in Washington gathers and arranges the enormous amount of data resulting from the decennial censuses. In a large city, hundred of clerks will be gathered in one office to take care of the records pertaining to water supply and water users. The Veterans' Bureau in Washington, D. C., is an excellent example of the kind of work done in a great clerical office of the government. When the World War ended, the government found itself faced with the tasks of caring for thousands of wounded men in hospitals, of educating and training those who were partially disabled, of paying allotments to the families of those who died in war, and of keeping the accounts of almost four million soldiers and sailors who took out government insurance policies. A

force of fourteen thousand clerks was gathered in Washington and they worked in night- and day-shifts for more than two years. In 1919 a special ten-story building covering a quarter of a city block was erected for these workers. Even now, several thousand clerical workers are required to keep the records of this branch of government service.

To describe in detail the work of such an office force would require a large volume. Clerical work in the government is just as specialized as it is in business. Thousands of stenographers, typists, file clerks, messengers, machine operators, and other clerks are found in government offices. The work of these people, whether in government or in business, is practically the same. They deal with different material, but what they need to know before taking a position is not different. There is, therefore, no need to describe again the work of most specialized clerical workers. We can review the discussion in Chapter XVI. Before doing this, however, let us look at a list of some of the clerical positions in the different departments in Washington, taken from a recent report of the Congressional Committee on Reclassification. Notice how similar the types of clerks are to those mentioned on pages 292, 300.

Administrative and supervisory clerical positions
Assessor and appraiser positions
Court clerk and docket positions
Departmental publications and information positions
Fiscal and accounting positions
Mail, file, and record positions
Messenger positions
Miscellaneous clerical positions
Office-appliance operating positions
Personnel positions
Specialized business positions
Supply and equipment positions
Telephone and telegraph operating positions
Typing, stenographic, correspondence, and secretarial positions

A similar list could be made of the kinds of clerical positions in any governmental unit.

Of course, under each of these services there are many special kinds of work. In the mail, file, and record service, for instance, notice how similar is the work of a government file clerk to the work of a file clerk in business. Compare the following description with the one on pages 296, 297:

JUNIOR FILE AND RECORD CLERK

United States Government

Duties:

Under supervision, to assort, arrange, prepare, and file papers, cards, cross-reference sheets, books, samples, or other office records; to extract papers or folders from the files; to charge them on forms prepared therefor, or to make notations thereon; to make out, usually on a typewriter, index cards or cross-reference sheets; and to perform related work as required.

Compare the duties of a government messenger described below with a similar position in business, described on page 293:

JUNIOR MESSENGER

United States Government

Duties:

To run errands and to perform, under supervision, the simplest routine office work; and to perform related work as required.

Examples: Delivering messages, documents, or other papers in an office, or on a bicycle to other buildings; sorting mail; operating an office appliance, such as a sealing machine, a numbering machine, or a mimeograph; assisting in the dusting of desks and the filling of water coolers.

Some people prefer governmental clerical work. — We shall see in the following chapters why some persons prefer government work to any other employment. But aside from the reasons given there, governmental office work attracts some because they like to feel themselves part of a great office force; because the positions are in national or

state capitals or at county seats; and because, in some cases, the material with which government deals is especially interesting to them.

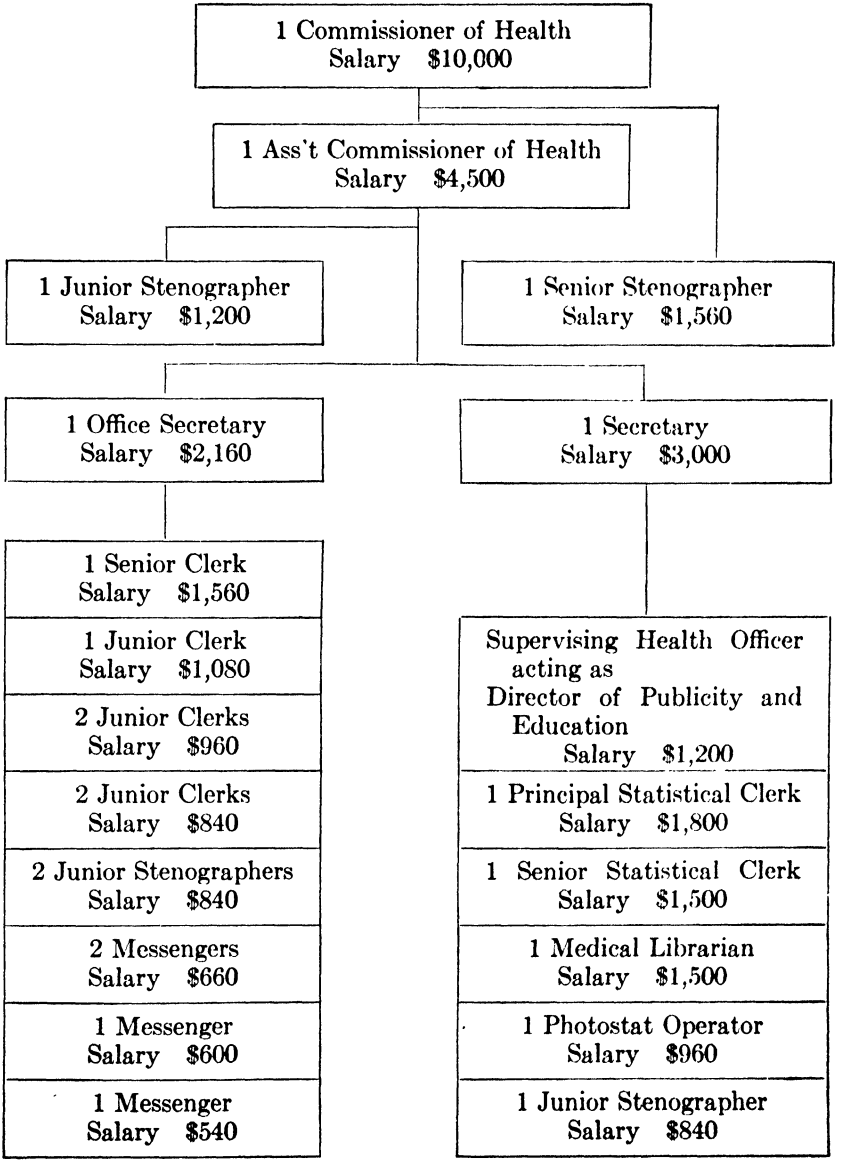
For example, a stenographer might prefer to work for government as a court reporter because of his or her special interest in law or court procedure. A boy or girl who is interested in international affairs might prefer to try for a clerical position in the State Department in Washington, rather than a similar position in business. Governmental units sometimes require finger-print classifiers. This work is not essentially different from other kinds of sorting and classifying, but the material dealt with has a fascination for some people. The same might be said of certain other governmental clerical jobs, such as Dead-Letter Clerk, Information Clerk and Guide, Fish-Distribution Clerk, Military-Stores Clerk.

Clerical organization of a government department. — The opposite chart shows the clerical organization of one department in a large city.

QUESTIONS AND PROJECTS

1. Explain the distinction between service and administrative activities of government.
2. What are the chief methods by which governments secure money? Explain or define each.
3. How much is the park in your city worth to you each year? How much are the streets worth? What would you be willing to pay for fire protection if the city did not furnish it?
4. Why is it impossible for governments to collect all the funds they need by securing direct payments whenever services are given?
5. Explain by an illustration the difference between direct and indirect taxes.
6. Ask your parents for examples of fees that they pay or have paid to a government, other than the fees mentioned in the text.
7. Give three examples of business earnings of government.
8. Does your town or city government provide water, street-car

DEPARTMENT OF HEALTH



service, gas, or light? If it furnishes any of these, have some member of the class find out at the city hall whether a profit is made.

9. Explain why a government might need to borrow funds.

10. Ask your parents if they have ever loaned money to the national government; to the state; to the city.

11. When governments borrow, they usually give the lender a contract called a bond or a certificate of indebtedness. Compare this with the contract given when a business man borrows. (See Chapter VIII.)

12. What is a budget? Ask your parents if they use a budget in handling family finances.

13. Why is it important for governments to keep their budgets balanced?

14. Have one or two members of your class learn the names of your county assessor, collector, and treasurer. (Any county or township officer can give this information.)

15. Why do all governmental units need assessors or appraisers? Why do they need collectors? Why do they need treasurers? Explain something of the work of each of the officers mentioned.

16. What are the advantages and the disadvantages in the work of such an officer as a vocation?

17. Explain why the assessment and the collection of funds for governments call for the work of a great many clerks?

18. "One of the main differences between government and business is that governments do not usually do things for financial profit." What arguments can you give for and against governments trying to make profits?

19. Why do you think governments need a centralized "personnel" agency to take charge of employment?

20. Give as many reasons as you can why you would like to be a government clerical worker. Why you would not like to be such a worker.

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part V.

CHAPTER XXVI

GOVERNMENT SERVICE AS A CAREER

The last two chapters set forth the principal activities of government (not including the political activities, which were described in Chapter XXIII), and mentioned some of the opportunities arising therefrom. In this chapter we shall deal in a more general way with government service. We shall talk about —

1. How government positions are obtained.
2. Working conditions in government service.

How Government Positions Are Obtained

Unfortunately, governments do not always look for the best qualified men and women to fill its important positions. This is because the political parties try to control not only the policy-making offices described in Chapter XXIII, but all other governmental positions as well. In the early days of our national government there were not many government employees, and it was customary to let them hold their jobs as long as they did their work faithfully. In the first forty years of our national government, there were very few removals from the government service. But when Andrew Jackson was elected, after a bitter political fight, he declared that the men who had helped elect him were entitled to rewards; he turned out hundreds of federal officials and employees and appointed his friends in their places. One of his followers, Senator Marcy of New York, justified this on the ground that " To the victors

belong the spoils of war." The practice of turning out government employees and appointing members of the victorious party has since been referred to as the "spoils system." As political parties grew stronger, with more and more workers to reward, the practice became firmly established, until most of the high offices of federal, state, and local governments and many of the lower positions were filled according to the spoils system.

EXTENT AND DISTRIBUTION OF GOVERNMENT EMPLOYMENT

The exact number of persons who work for governments in this country has never been ascertained. A committee of the Governmental Research Conference in Cleveland in 1922 estimated that there were in the service of federal, state, and local governments at that time at least 2,300,000 persons, not including public school teachers, the army, or the navy. If we add public school teachers, the army, and the navy, the number is well above three million. This means that in every seventh family in the United States one member is working for the government.

