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Economic Development of the United States

A First Course

BY

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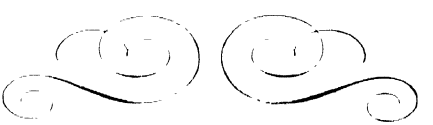

THE MACMILLAN COMPANY
New York

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Published May, 1939
Second Printing June, 1940.

SET UP AND ELECTROTYPED BY J. J. LITTLE & IVES COMPANY, NEW YORK
PRINTED IN THE UNITED STATES OF AMERICA

PREFACE

THIS book has been prepared to be used as a text in an introductory course in the economic history of the United States. At every step in its preparation a conscious effort has been made to write a teachable text, to design a book for students—a book that would enable the student to master the subject matter with a minimum of effort. To that end we have not hesitated to repeat when repetition seemed desirable. The text has been broken into distinct sections. The chapters have been made short and numerous, and they have been divided and sub-divided all with the intention of facilitating the efforts of the student in making progress toward an understanding of the economic development of his country.

For each chapter of the text have been included selections from contemporary writings and documents. Not every good selection could be included; to do so would have lengthened the book unnecessarily. Rather, an attempt has been made to include only selections from generally known and widely accepted authorities, and to limit the length and number of selections. Such a plan has the advantages of supplying essential supplementary readings at no extra cost to the student and of doing it in a way that requires a minimum expenditure of time and effort.

C. M. T.
F. M. J.

URBANA, ILLINOIS
April, 1939

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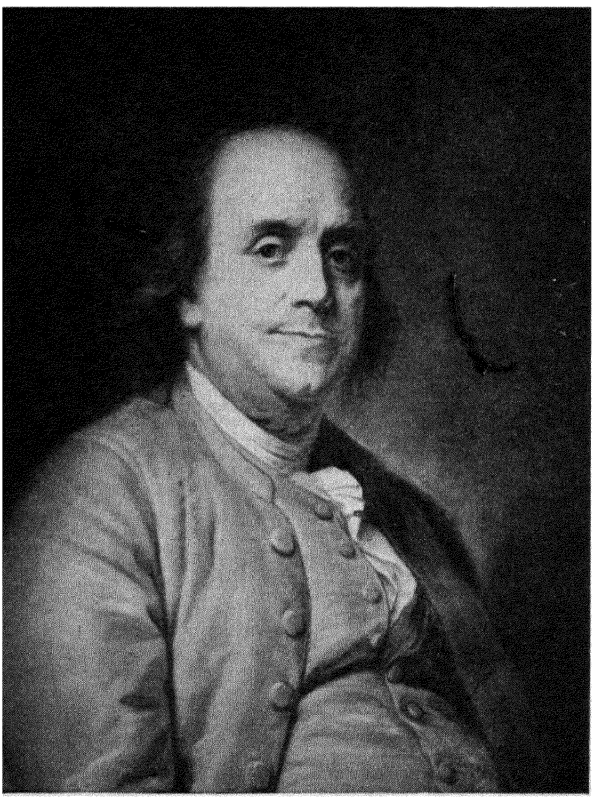
LAYING THE FOUNDATION
1607–1789



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BENJAMIN FRANKLIN

"I represented the American people"

Chapter I

SEEKING OPPORTUNITIES IN A NEW WORLD

THE discovery of America by Christopher Columbus in 1492 and its conquest and settlement by the nations of Western Europe during the centuries that followed, comprise a series of closely related events of the greatest significance. This newly discovered land lay thousands of miles away across an uncharted sea, but its influence on those who had discovered it and on those who took possession of its treasures was far reaching and lasting. The opening up of new trade routes, the exploitation of vast, virgin territories peopled by inferior races, and the opportunities for a fresh start in life, stirred the imagination of the peoples of the civilized world and turned their attention to new and unfamiliar channels of thought and action.

No one escaped this influence. Men borne down by a philosophy that barred their social and economic progress, traders and merchants seeking new fields to conquer, as well as governments hard pressed for revenues and eager to outstrip their neighbors in wealth and power, welcomed the opportunities held out to them by the New World and eagerly set about to grasp them. To state the matter frankly, the Old World developed, after 1492, a complex which to this very day has done much to shape its thought and action—a complex which it pretends to ignore but which it has never been able to throw entirely off.