HOW MANY PEOPLE MAKE A LIVING BY WORKING FOR THE GOVERNMENT?

It is natural and perfectly proper for the President, the governor of a state, or the mayor of a city to appoint as his chief assistants men of the same political beliefs. The President needs as heads of departments and as ambassadors to foreign countries men who are in sympathy with his policies. But there is no good reason why a Republican or a Democratic President should appoint only Republicans or Democrats as mail carriers, clerks, and technical men.

The spoils system reigned almost without check from 1830 to 1883, and during this time the federal service became more and more corrupt and incompetent. Men were known to pay as much as $5,000 for a position in the revenue service with a salary of only $1,500, for the opportunity to steal

government funds. When the Collector of the Port of New York was removed in 1838, his accounts were found to be short by a million and a quarter dollars.

The classified and unclassified services of the federal government. — In 1883, Congress took action to end the spoils system in the federal service. It passed the Pendleton Act, which created the United States Civil Service Commission. Federal employees henceforth were prohibited from being active in politics, department heads were forbidden to remove employees for political reasons, and only those were to be appointed to government positions who had passed a competitive examination. This act was intended to substitute a "merit" system for the "spoils" system. The merit system applied at first only to thirteen thousand positions.

Our national government is the largest employer in the world. The number of federal officials and employees, not including the army and the navy, is slightly less than 550,000. The yearly salaries total more than $800,000,000.

OUR NATIONAL GOVERNMENT AS AN EMPLOYER

New York and Massachusetts followed the example of the federal government in 1883 and 1884. Other states to adopt the merit system were Illinois, Colorado, New Jersey, Ohio, California, Maryland, and Wisconsin. The merit system spread more rapidly among the large cities because of the larger number of employees and the greater disadvantages of having such services as the police, fire, and health departments subject to politics. More than three hundred cities have the merit system, including all of the twenty largest cities.

That part of the government service in which employees are selected by examination is generally known as the classi-

fied service. The classified service of the federal government has grown steadily since 1883 until in 1925 it included about 440,000 of the 550,000 federal positions. The other 110,000 constitute the unclassified service and include

United States judges
Ambassadors and ministers
Consuls
Heads of departments and bureaus
Postmasters of all but the smaller cities
Collectors of customs and internal revenue
District attorneys and marshals
Commissioners of immigration
Surveyors general of land offices
Deputy collectors and deputy marshals
Prohibition enforcement officers
Commercial attachés
All unskilled laborers

We may well glance through Chapter XXIV again, and review the positions in the classified service.

Merit *versus* spoils system in states and cities. — The number of positions in the classified service of a state government depends upon the civil service law of the state. In California, for example, six thousand employees are classified and nine thousand unclassified. In Massachusetts the division is about equal.

THE APPROXIMATE NUMBER OF STATE EMPLOYEES IN A FEW OF OUR STATES

California	15,029
Illinois	11,228
Maryland	3,467
Massachusetts	6,900
New York	32,131
Wisconsin	4,101

Such a table as the following shows us how workers for one great state are divided.

Office Service	
Clerical group	
Clerks	249
Stenographers	292
Typists and Dictaphone Operators	30
Messengers	20
Miscellaneous	8
Specialist group	
State Officials and Paid Commissions	38
Officials and Commissioners (no regular salary)	141
Accountants	20
Actuaries	4
Attorneys and Judges	14
Engineers and Draftsmen	49
Examiners	32
Librarians	44
Proofreaders	3
Scientists	17
Secretaries	27
Secretaries (Executive) and Deputies of Commissions	27
Statisticians	6
Miscellaneous	18
Field Service	
Assessors of Incomes	47
Conservation Wardens	59
Engineers, Professional	44
Forest Rangers and Park Superintendents	11
Gauge Readers	37
Inspectors:	
Board of Health	13
Dairy and Food	22
Department of Agriculture	15
Department of Engineering	9
Fire Marshal	5
Grain and Warehouse	20
Industrial Commission	15
Deputy Oil	36
Public Instruction	13
Institutional Agents	14
Special Treasury Agents	27
Supervisors of Dairy Tests	16
Miscellaneous Inspectors	8
Institutional Service	
Penal, Charitable, and Educational Institutional Heads	26
Institutional Deputies and Assistants	8
Attendants	250
Bakers, Cooks, Chefs, and Stewards	41
Cell-House Keepers	8
Family Officers and Teachers	11
Foremen and Supervisors	24
Guards	58
Housekeepers	7
Laundrymen	3
Matrons	51
Nurses	24
Physicians	15
Teachers	1,155
Teacher Guards	4
Miscellaneous	7
Maintenance Service	
Superintendents and Administrative Heads	10
Capitol Guides	2
Elevator Operators	13
Engineers	58
Engineers' Helpers	11
Firemen	21
Foremen	29
Foremen, Farm	6
Gardeners, Farmers, etc.	11
Janitors	80
Laborers	21
Police and Nightwatchmen	27
Skilled Trades	112
Teamsters and Draymen	5
Telephone Operators	4
Miscellaneous	3
Laborers (Unskilled)	548
Total	4,138
Deducting those enumerated two or more times	37
Net Total	4,101

DISTRIBUTION OF ALL EMPLOYEES IN STATE SERVICE IN WISCONSIN[1]

[1] From *Your Business*, a publication of the Wisconsin Civil Service Commission.

We have seen that the larger cities of the United States all use the merit system. In New York, for example, 98.3 per cent of the city employees are selected in this way; in Chicago, about the same percentage; in Philadelphia, 89 per cent; in Los Angeles, 87.4 per cent; in Seattle, 97.4 per cent; in Buffalo, 60 per cent; in Newark, 96.6 per cent. The table shows the kinds of workers in one city.

Attendants, janitors, messengers, etc.	3,042
Clerical and general	6,986
Engineering and architectural	3,008
Uniformed fire department	5,014
Institutional positions	4,279
Laborers	8,440
Legal positions	332
Medical and nursing	2,567
Nautical and ferries	584
Uniformed police force	10,861
Street-cleaning force	5,901
Superintendents and inspectors	3,547
Skilled trades and occupations	3,388
Teachers	27,683
Executive positions	775
Total	86,397

TYPES OF JOBS AND APPROXIMATE NUMBER OF EACH AVAILABLE IN NEW YORK CITY

Large cities are greater employers of men and women than are state governments. The above list shows that the number of employees of the city of New York approaches ninety thousand. The state of New York employs only 32,572 people. The city of Chicago employs more than thirty thousand people, while the state of Illinois employs only 11,228.

How to secure a civil service position. — It is not so difficult as some believe to get into government service. In every government where the merit system is in force there is an agency, usually known as the civil service commission, which is in charge of the selection of employees for various

Women in Government Work (1926)

In the federal civil service at the present time[1] there are about 80,000 women employees, or about 15 per cent of the total. The largest number of women employees is in Washington, D. C., where they number nearly 25,000, as compared with about 37,000 men. In state and local governments the proportion of women is probably about the same.

Aside from positions as secretaries, stenographers, typists, file clerks, telephone operators, and other clerical workers, women hold many important executive positions.

In the postal service outside Washington, D. C., there are over 25,000 women, including a number of postmistresses with salaries of $3,300 to $6,000.

In the public health services of the national, state, and municipal governments, women occupy such positions as chiefs of child hygiene work, chiefs of laboratories, and heads of vital statistics. There are also many visiting nurses, school nurses, and public health nurses.

Recently many women have been appointed to positions in the law-enforcing branches of government. Several women have been made United States District Attorneys, and women lawyers are found in the Bureau of Internal Revenue, the Bureau of Customs, the Land Office, and the Patent Office. Mrs. Annette Adams, of California, was the first woman Assistant Attorney-General. Mrs. Mabel Walker Willebrandt has been made Assistant Attorney-General in charge of the enforcement of the Eighteenth Amendment, one of the most important posts in the Department of Justice.

In the United States Department of Agriculture, women serve as chemists, micro-analysts, plant pathologists, bacteriologists, and laboratory assistants. Women scientists are also found in the Bureau of Standards, the Division of Customs, the Bureau of Internal Revenue, and city and state health laboratories.

Recently women have entered the foreign service. Lucile Atcherson was the first woman to be appointed to the diplomatic service. Margaret Goldsmith and A. Viola Smith have been appointed Assistant Trade Commissioners in Berlin and China, respectively.

Other positions held by women include that of Assistant Director of the United States Mint; Collector of Internal Revenue at Chicago; Deputy Commissioner of Internal Revenue in charge of three kinds of taxes; and member of the United States Civil Service Commission.

positions. All commissions issue reports, announcements, and other data describing the opportunities in government service. It is an important part of their duties to give information to anyone interested in entering public service. A letter or post-card to your local or state civil service commission or to the United States Civil Service Commission will bring you interesting information about the government service as a career. If you request, your name will be placed on a mailing list and you will receive an announcement of the next examination to be held in which you might be interested.

Announcements of examinations. — Announcements of civil service examinations are always published in some newspaper and are posted on the bulletin board of the commission in the city hall, courthouse, or state capitol. Usually they are posted also in public libraries, employment bureaus, schools, and colleges. Examinations for the United States service are announced in the post-offices of the country. Recently the United States Civil Service Commission has been announcing its examinations from radio stations throughout the country. A sample of a notice of examination posted by the state of Maryland follows:

THE STATE OF MARYLAND

NOTICE OF EXAMINATIONS

The State Employment Commission of Maryland will hold examinations on the following dates to establish lists of persons eligible for appointment to the following classes of positions in the state service. The usual starting salaries are as indicated.

FEBRUARY 23, 1924

Junior Stenographer	$660 to $1,080 a year
Senior Stenographer	900 to 1,500 a year
Junior Typist	600 to 1,000 a year
Senior Typist	900 to 1,200 a year

MARCH 22, 1924

Patrolman, Maryland State Police (Mounted)	$900 a year
Patrolman, Maryland State Police (Motorcycle)	900 a year

NON-ASSEMBLED EXAMINATIONS

Public Health Nurse	$1,500 to $1,800 a year
Cottage Master and Matron	900 a year and maintenance
Hospital Attendants	$360 to $540 a year and maintenance

Latest date for filing applications, February 29, 1924. Apply to the State Employment Commission of Maryland, 22 Light Street, Baltimore, telephone Calvert 2200.

Applications. — One who wishes to take a civil service examination must secure and fill out an application blank, which asks for information about age, height, weight, education, and experience. An application blank can be secured from the civil service or employment commission of your state or the efficiency or employment board of your city as the case may be. If the application is accepted, the applicant is notified to appear on a certain date for examination.

Examinations. — The following statement made by the United States Civil Service Commission gives us a good idea of how the federal government selects its employees:

An examination does not necessarily require that one sit at a desk and answer questions on geography, solve problems in arithmetic, and spell words. It means submitting one's qualifications to measurement for a particular kind of work, whatever the method of measurement may be. It may be a written question-and-answer test on certain subjects, it may be proving certain experience and accomplishment by credible evidence, it may be exhibiting necessary personal qualities in an interview, or a combination of any or all of these.

In many private plants laborers are selected by a foreman who looks over a crowd about the factory gate and picks out the most sturdy-looking

of the lot. The Government in most of its plants has a physician examine the applicants, who discovers many defects and communicable diseases the private foreman would never see. Besides, the strength of the applicant is tested. It is believed that the Government's plan is better.

In many private offices the selection of stenographers is based on the applicants' claims as to what they can do, or statements of others as to what they have done. The Government gives them notebook and typewriter and asks them to demonstrate their ability by actually doing a stenographer's work. It is believed the Government's way is better.

The private employer selects an employee to enter his chemical laboratory as a *junior chemist*, to learn the business, on his record at college and his personal reputation. The Government considers not only his record at college and his reputation, but puts appropriate questions to him in order to determine what he actually learned about chemistry while in college. It is believed that the Government's method is better.

The private employer generally selects an employee to fill a high-grade, technical, professional, scientific, or administrative position by inquiring into his training, his experience, and his actual achievement, among those who have employed him or been associated with him. The Government follows the same general method as the private employer. It requires no written question-and-answer test, but determines suitability by weighing evidence of training and achievement. It is believed that the Government's method is better because the Government is more careful in setting its standards as to training and experience required and more rigid in following them, and especially because the private employer's field of selection is usually limited to persons who are known to him, or known to those with whom he comes in contact. The Government makes known its needs to technical schools that train the kind of employee desired; to associations that include the particular type of technical or scientific men in its membership; and to the general public through bulletins and press and radio announcements; thus reaching an incomparably wider field from which to make selection.[1]

Certification. — The names of all who have passed the examination are arranged in order of rank. This list is known as the *eligible list* or *employment list.* It is usually posted on the bulletin board of the commission, and each candidate is notified where he stands on the list. When a vacancy occurs in any government office, the head of that

[1] "How the Federal Government Selects Its Employees in the Classified Civil Service." *Form 2466*, U. S. Civil Service Commission (Jan., 1925).

office requests the Civil Service Commission to certify the names of eligibles. In the federal government and most other governments, the three names from the top of the list are certified, and the appointing officer may select any one of the three and offer him the position. In Illinois and a few other places, only one name is certified, and the bureau head must appoint this one.

Preference to veterans. — Soldiers and sailors who have been honorably discharged are nearly always given preference in appointments to government service. If the former soldier or sailor can pass the examination, he is given extra credit for his military service; sometimes he is placed at the head of the list.

Positions are divided among states. — In the United States service in Washington, D. C., appointments are apportioned among the states and territories according to population. For example, if New York has one tenth of the population, it is entitled to one tenth of the employees in Washington. The chance of appointment to such positions is better for residents of the states distant from Washington, because their quotas are seldom full.

Training for government service. — Because of the fact that most government positions in the past have been filled under the spoils system, until recent-years no particular attention has been paid in the United States to training for government service. In England, France, and Germany, where the government service has been considered an honorable career, there are many excellent schools devoted to training men for public service. Many of the graduates of Oxford and Cambridge take civil service examinations for positions in India or the colonies or in the home government. In Germany, practically all government officials have to go through a special course of training in universities or technical schools.

There are in the United States a number of so-called "civil service schools." You can see their advertisements in magazines in which they guarantee to prepare you for a government job in three or six months or less, sometimes in a few lessons. Most of these schools have simply gathered together a lot of questions used in past examinations. The students memorize the answers to these questions, but there is no assurance that any of them will be used in the examinations they enter. The training they receive from such schools is of very little value.

Commercial schools may prepare stenographers, typists, machine-operators, bookkeepers, etc., so that they are able to pass civil service examinations with high marks. But men and women with merely commercial-school education are seldom appointed at entrance to the highest positions in civil service.

In recent years, a number of colleges and universities have given special attention to training for the government service. The College of the City of New York gives a number of courses designed to train men for positions in the service of New York City. The University of Michigan gives special courses in government administration. Some municipal colleges, such as Cincinnati, Dayton, Toledo, and Akron, train men and women for the public service.

The National Institute of Public Administration in New York City was organized in 1921 to train men and women for public administration, especially in city and state governments.

A number of schools give courses designed to prepare young men for the foreign service. The Georgetown School of Foreign Service in Washington, D. C., has trained a large number of men for the consular service and foreign trade positions. (For training in professions, see Chapters XIX and XX on "Professions.")

Working Conditions in Government Service

An objection frequently made to government service is that salaries are lower than in business occupations. It is probably true that the higher officials of the government — engineers, scientists, technical employees, and executives — are underpaid as compared with those of business. Employees holding lower positions, such as clerks, stenographers, and laborers, are probably better paid than similar employees in business. A committee of Congress reported in 1919 that the compensation of government employees in Washington had not kept pace with the cost of living, and that this was the cause of serious discontent and a large turnover among the best-trained government employees. Since then, Congress has made substantial increases in the salaries of most of these employees.

Within the last few years there has been a decided movement to pay larger salaries to government employees in the various states and cities where the merit system is in effect. Investigations in Chicago, New York, and other large cities have resulted in new schedules of compensation, particularly for the high-grade positions.

We have seen illustrations of wages in earlier pages of this and the two preceding chapters. But we must remember that schedules of wages become out of date rapidly and vary greatly in different parts of the country. The most important thing to keep in mind is that a letter to the United States Civil Service Commission in Washington, or to your city hall or state capitol, will bring up-to-date information about salaries and opportunities in any particular kind of job in which you are interested.

Promotion in government service. — An objection sometimes raised is that promotion in government service is slow.

Many men spend their entire lives in the government service without rising more than two or three ranks. But this may he said of any large business where thousands of employees are engaged in similar work. There are many men and women who have entered the government service as messengers, clerks, or assistants and have been promoted to positions of high rank.

In all cities and states having the merit system, a great deal of attention is now being paid to opportunities for promotion. When a vacancy occurs, the law usually requires that it be filled if possible by promoting someone already in the service. In the New York City police force, every higher position has been filled by promotion. The same is true of the fire department. In the health department, the director of child hygiene, the director of the food and drugs bureau, and most of the other high administrative officers were promoted from the lower ranks. Practically all the engineers who have designed the greatest system of bridges in the world and the greatest water-supply system in the country received their positions by promotion.

An example of promotion to a high position in government service occurred in February, 1925, when President Coolidge appointed a mining engineer as governor of Alaska at a salary of $7,000. This engineer had entered the government service in 1909 at a salary of $1,320 a year, and reached the position of supervisor of surveys in Alaska, under the General Land Office.

Removals and retirement in government service. — One of the chief advantages of working for the government is the security of the employment. The merit system has made government employment practically permanent during good behavior; no other is so dependable. In times of industrial depression, large corporations and business men are

forced to lay off thousands of employees; but panics and depressions affect the government relatively little. Government work goes on through good times and bad times. Its employees are seldom laid off, and are not discharged except for incompetency or serious misconduct.

The security of government employment, together with comparatively low salaries, accounts for the fact that many old men and women are found in the government service. Often they stay long after they have become feeble, crippled, or even blind or deaf. To enable these superannuated employees to retire, and to open their positions to younger persons, many of our governments have established pension systems. The pension system of the federal government, established in 1920, provides for the retirement of employees at ages varying from sixty-two to seventy years according to the type of work done. The highest pension paid is $720 a year.

Other working conditions in government service. — The government has the reputation of being a generous employer. Employees in Washington are given a vacation of thirty days each year with pay. Other government employees get at least two weeks. An equal period is ordinarily allowed in the event of sickness. Government hours are usually eight hours a day; in Washington the working day is seven hours. This gives employees opportunities to study in the numerous universities and law schools in Washington, or to improve their leisure otherwise. Government work is seldom hard, discipline is not severe, and working conditions are usually pleasant.

Professionalization of government service. — The idea is growing that experts are needed as much in government as in business, and gradually some branches of government service are coming to be regarded as distinct professions.

Government engineers, scientists and technicians, and physicians and surgeons are proud of their professions and are careful not to allow their positions to be controlled by politics. Even where there is no merit system in force, this strong professional spirit has made the government service efficient and desirable in these particular branches.

Perhaps the most interesting example of professionalization in government work is the position of city manager. The managers of the more than three hundred American cities that now have the manager plan of government regard their work quite as professional as that of doctors or lawyers.

Trade unions have also done much to improve the efficiency of government service, to improve working conditions, and to overcome the influence of politics. Some of these unions have high standards of workmanship and are as proud of their occupations as professional men are of theirs.

A summary of the disadvantages and advantages of working for government. — In summing up the disadvantages and the advantages of working for government, we have in mind only the positions under the merit system. The disadvantages of the spoils system are so clear that they need not be discussed.

The chief disadvantages of government employment may be said to be (1) the slowness of promotion; (2) the routine nature of much government work, which dulls initiative and destroys ambition; (3) the fact that the highest positions are often filled by politicians and are therefore not open to promotion; and (4) the bad reputation of government service among business men. The first two of these objections arise from the great size of the government; the same objections are found in any large business where a great many employees are doing the same kind of work. The last two are due largely to the fact that the government service

has been under the influence of the spoils system and in many cases is still controlled by politics.

In spite of these objections, there are many decided advantages in working for the government. We have pointed out above that no other employer is so dependable and few are so generous with their employees. In many cases government employment furnishes valuable training and experience. This is particularly true of the scientific work offered by the Bureau of Standards, Weather Bureau, Bureau of Chemistry, Geological Survey, Naval Observatory, Department of Agriculture, and other departments where scientific research is carried on.

Many men and women find their greatest satisfaction in the feeling that they are serving the public. This is what keeps many highly qualified men and women in the government service. A physician might earn twice as much money in private practice as in the public health service, but might find less satisfaction in his work. A city engineer might receive a much larger salary working for a corporation, but he prefers to design the city's bridges and water works.

QUESTIONS AND PROJECTS

1. Explain the rise of the spoils system.
2. Explain the rise of the merit or classified service.
3. Explain clearly the difference between the spoils system and the merit system.
4. Make as clear a statement as you can of the weaknesses of the spoils system from the standpoint of good service.
5. Make as clear a statement as you can of the advantages of the merit system from the standpoint of good service.
6. Why do some politicians still like the spoils system?
7. What proportion of the United States government service is now under the merit system?
8. Has the merit system made the most advances in national, state, or local governments?