The history of America, therefore, is something not altogether apart from the history of modern Europe; neither alone tells the whole story. Instead, the two run side by side, each influencing the other, both integral and indispensable parts of a complete whole—the history of the Western World. It is now our task to survey the economic conditions and institutions from which America sprung.

1. ECONOMIC CONDITIONS IN EUROPE

Population and wealth.—Measured by modern standards, the population of Europe at the time of the discovery of America

was small in numbers, its members, generally speaking, illiterate, intolerant, and superstitious, and altogether lacking in what today are regarded as absolute minimum needs in our everyday living.

In 1500 the four powers vitally interested in the New World —Spain, Portugal, France, and England—had a combined population of about twenty-six million. Only France could boast of as many inhabitants as now live within the confines of metropolitan London; taken together they fell far short in numbers of equalling that part of the United States lying north of the Ohio and east of the Mississippi. The population of these countries in 1500 is estimated as follows:

Country	*Population*
Spain	9,000,000
Portugal	1,000,000
France	12,600,000
England	3,700,000

More important even than drawing comparisons of numbers are an understanding of the inward qualities of those peoples and some notion of their attitudes of mind. Illiteracy—using that term in its proper sense—was general. Aside from churchmen, relatively few could read and write; these few were far removed socially from the average man, and, as a consequence, exerted little influence on his habits of thinking.

Along with illiteracy went intolerance and superstition. What the people of any given locality knew about the people outside was meager and generally unfavorable, and, in the main, rested on hearsay, misleading at best—hearsay consciously created by national leaders and kept alive by them under the guise of love for country. Narrow and intolerant, too, were they in matters having to do with religion. Whatever the individual's belief, all others were in gross error and subject, therefore, to persecution and even torture. To make a bad matter worse, superstition prevailed among all classes from the lowest to the highest, its evil influence affecting those governing as well as those being governed.

The European of 1500, whatever his nationality, spent the greater portion of his time and practically all of his effort in getting a bare minimum of food, clothing, and shelter; his main objective in life was to "keep body and soul together."

In England pauperism was already being accepted as a permanent condition. Beggars in large numbers roamed over the country. They, with the light-fingered gentry that infested the cities, combined to offer, for a time, a real menace to the welfare of the nation. This situation the British Parliament recognized by enacting laws against vagrancy, ordering able-bodied men to hire themselves out, and providing penalties for those who refused to do so.

Along with this increase in pauperism ran an increase in wealth—a wealth measured not in human welfare but in the numbers of counters known as money units. From America came a constantly increasing stream of precious metals, most of it finding its way to Spain, with evil effects on industry, thrift, and sobriety. From Spain the greater part of this new found wealth flowed into the other nations of Western Europe in exchange for raw materials and manufactured goods. As it went, it raised prices, thereby depressing real incomes among those already perilously near starvation.

Not content with an increase in the supply of precious metals, the ruling classes resorted to the age-old device of debasing the currency. This they did by calling in the coins in circulation and reissuing them, taking care that they were either smaller in size or baser in content, or, as sometimes happened, both smaller and baser.

Stock of Precious Metals

(Gold and Silver)

1492		$170,000,000
Yearly average production	1493–1544	7,000,000
	1545–1600	19,350,000

Conditions of labor.—Not all Europeans of the lower classes were by any means either paupers or beggars. Tens of thousands of them were able to work and did work. The particular thing they lacked was bargaining power, for as a group they were not organized, and, having no vote, they had little influence in the enactment and enforcement of laws. Lacking this power, they found themselves invariably discriminated against by the government, and, at times, they were at the mercy of unprincipled land owners and city employers.

For the long hours which the laborer worked, he received little pay, and however much he may have deplored his lot in

life, he could do nothing. On one side was government and greediness, on the other, starvation for himself and his family. Laws regulated wages with considerable detail and the conditions under which men worked. In England, for example, unemployed able-bodied men could be forced legally to work on farms. For this they were paid small wages—wages that provided nothing beyond a squalid existence. During the reign of Queen Elizabeth (1558–1603), farm laborers were paid approximately forty dollars a year, while city workers received from twelve to eighteen cents a day, the wage in all instances depending primarily on strength and skill. For the whole period 1400 to 1600, agricultural laborers in England averaged something like twelve and one-half cents a day.

It is to be expected that the living conditions of these workers and their families left much to be desired. Their surroundings were little better than those provided for the draft animals with which they worked. These laborers toiled long and hard, endured exposure, and suffered much. Of security they had none; reserves against the proverbial rainy day were out of the question. Illness or accident meant pauperism or worse for themselves and for those who depended on them.