9. What has the merit system done to make government work more satisfactory to those employed?

10. Just what are the steps to take if one wishes to get into government service?

11. What is a Civil Service Commission?

12. Have some member of the class write to the city, state, or federal Civil Service Commission and ask for information about some government civil service position. Have him show the answer to his letter to the class, as an example of the kind of position that may be obtained through the Civil Service Commission.

13. Notice the newspaper and the public library bulletin for a few days to see if there are any announcements of civil service examinations.

14. Have some member of the class visit the post-office and report if any announcements of civil service examinations are posted there.

15. What do you think of Wisconsin's slogan, "The Best Shall Serve the State"?

16. What are some of the methods used in civil service examinations?

17. What is meant by certification in civil service employment?

18. What is meant by preference to veterans; division among states?

19. What ways can you suggest of preparing for work in government service?

20. Are there any courses in your school that you think would be useful in getting you ready for any kind of government position?

21. Have some member of the class write to one of the schools mentioned in the text and ask for information about training for government work. Also have another member of the class write to the state university of your state. Have them report upon the information received, or place it where it will be available for use by the class.

22. Look through the lists of types of employees given in this chapter. Note the types of work about which we have studied before. In so far as government uses the same kinds of workers as those found in business and the professions, the choice is merely a matter of whether one wishes to work for government, for business, or for himself. Explain this statement.

23. What proportion of the workers in the federal government are women? What proportion of the federal workers in Washington, D. C., are women?

24. Why do you think women are being given more important positions in the United States government service?

25. Compare the pay mentioned for certain government occupations with the pay mentioned for similar occupations in some of our earlier chapters.

26. How is promotion obtained in government service, and what are the chances of such promotion?

27. What is meant by professionalization of government service?

28. Make a list in two columns: On one side place the disadvantages of work for government; on the other, the advantages of work for government. Make a similar table for work in business, and also one for work in the profession that seems most interesting to you. Go through all three lists, one after another, with these thoughts in mind:

a. How should I fit into this kind of work?

b. What salary could I obtain?

c. What are the chances of securing promotion to the sort of position I should like?

d. How much training is required and what would it cost me?

e. What would be the quality and value of my service?

f. What is the general satisfaction of this kind of work for me and for those for whose satisfaction I have regard?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part V.

PART V

HOW TO GET READY

CHAPTER XXVII

LOOKING AT OURSELVES

We have finished our study of the way in which the work of the world is done. We have finished our study of the opportunities that are open for us in finding a place in the world's work. Let us review the steps that we have taken. This will help us to see more clearly how to get ready for a place in society.

1. We learned that the first important question to consider is " what makes a satisfactory life? " This depends upon:

a. Our own ability
b. Our luck
c. Our friends
d. What we make of opportunity
e. Our knowledge of the world around us

2. We found that *knowledge of the world around us* counted so much in making a living that we spent a great deal of time in learning about that world. We did this by studying:

a. Our own community
b. The economic community

In studying the economic community we learned that it is made up of the activities of all the people who work. We learned that all these activities are organized by private enterprisers, working through forms of business, and public enterprise, working through various forms of government.

3. We decided that we could best study the economic community by studying the work done by these organizers.

4. We found that some private enterprisers are in work that is called " business " and that others are in work called " professions." First, we studied business. We looked at the tasks of the business man. We tried to see what we should have to do if we should ever go into business ourselves. We tried to see what kinds of jobs are open in each phase of the business man's work.

Next we studied the professions. We tried to learn what every profession does, its importance, and what one must do to find his way into it.

5. Then we looked at organization by public enterprise. We saw that public enterprise works through various forms of government. We next looked briefly at the form taken by most of our American governments. With the understanding thus gained of what governments are, we were ready to observe the good things we try to do for ourselves through government and the opportunities there are for becoming part of our government or working for it.

6. Now we are ready to see what we can do to get ourselves ready for Making a Living.

In getting ready for making a living the first and most important thing for us to realize is the extent to which *success depends upon ourselves.* It does depend very much upon each of us.

In our study of medieval economic life we saw that a boy who lived in those days might have very little to do with his own success. If a boy were born on a manor, the son of a villein, he would probably become a villein himself. If he were the son of a craftsman in one of the towns, the chances were against his getting into a vocation

different from that of his father. Custom and tradition were strong forces in determining what he might do.

Now all this is changed. In our country we pride ourselves on the fact that we are free. We have the *right* to make of ourselves what we will. There is nothing of which Americans are more proud than that boys and girls from poor families have often risen to places of wealth, and that boys and girls from unknown families have often risen to places of the greatest importance. The life of Abraham Lincoln typifies America's proudest ideal of liberty and opportunity.

Freedom brings responsibility. — But all this freedom puts responsibility squarely upon our own shoulders. A king's son did not need to make himself a ruler; all he had to do was to live. A villein's son did not need to plan to become a farm laborer. But *we must plan.* Our planning and our work to achieve what we plan will be the greatest forces in bringing us the kind of living we believe will be satisfying for us.

What kind of living we want. — In Chapter I, we saw that first of all we must think about what kind of living we want. That is true also in making our plan for getting ready. It would be well to read again Chapter I, for the kind of living we want will have much to do with how we make our plans.

What kind of person each one of us is. — The second important step in making our plans is to consider very carefully what kind of persons we are. We have had to do that to some extent in thinking about what kind of living we want; but we must also do it in terms of our abilities. Can we do anything and everything we want to do? Are there some vocations that would make greater demands on mental and physical abilities than we can meet? We are not all equally

able. People are somewhat different. Let us see what some of these differences are in an effort to judge ourselves.

Individual differences. — There are many ways in which all persons are alike. We have no difficulty in telling a person from a kitten or a horse or a tree. But there are, nevertheless, many differences in individuals. We differ in the things we know and in the amount of intelligence we have. We differ in the amount of energy we have, in our interests, in industry, in coöperativeness, in our physical health and strength, and in other ways.

Some of our differences are easy to explain. In part, they grow from *differences in sex.* Boys and men, for example, are nearly always larger and stronger than girls and women of the same age. This enables them to do certain kinds of work for which women are not adapted. *Differences in race* also make individuals differ. We think of the southern European races as emotional and artistic; of the northern Europeans as steady, firm, and deliberate. Negroes seem to have racial traits of being good-natured and light-hearted. *Differences in ancestry* likewise affect all of us. Although biologists disagree somewhat as to just how we are the product of our ancestors, it is certain that all of us have traits for which our parents, grandparents, or other of our ancestors are responsible. In addition to these three causes of differences is the fact that each of us has been raised in a *different environment.* Although we may have differed from one another because of sex, race, and ancestry, we have been made still more different in some ways by the fact that our surroundings have varied. The important feature of all these differences for us is that they have great influence in determining the kinds of work that we can do best.

Some important ways in which we may differ. — Some differences are of little consequence. On the other hand,

there are certain differences which are very important in making a living. It will be worth our while to list some of these and try to see how we differ for better or for worse from some other people in respect to these qualities. Let us consider the following: physical fitness; interest; energy and industry; social-relations ability; mental ability; control of ourselves; and a special ability.

Physical fitness. — Physical fitness means, of course, our condition of health. Health, as we saw earlier, is the most important single thing in the world to each of us. As a way of measuring our health, and perhaps of improving it, let us each make the following self-tests:

HEALTH TEST NO. 1

1. Am I in good health?
2. What is the condition of my teeth?
3. What is the condition of my eyes?
4. Do I get sufficient exercise? Recreation? Sleep?
5. How much of each of the above do I need?
6. What knowledge of hygiene would be useful to me?

HEALTH TEST NO. 2

Excellent health and vitality	Average health and vitality	Poor health and vitality
1. ———	1. ———	1. ———
2. ———	2. ———	2. ———

Under each heading in a blank like the above, list the names of two persons who have the qualities indicated. In the column where you would place yourself write your name.

Interest. — Success in work, especially where we are not under the direct supervision of somebody else, depends in great measure on interest. Interest is our enjoyment of the thing we are doing. If we are interested we have zeal

or zest for work. With it come enthusiasm, cheerfulness, and — if other conditions are at all favorable — happiness. Some people seem able to find interest in almost any kind of work; others in no kind of work; but most of us find certain kinds of work much more interesting than others. It will be important to us in making a plan for our lives to attempt to find work in which we have real zest. Try the following test for interest:

INTEREST TEST

Great interest in his occupation	Moderate enjoyment of his occupation	Finds his work unpleasant
1. ————	1. ————	1. ————
2. ————	2. ————	2. ————

In a blank like the above, fill in the name of some person you know who would fit under each heading. Do this (*a*) for all kinds of work you have ever done and (*b*) for whatever kind of work you liked best. Write in your name where you think it belongs.

Energy and industry. — Energy seems to be largely the outgrowth of health. Where people are well there seems to be almost no limit to the effort they are able to expend. When energy is coupled with interest in work, the result is usually a marked degree of industry.

ENERGY AND INDUSTRY TEST

Very energetic and industrious	Fairly energetic and industrious	Listless in work
1. ————	1. ————	1. ————
2. ————	2. ————	2. ————

In a blank like the above fill in the names of two persons under each heading. Where would you list yourself? Write in your name.

Social-relations ability. — By social-relations ability we mean our ability to get on well with others; to like people and be liked by them; to respect those who deserve it and to be respected by them; to work with people not only because we need the money but in such a way that we find pleasure and satisfaction in the activity itself. Of course social-relations ability takes many forms. We find it in play as well as in work; in our homes and at school as well as on a job. We can test ourselves and perhaps improve ourselves in our social-relations ability in all of these places. Work out the following test of yourself for social-relations ability. It may be well to work it out several times — once in terms of home life, again in terms of school, again in terms of play, and another time in terms of work.

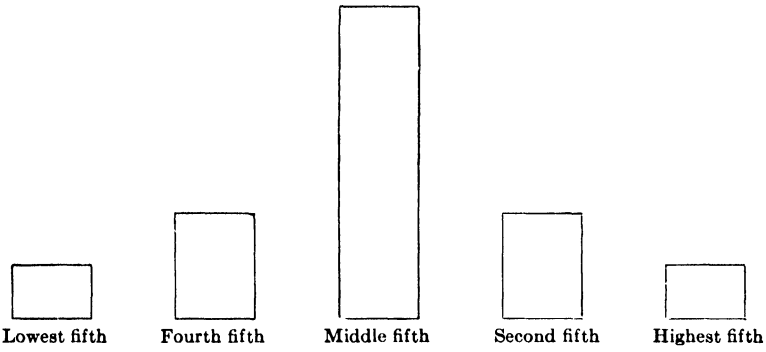
TEST OF SOCIAL-RELATIONS ABILITY

Fine social-relations ability .	Average social-relations ability	Poor social-relations ability
1. ————	1. ————	1. ————
2. ————	2. ————	2. ————

Classify two persons whom you know under each of the above headings. Write in your own name where it belongs, using separate blanks for the different social relations suggested above.

Mental ability or general intelligence. — Mental ability is such a general ability that it is very hard to measure. Of course all of us sense the difference between a genius and an imbecile, and we know that most of us belong somewhere

between these two classes. The best students of this subject say that if we divided grown-up people into five classes according to their general intelligence we should find about as many in each class as are shown by the following diagram:



Many tests and measuring-sticks have been worked out for measuring intelligence. Most of them need to be used under the direction of some trained person before we can put much confidence in them. If there are any intelligence tests given in your school, it would be very interesting to have someone give them to your class. Each one of us, however, can make one sort of intelligence test himself.

A General Intelligence Test Blank

High-grade intelligence	Average intelligence	Low-grade intelligence
1. ————	1. ————	1. ————
2. ————	2. ————	2. ————

Think of intelligence as meaning partly ability to learn, as shown by average grades in class work; partly ability to get along with teachers and fellow students; partly ability to make plans and to live up to them. Measure

according to these standards some of your acquaintances of about your own age and enter the names of two of them in each of the columns of a blank like the one on page 570. With which two of these acquaintances would you class yourself?

Control of ourselves. — Since each of us must work out his own life plans, it is important that he have as much control over himself as possible. It is, therefore, worth while to try to see where we would rank ourselves in that respect. Control over ourselves involves at least these things:

a. Some knowledge of ourselves.

b. Some knowledge of the world into which we are trying to fit ourselves.

c. Ability to analyze ourselves, to make up our minds fairly about what we are, and not to believe that we are better than we are or more capable than we are.

d. The ability to make a plan of action for ourselves and to stick to that plan until we are convinced that it is a good or a poor one.

TEST OF SELF-CONTROL

Excellent self-control	Average self-control	Poor self-control
1. ———	1. ———	1. ———
2. ———	2. ———	2. ———

In terms of *a*, *b*, *c*, and *d* above, list two persons whom you know under each of the headings of a chart like the one above. Then try to place yourself with one group of these people.

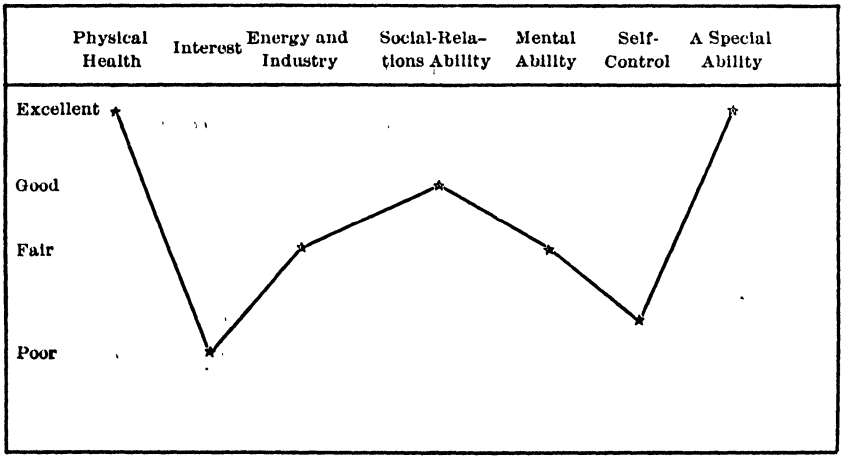
A special ability. — It may be that we have already discovered in ourselves some ability in which we seem to be better than the average person. If so, this may be a very important discovery. It may be that we have a real talent for music, an unusual ability in public speaking, a surprising

skill in drawing, an interest and skill in mechanics or in some other field. Any unusual ability that we have is well worth watching closely, for our greatest success and satisfaction in life may come through following our strongest characteristic. If we have such a trait, let us make a self-test of it also.

TEST OF OUR SPECIAL ABILITY, IF ANY

Extremely marked special ability	Marked special ability	Ability below the average in some line
1. ———	1. ———	1. ———
2. ———	2. ———	2. ———

See if you can think of two persons you know who would fit under headings like the above. Where would you place yourself? Write in your name.



HOW WE CAN DIAGRAM OUR ABILITIES

In making a picture of ourselves like this, we should remember that there are many other important traits that we could consider, such as courage, integrity, and perseverance.

A picture of our personality. — Each one of us is now ready to make a picture of himself, based on the tests just made. On page 572 is what we will call a personality chart of John Smith. When John made this chart he put a dot opposite " Excellent " and under " Health " because he was in excellent health. His interest in his work was poor, and so he put a dot opposite " Poor " and under " Interest." He believed he possessed marked musical ability, and so he rated himself high in special ability. In like manner he rated himself on all of the qualities we have been testing ourselves upon. Then by connecting these dots with a line, he saw how he looked as a person. Make a similar picture of yourself. (If the members of a class compare their pictures, they will see how great individual differences are.)

QUESTIONS AND PROJECTS

1. Is it truthful to say that success depends very much upon ourselves and our own efforts? Why?
2. Is it true that a boy or girl now has more responsibility in finding out how to make a living than a boy or girl had in medieval days? Explain why.
3. Freedom has brought responsibility. Explain what this means. Give an illustration of how lack of freedom carries no responsibility.
4. What are some of the more important motives that may guide us in deciding what kind of living we want?
5. In getting ready for making a living, why is it important for us to decide what kind of persons we are. Give three examples of pupils in your school whom you think naturally adapted for certain vocations.
6. It is sometimes said that we are all very much alike, but that the slight differences are the things by which we know one person from another. Why is it that Chinese or people of any other unfamiliar nationality all look alike to most Americans? Are they really all alike? How do they differ as people?
7. In what ways are the pupils in your school similar? Make a list of the ways in which some differ from others. Can you give reasons for any of these differences?
8. What ones of the differences you have listed under question 7 do you think might be important in deciding a vocation?

9. Since you have made a "picture of your personality" as asked for above, now make another one. This time use the qualities mentioned in the text and a number of other qualities that you think are important. Compare your "personality picture" with that of two or three members of your class. What characteristics that you have graded low in your personality do you think you will be able to improve if you wish? By what methods can they be improved?

10. Does it seem to you that there are some vocations for which you are particularly ill adapted? Particularly well adapted?

SUPPLEMENTARY READING

Lyon and Butler, *Vocational Readings*, appropriate selections from Part VI.

CHAPTER XXVIII

PLANNING OUR EDUCATION

Most of us enter school without thinking very much about what school is. Certainly we do not think much about the different kinds of schools and what each might do for us if we called on it for help. We just " go to school."

There are many kinds of schools. — The truth is that there are many kinds of schools. Each of these is more useful for certain things than for others. Schools are a great deal like a workman's tools — some can be used for one purpose and some for others. This fact becomes especially true after one has passed through the grade schools. Let us notice what some of the more important kinds of schools are and what sort of help we can get from each of them. Here is a list:

The Grade Schools
The High Schools
Colleges and Universities
Professional and Technical Schools
Graduate High-School Technical Courses
Evening Schools and Continuation Schools
Business Colleges and Private Trade Schools
Correspondence Schools
Schools within businesses, usually called Corporation Schools

Let us now see what each of these is and how we may count upon it to help us.

The grade schools. — All of us know what the grade schools are, whether we have been in the public schools or in

a parochial or some special form of private school. We are familiar with what is done there. The most important help that the grade school gives us is in teaching us to read and write. This enables us to communicate with others. Having learned to read, we can draw on all the knowledge of the past as well as on the new knowledge that is coming into the world every day. The most important single thing that any school can do for us is to teach us to read, for reading is the key to all other knowledge.

The grade school does more than this for us; it gives us a knowledge of arithmetic, geography, and history. What we learn of these subjects in the grade school furnishes us no small knowledge of the world around us. It furnishes also the basis for going on to other work that will give us a much broader view of the world in which we live.

The high school. — The high school has often been called "the people's college." Our good modern high schools do offer us as much as many colleges offered a generation or two ago. The high school can help us in five ways:

1. It can help us greatly in planning to fit ourselves into the work of the world by giving us a much broader knowledge of the kind of world in which we live than we secured in the grade school. It will give us this through courses that guide us in reading history, fiction, and other books. It will do it through courses describing more completely the work of business men, professional men, and government. It will give us a better knowledge of our world by courses in geography and physiography. It can introduce us to all of the great sciences, such as physics, botany, biology, and chemistry.

2. It can improve our ability to communicate and read. It does this by teaching us how to use our own language better and how to use foreign languages. It does it by

teaching us something of how to find and use books in which is stored the knowledge of the past.

3. It can prepare us for further work in any field that we may choose. High-school graduation is required for admission to any college and will admit students to many professional schools.

4. It can give us special knowledge and skill in some kind of work that leads directly to a job. For example, we may learn enough about bookkeeping to secure a position in an office; about typewriting and shorthand to secure a place as a stenographer; about a trade (in some high schools) to make it easier to find a job in a manufacturing plant.

5. It can widen our circle of friends and make us acquainted with many persons who, as time goes on, will become important in the community and increasingly valuable and enjoyable to us as friends and associates.

Colleges, professional schools, technical schools, and universities. — All of these types of schools are alike in that they represent a form of education or training beyond the high school. In a *professional school*, as the name suggests, the training is for one of the professions, such as medicine, law, dentistry, or architecture. *Technical school* is the name usually given to a school that trains for engineering. *Colleges* give advanced training, but of a less specialized sort. They put their emphasis upon language, literature, history, social sciences, and general courses in science, rather than on applied or vocational work. *University* is the name given to an institution that includes a number of advanced schools. Harvard University, for example, includes among others a medical school, a law school, and a college. The University of Chicago has a college, a law school, a medical school, a business school, a divinity school, and so on. Nearly all of the state universities include a number of

Does Education Pay?[1]

Does education really pay in dollars and cents?

If it does pay, how much does it pay, and when?

Investigations show that a high-school education is worth $33,000 to the graduate.

The cash value of a college or technical-school training is bigger. The diploma from an institution of higher learning is worth to the recipient $72,000.

Consider first the untrained man. He goes to work as a boy of fourteen and reaches his maximum income at the age of thirty. This maximum is, on the average, less than $1,200 a year. Since his income is largely dependent on physical strength and manual dexterity, it falls off at the age of fifty or earlier to a point below the level of self-support. More than sixty out of every hundred untrained workers are dependent upon others for support at the age of sixty.

The man's total earnings from fourteen to sixty are about $45,000. The significant fact is that not more than $2,000 is earned during the four years that would have given him a high-school education.

Second, take the high-school graduate. He goes to work at eighteen, having lost the opportunity to earn the $2,000 which the untrained man earned during this period. But starting at eighteen, he passes the maximum income of the untrained man in seven years, rises steadily to his own maximum of $2,200 at forty years, and continues at that level for the rest of his active life.

His total earnings from nineteen tc sixty are about $78,000. The $33,000 more than is earned by the untrained man represents the cash value of a four-year high-school course.

Third, consider the college or technical-school graduate. His permanent earnings begin at twenty-two, although a considerable amount may be earned during the college course. By the time he is twenty-eight, his income equals that of the high-school graduate at forty; and his income continues to rise practically without a break.

Since his income is dependent upon his mental ability and training constantly improved by practice, it increases instead of diminishes with the years. The college or technical-school graduate's average income of $6,000 at sixty years is often surpassed.

His total earnings from twenty-two to sixty, not including anything earned during the college period, are $150,000. The $72,000 more than is earned by the high-school graduate represents the cash value of college or technical-school training.

[1] Adapted from a study by Dean E. W. Lord printed in *Commerce Magazine* (University of Wisconsin).

advanced schools. The University of Wisconsin, which is a good illustration, has a college, a school of engineering, a medical school, a law school, a school of agriculture, and other schools.

We must remember that some of these advanced schools require more than high-school graduation for admittance.

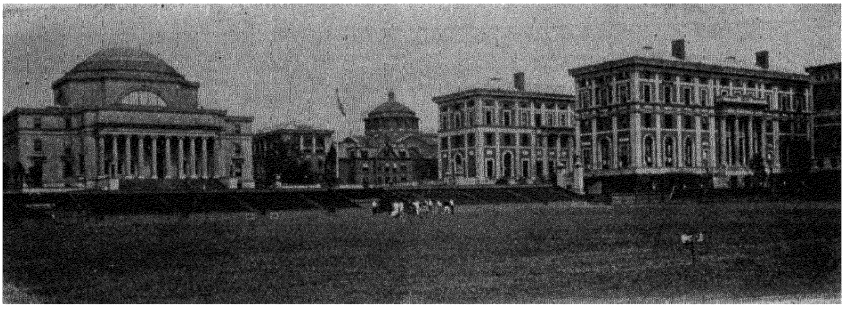


Official Photograph, U. S. Army Air Service

WELLESLEY COLLEGE — ONE OF THE LARGER COLLEGES FOR WOMEN IN THE UNITED STATES

A number of law and medical schools require at least two years of college work for admission. The same requirement exists for admission to some engineering and collegiate business schools. Harvard University requires graduation from college for admission to its school of business. In nearly any special line of work there are " graduate schools " in

the universities where intensive study can be carried on for some three years beyond college graduation. This study usually leads to what is called the " doctor's degree." Such preparation is necessary for one who wishes to do his best work in college or university teaching.



COLUMBIA UNIVERSITY

IS THE COLLEGE MAN WANTED IN BUSINESS? [1]

"The college man long has been needed in business. We see him now appearing in office and bank, in factory and store. He will be the business man of the future.

"Business needs trained minds, high standards, and constructive ability. It needs and richly rewards real leadership. It does not care *per se* whether the young people coming into its employ are rich or poor, college trained or not, but it does ask for and seek constantly those who have the grit, the courage, the character, and the ideals of personal, institutional, and national success.

"I commend casting your lot with a large and creditable organization, because these organizations continually offer openings for the beginners and have so many varied lines of activity that promotion to the right man is not too far ahead. Mercantile institutions esteem college men, for big business has its eye open for intelligence and latent ability. In such institutions good positions are not hard to find — they are hard to fill."

[1] Adapted from *Business and the College Man*, by James Simpson, President of Marshall Field and Company.

WHAT COLLEGE GRADUATES DO [1]

Accountants	902
Architects	220
Authors	1,156
Bankers	1,803
Business Executives	7,335
Chemists	1,294
Engineers	4,122
Farmers	3,439
Journalists	1,711
Lawyers	7,630
Merchants	3,887
Ministers	14,967
Missionaries	2,114
Physicians	5,353
Social Service	1,816
Teachers	28,679
College or University Professors	4,303
College or University Presidents	533
Housewives or Managers of the Home	23,415
Miscellaneous or Unknown	25,114
Total	137,579

The occupations and professions of more than 137,000 men and women who have been graduated from college.

Graduate high-school technical courses. — Very often boys and girls while going through high school take general courses. Then, if they cannot go on to college, they wish to learn some specialized subject such as bookkeeping, filing, stenography, or typewriting as quickly as possible. To meet this need, some high schools have established graduate courses for one year or even for less time. In these courses the student takes nothing but one or two special subjects and thus learns them quickly. There are several Chicago high schools where such courses are now given

[1] From data compiled by A. C. Marts.

quite successfully. Some other cities are also establishing such courses. Is there one in your high school?

Evening schools and continuation schools. — Unfortunately a great many boys and girls find it necessary to leave school before they finish high school. Many must drop out



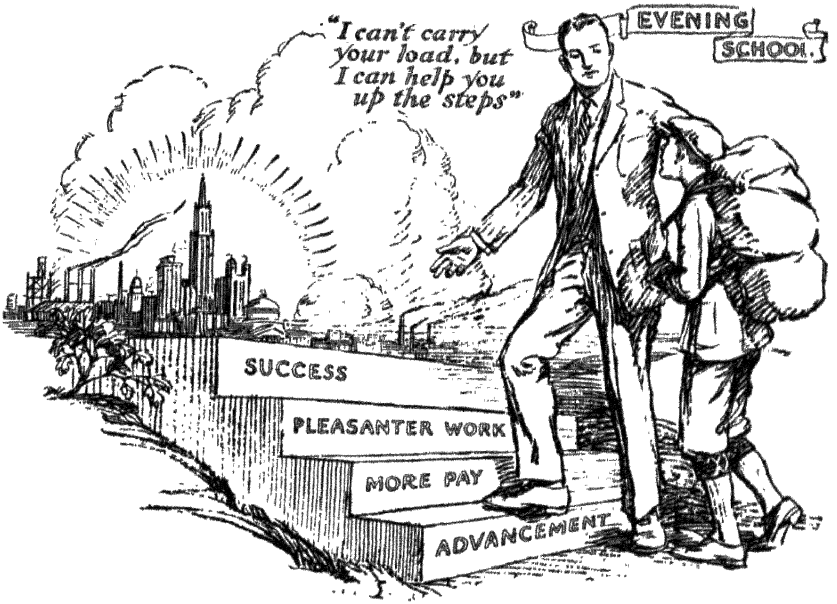
Photo by Brown Brothers

AN ENGLISH CLASS IN A NEW YORK PUBLIC NIGHT SCHOOL

even before they enter high school. Such boys and girls should never think of themselves as through with school. There are several kinds of schools ready and anxious to give them great help.

One of these is the evening school. Evening schools are now open in either the high schools or the grade schools of very many cities. They offer courses that fit right into the

need of people who are at work during the day. For example, a boy or young man may be working in a machine shop. He is quite likely to find an evening-school course that will offer just what he needs to help him to advance. A boy or



BESIDES THE EVENING SCHOOL, WHAT SCHOOLS CAN HELP CARRY THE LOAD?

a girl may be working in an office at bookkeeping work. An evening-school course will give either a much better knowledge of his work and better opportunity for promotion. The same is true no matter what the work may be.

SCOPE OF WORK IN EVENING SCHOOLS IN ONE STATE [1]

Academic	Citizenship
General — common branches	Civil service
course, reading, spelling	Income tax

[1] Edward A Fitzpatrick, "Adult Education," *Wisconsin's Educational Horizon* (State Board of Education, Madison, Wis., December, 1921), Vol. IV, No. 2, Part 2, pp. 9–10.

- Academic — *Continued*
  - Language
    - English
    - French
    - Spanish
  - Mathematics
    - Algebra
    - Arithmetic
    - Business arithmetic
    - Shop mathematics
    - Trigonometry
  - Penmanship
  - Physiology
  - Spelling and penmanship
  - Science
  - Social law
- Commercial
  - General
  - Accounting
  - Bookkeeping
  - Business English
  - Commercial law
  - Shorthand
  - Typewriting
- Art
  - Applied art
  - Architecture
  - Arts and crafts
  - China-painting
  - Drawing
  - Interior decoration
  - Needle art
- Home economics
  - Cooking
  - Dietetics
  - Drafting patterns
  - Home nursing
  - House decoration
  - Knitting
  - Lace-making
  - Sewing
- Related trade
  - Blue-print reading
- Related trade — *Continued*
  - Mechanical drawing
  - Slide rule
- Trade and technical
  - Auto-mechanics
  - Cabinet-making
  - Carding
  - Concrete
  - Drafting
  - Electricity
  - Engineering principles
  - Estimating
  - Forging
  - Freight traffic
  - Gas engine
  - Heat treatment
  - Heating and ventilation
  - Machine shop
  - Massage
  - Millinery
  - Paper-chemistry
  - Pattern-making
  - Pharmacy
  - Printing
  - Salesmanship
  - Sheet metal
  - Shop
  - Show-card writing
  - Steam engine
  - Telegraphy
  - Trade analysis
  - Welding
  - Woodwork
    - General
    - Carpentry
    - Cedar chests
    - Manual training
    - Roof-framing
- Miscellaneous
  - First aid
  - Gymnasium and physical education
  - Music

Another form of school that can be of great help to the boy and the girl who have dropped out of regular day school is the continuation school. Such schools have been established at public expense in a great many of the states. In some states pupils may choose whether they will attend or not. In many states, however, anyone who drops school before the age of fourteen (and in some states before sixteen) must attend continuation school for a period of from two to four years. While the laws in the states differ somewhat, these questions and answers given by the Chicago Board of Education will give us a good idea of what the continuation school is and what it can do for us.

Q. What is a continuation school?

A. A part-time school for boys and girls between fourteen and eighteen years of age who have left the full-time school to go to work.

Q. Must all working boys and girls attend these schools?

A. Yes. Wherever such schools are open, working boys and girls between the ages of fourteen and seventeen must attend.

Q. What boys and girls need not go to continuation schools?

A. Those who go to full-time schools, and those who are graduates of a four-year high-school course.

Q. Must working boys and girls who are graduates of the eighth grade go to continuation school?

A. Yes.

Q. Are working boys and girls who go to evening schools excused from attendance at continuation schools?

A. No.

Q. If boys or girls lose or quit their jobs, must they go to school?

A. Yes. They must go either to full-time school or to continuation school.

Q. What is the purpose of the continuation schools?

A. To give working boys and girls, as nearly as possible, the opportunities enjoyed by others who remain in the full-time school.

Q. Do the continuation schools teach trades?

A. No. They are not trade schools. They aim to acquaint the children with the rudiments of several trades or occupations, helping the children to decide upon the kind of work for which they are best suited.

Q. Wherein do the purpose and methods of the continuation school differ from those of the full-time school?

A. The continuation school gives constant thought to both the present job and the possible future job of the boy and girl. The present job is the starting point for the vocational instruction. The possible future job serves as a goal.

Q. Is vocational training regarded as the principal problem of the continuation school?

A. No. The greatest value of the continuation school is the opportunity afforded the working boy and girl to secure that general education and training that will fit them to fill their place in the community in which they live. The vocation is one of the elements to be taken into consideration.[1]

Business colleges and private trade schools. — Suppose that a boy has finished high school and worked for a year or two at some job. Perhaps the work is not very satisfying, and he feels that he would do much better if he had more technical skill in some field such as typewriting, stenography, telegraphy, plumbing, or mechanics. There are private schools that offer courses of this sort for a price. Those schools that offer courses in commercial work, such as typewriting, stenography, bookkeeping, and telegraphy, are usually called *business colleges*. Most of these schools accept students at almost any age, but those with higher standards require as much as a high-school education.

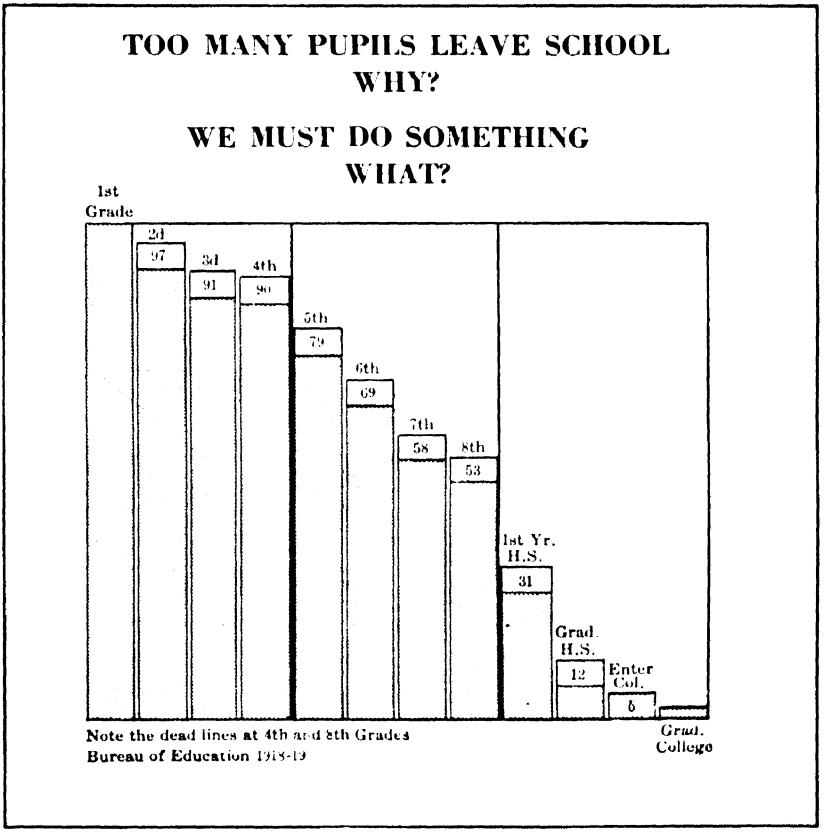
Schools that teach trades such as automobile repairing, dressmaking, millinery, barbering, beauty-culture, and window-trimming are generally called *trade* or *industrial schools*. There are a number of these schools in all the larger cities.

The Y. M. C. A. is also an agency that offers training in many types of work.

The best business colleges and trade schools are very good and will give a student a good training quickly. Many of

[1] *Public Continuation Schools* (pamphlet published by Board of Education, City of Chicago). Adapted.

them, however, are not very satisfactory. A student who is planning to take a course in one of them should seek good advice before choosing his school. Perhaps his former school principal will be the best person with whom he can



consult. These schools usually give evening work and part-time or full-time day work. If one can afford the time, it is almost always better to give full time to the study for a period of a few weeks or months rather than to drag out the course over a much longer period of evening work. Boys

and girls who must quit school early should remember that there are such agencies ready to help them.

WANTED

MEN AND WOMEN TO TRAIN FOR HIGH-PRICED JOBS

Last year over three thousand of our pupils reported salary raises that averaged 95 per cent increase per person. In every instance the student felt that his work in our school had been largely responsible for his promotion.

We make an effort to meet the specific needs of each student. For particulars concerning our business training courses address

Department 576,
Home Study College

One must be careful in buying a course from a correspondence school. Some schools offer helpful courses, while others are not careful to see that their students are really fitted for the work they are taking, or that their courses are well planned and presented. Not all correspondence schools are so good as their advertisements lead readers to believe.

Correspondence schools. — A great many persons who have stopped their regular school work add to their education through correspondence courses. If one chooses his correspondence work well, it is sometimes very useful. One needs to be careful indeed, however, in deciding to take work by correspondence. Some correspondence courses advertise to do much more than they can do. They often also sell courses to students who are not prepared to take them satisfactorily. For example, they may sell a course in law to a man who cannot read legal language intelligently. The result is that the student who has spent his money drops the course without receiving much value. Some of the best correspondence courses are those offered by state universities and other established universities that are full day schools as well. Correspondence courses are given by some such

schools. Before one takes any correspondence course he should get the advice of someone well acquainted with school matters. He would also do well to write to the state university of his state, or to some other well-known university, tell what education he has had, and ask whether he is ready to profit by the correspondence course he proposes to take.

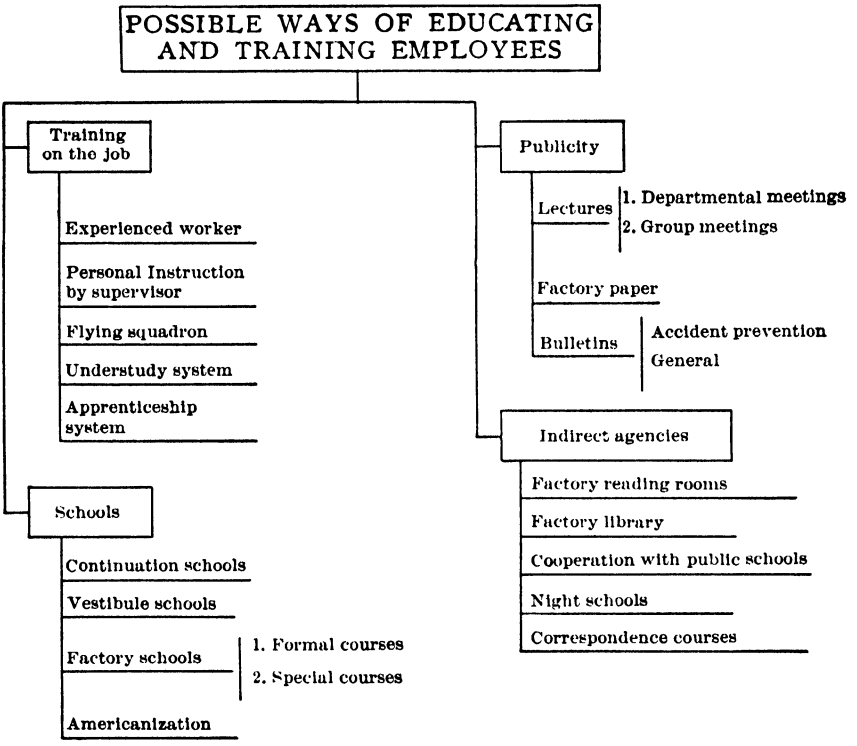
Schools within a business. — A great many manufacturing companies, wholesalers, retailers, banks, and other businesses have learned that the persons who come to work for them have not been taught everything that would be useful. They have therefore established schools within their own businesses. A general name for these schools is Corporation, or Company, Schools.

There are several kinds of company schools. Manufacturing companies sometimes take boys and train them for trades. An example of this is the apprenticeship system of Brown & Sharpe Co., described on page 221. Besides training for manual work, a company school may give courses in office work, salesmanship, advertising, or any kind of work in the business. Sometimes company schools train employees for only a few weeks. Sometimes new employees go to school for a year or more.

Sometimes the company school is for college or high-school graduates only. Sometimes a company school is for all new employees. Sometimes the meetings of the company school are held during time allowed from work hours. Sometimes the meetings are in the evening. Sometimes the company gives correspondence lessons. Sometimes it sends some of its men and women to business college or university or high-school evening courses. Sometimes, as in the case of the banks in most of the larger cities, the companies combine and have a school to which any bank employee may go. The American Institute of Banking, which

has a division in most large cities, offers a long list of good courses to employees of banks.

In some cities, such as New York and Boston, the department stores have joined with the high schools and specialized



VARIED INTERESTS OF THE DIRECTOR OF TRAINING AND EDUCATION[1]
This chart shows the numerous agencies utilized for the training and educating of employees.

in training people for sales work. Boys and girls in such cities may go to the public school and then work in a store and be taught in a company school for alternate two-week periods. In some cities — for example, Cincinnati — there

[1] Used by permission from Scott and Clothier, *Personnel Management* (A. W. Shaw Company).

are such coöperative courses in office work. Are there any coöperative courses in your school?

The importance of company schools. — These corporation or company schools are very important, because no two concerns carry on their business in the same way. Therefore no matter how long one goes to school there are some things about a business that he cannot learn. These he must learn after he has gone to work, and business houses find that schools are a good way to teach some of these things. If boys and girls in school would learn this, they would not be too anxious to master details about a business before they leave school. Such details can best be learned afterward. But general knowledge of our economic community, knowledge of how to express oneself, knowledge of the books that contain useful information, and knowledge of sciences can best be had while one is in regular school work.

How to work out a plan to use schools. — Nothing is cheaper to get than education, and nothing can be sold at a higher price through the rest of one's life. Few things, if any, in themselves give one more satisfaction. Therefore everyone should make a plan to use schools as best he can. To make such a plan he should —

1. Make up his mind to stay in school as long as possible.

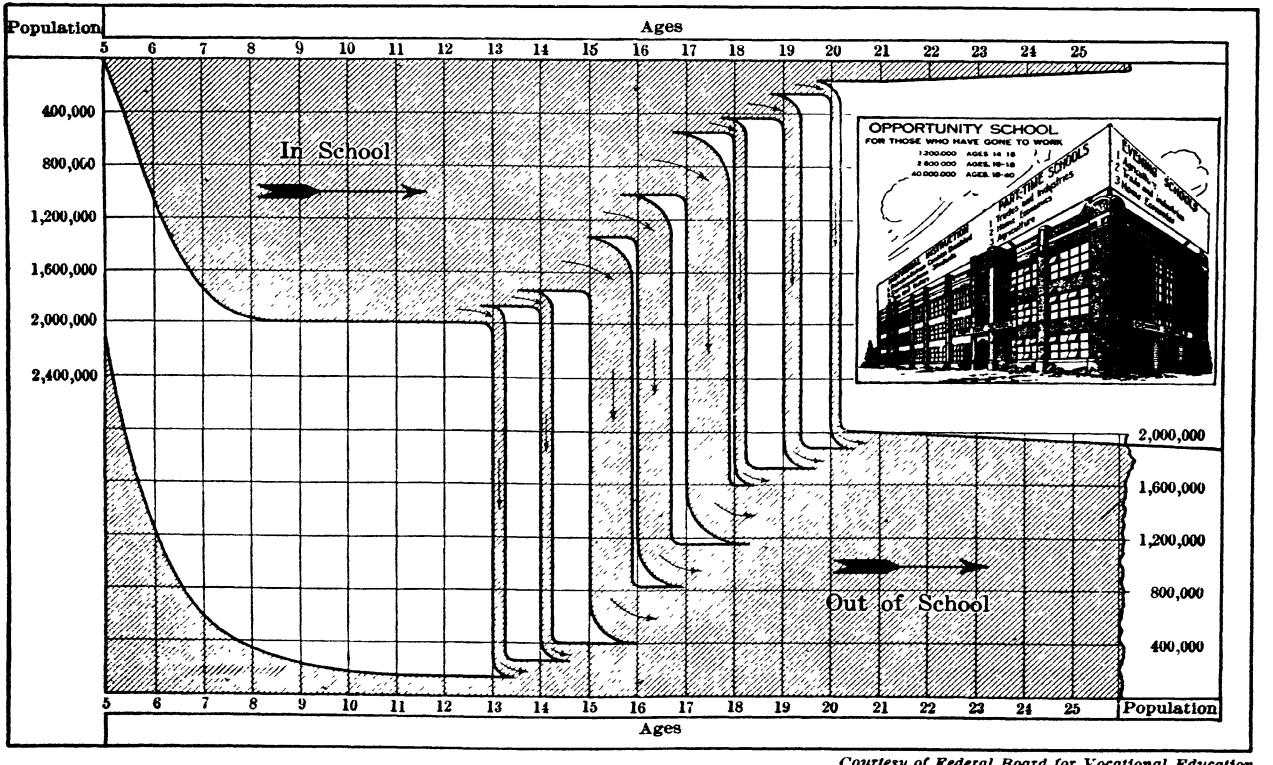
2. Select those courses while in school that will be of most use to him in going on to the next higher step if he can plan to go on. If he cannot go on, he should select those courses that will give him the most general knowledge about the kind of work he wants to undertake.

3. Plan near the end of his school work to take courses in special subjects that may help him directly in getting a job. He should remember that *it may be much more important to take general courses while in school than to take*

technical courses. Company schools may teach him how to do the clerical work of his job or how to work at a bench or a machine. Evening schools, continuation schools, a business college, or a trade school may help him get a better job. But the best time to get general knowledge about the world in which one lives is while one is in the regular full-time school. And such knowledge is important in knowing what kinds of work there are, what each kind is like, and what any job really means.

4. He should make up his mind to make use of other schools if he leaves full-time day school. He should think carefully of what use the business college, the trade school, the evening school, the continuation school, the correspondence school, and the company school may be to him. When he is at work, or before taking a job if possible, he should ask whether the company has a school or will do anything to help him get more education. When he is at work he should think carefully just what he needs to help him advance and just what kind of school can best aid him outside of working hours.

Plans have to be remade. — Of course all of us often remake our plans. A freshman in high school may read this while thinking he must leave school at the end of the year and must make his plan accordingly. Then he may find out that he is able to finish high school and perhaps to go to college. This will change his educational plan. Or a boy who had been expecting to go to college may have to drop high school at the end of his second year to help his family. He will remake his plan. The fact that we must sometimes remake plans need not stop our making them. Making and remaking plans will help us to see of what use the many kinds of schools can be to us, and how we can use them in helping us to better, more enjoyable, and more satisfactory living.



Courtesy of Federal Board for Vocational Education

WHEN STUDENTS LEAVE SCHOOL

Notice how pupils begin to drop from "in school" at about twelve years of age until, by the time they are nineteen, nearly all are "out of school." To what may they turn to continue their training?

SOME THINGS TO CONSIDER IN PLANNING YOUR WORK AND YOUR EDUCATION

Grade school enough for	Unskilled labor Poorest office jobs Some skilled labor
High school helpful in	All work in offices All selling work All semi-skilled labor All skilled labor
High school demanded for	All professions Many office positions Many selling positions Many other business positions Many government positions Entrance to all colleges and engineering schools Admission to Annapolis or West Point
College very helpful in	All professions All business tasks All government positions
College demanded for	Entrance to some professional schools Entrance to some engineering schools Entrance to some schools of business Most advanced work in any field Many business and government positions
Evening school Continuation school Business college Private trade school Correspondence school Company school	May help anyone at any time by supplying special knowledge or skill needed. Many college graduates as well as those who did not finish the grades use these schools.

QUESTIONS AND PROJECTS

1. Copy the list of schools given on the first page of this chapter. Find out whether each kind is represented in your town or city. If so, be able to give an example of each. The telephone directory will be helpful in some of this work. You can learn about graduate technical courses from the high-school office.

2. Is it reasonable to say that reading is the key to all other knowledge? Why?

3. Why is it that students who are not planning to go abroad may profit by studying French, Spanish, and other foreign languages?

4. Write a short statement concerning the use of each of the following: arithmetic, geography, history, English composition.

5. What arguments can you make for going through high school? What arguments can you make against going through high school?

6. Put down a list of the main divisions of work or courses in the high school in your town or city, such as the English course, the commercial course, etc. Just what does each of these courses try to train for?

7. What subjects are given in each of the high-school courses? Do your best to think why these subjects are given in these courses. Can you think of subjects that might be added or taken away to advantage?

8. Write a definition of college, university, professional school, and technical school. Where is the one of each of these nearest to your town or city?

9. What arguments can you make for going to college? Why might it be better in some cases to go to a technical school than to a general college?

10. Suppose you were to go through only one year of high school. Make a list of the kinds of schools that stand ready to help you get an education. Show the kind of help that each school could best give.

11. If there are evening courses given by your grade schools or high school, have some member of the class secure a list of the courses given.

12. Is there a continuation school in your town or city? If so, have some member of the class report on the courses offered, the hours of attendance required, and other matters of interest.

13. If there is a business college in your town or city, have some member of the class get some of its advertising literature. What courses does it offer? For what kinds of jobs does it say it prepares people? Look back at the sections that tell about office work (Chapter XVI) and see what the requirements for this kind of work are. See if it is possible for the business college to prepare properly for the jobs it mentions in its advertising.

14. Are there any trade schools in your town or city? Have some member of the class secure advertising matter and report on what these schools say they can do for students.

15. Why must one be careful in buying a course of study from a correspondence school? What are some of the conditions under which such a course might be useful?

16. What is a company or corporation school? Are there any in your town or city?

17. Why is it that a corporation or company school is especially useful in teaching just what one needs to know for a particular job? Why do business houses have schools for their own employees? Do you think it is better for a business house to teach its employees the way in which it wants its work done, or do you think such things should be taught in the public schools?

18. Work out an education plan for yourself. Assume — (1) that you intend to become a physician; (2) that you intend to become a certified public accountant; (3) that you intend to go into business; (4) that you intend to be a stenographer; (5) that you intend to go into office work; (6) that you will enter a profession or other occupation you now think you would like to enter.

19. Fill out a blank like the one below. Apply it to yourself and the occupation which at this time you think you are interested in entering.

BLANK FOR MEASURING REQUIREMENTS AND ONE'S READINESS TO PERFORM _____

[Insert name of profession or occupation here]

Requirements. (Under each division below list the qualities you think necessary for the profession or occupation filled in above.)	In this column grade yourself E for excellent; G for good; F for fair; P for poor. Put a check-mark opposite the educational requirements you lack	In this column note your plan for improvement.
Physical.....		
Personal, mental, and moral.....		
Educational		

BLANK FOR MEASURING REQUIREMENTS AND ONE'S READINESS TO PERFORM *Dentistry*

[Insert name of profession or occupation here]

Requirements. (Under each division below list the qualities you think necessary for the profession or occupation filled in above)	In this column grade yourself E for excellent; G for good; F for fair; P for poor. Put a check-mark opposite the educational requirements you lack.	In this column note your plan for improvement.
Physical		
Good Health.....	F	Physical examination. Exercise one hour each day in open air. Have eyes tested. Be sure to get recreation and sleep.
Strong, supple hands and fingers.....	E	
Mechanical ability..	E	
Good eyesight.....	P	
Steady nerves.....	F	
Personal, mental, and moral		Daily bath. Brush teeth after each meal. Care for fingernails. Force self to keep word rigidly, even in trivial matters. Assume and carry through responsible tasks.
Absolute cleanliness.	G	
Ability to make quick and accurate decisions.....	F	
Reliability.....	G	
Honesty.....	E	
Temperateness.....	E	
Educational		If possible, take general four-year high-school course, in day-time. If not, try to obtain work that will encourage deftness of hands and fingers and attend high-school night classes twice a week. Save money, and enter dental school as soon as possible. Plan to work outside of school if necessary.
Grade school.....		
High school.....		
Three- or four-year dental course.....		

This is the way James White, who wished to become a dentist, filled out his blank.

SUPPLEMENTARY READING

L. S. Lyon, *Education for Business*, especially Chap. XXXII.
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