It is but fair to say that even the more fortunate classes lacked what today seem commonplace. Elizabeth, the Queen, put up with conditions which the modern city worker would not for a moment tolerate. Not one of the many conveniences now taken for granted was known to her. Kings and Princes and Dukes had it in their power to order the lives of their subjects, but none of them ever "switched on" a light, had a tooth extracted without pain, listened to a musical program a thousand miles away, ate a grapefruit, saw a steam engine, or rode at a speed in excess of ten or fifteen miles an hour. Their lot in life was better than that of those whose labors they directed, but, compared with the lot of the modern laborer, it was no lot at all.

Use of land.—Four hundred years ago the principal industry of Western Europe was agriculture; the supply of food was at all times small, and famine threatened with every crop failure. No less significant was the fact that the wealth of the nobility consisted in large part of tillable land and that the acquisition of land and its operation lent respectability, if not prestige, to those who had acquired wealth in trade and commerce.

During the latter part of the Tudor period many large land owners shifted their emphasis from tillage to pasturage. Instead of growing wheat and other grains, they raised sheep. The consequences were many and far reaching, the most important one being a decline in the need for farm laborers. Whereas, formerly many men had been employed in plowing, planting, cultivating, and harvesting, now but a relatively few were needed to look after the pastures and to tend the flocks.

The ease with which land can be obtained in the United States was unknown in Europe, particularly in England. The English farm was much like a trust in perpetuity. Its income could, for the time being, be spent as the owner saw fit; he could not always, however, sell his holdings as against his heirs. Nor were those landed estates broken up with the deaths of the owners. They descended directly to the oldest sons, who in due time would pass it on to their oldest sons, according to the law of primogeniture, thus insuring a direct line of succession in each family.

The typical English farm tenant was a man of some affairs. He dealt directly with the owner, obligating himself to pay the stipulated rent. He in turn hired laborers and provided subtenants with living quarters. His task was one of management and direction. Ordinarily he never became a land holder in the proper sense, for in addition to the scarcity of land there was its high price. To this day, even in America, high land prices and tenancy seem to go together.

In France, where the law of primogeniture was not general, much farming was carried on by many small operators, each owning and operating his own land and each assuming the full responsibility of management. These small farmers never as individuals became strong and rich, but as a group they exercised much power, and in time of stress proved themselves to be the backbone of the nation. There, as in England, the incomes of noble families came directly from the ownership of land.

Something remains to be said concerning the relations of the Church to land ownership. From the days following the introduction of Christianity into the countries of Western Europe, the Church as an organization had owned land. With the passing of time, more and more land had come into its possession, until by 1500 great areas in all of the countries were known as

church lands. The income from these lands the Church used in carrying on its many and varied activities. On this income the Church drew for the support of its cathedrals and chapels, its monasteries and nunneries, its schools and hospitals, and for its asylums and poor relief. No lands in any of these countries were more closely held than were those owned by the Church; and no tendency toward monopoly was regarded by the governing classes with greater disfavor than was this constant movement always in the same direction—a direction that must in time lead to the dispossession of the individual as a land owner.

Merchant and craft gilds.—During the late middle ages and early modern times the urban economic life of Western Europe was in large measure the life of the gilds—merchant and craft.

Of these the first in point of time were the merchant gilds. They were associations of merchants and traders and were formed for the purpose of aiding their organizers in their business activities. With their growth came new opportunities and new responsibilities. United, these merchants found it possible to do easily what no one of them individually could possibly do alone. They shared risks on the high seas, built and maintained navies, and, in times of need, gave vital support to the government to which they owed allegiance. Being located in the cities and towns, they in time took upon themselves a variety of public functions not originally intended. Often, in fact if not in name, the gild hall was the town hall, and the members of the gild were the moving spirits in the community. Also, these gilds as organizations assumed responsibilities toward those who dealt with their members as individuals. This responsibility might consist of insuring correct weights and measures and honest representation concerning origin and quality of goods offered for sale.

With the growth of urban centers, another gild came into being, and, in time, it crowded its way to a position of leadership. This was the craft gild.

Unlike the merchant gild, the craft gild, in the heyday of its strength and prosperity, reached back beyond the mere acquisition of goods; it reached back to their fabrication. Instead of being merely an organization formed to make effective the advantages to be gained by merchants acting through cooperation, it was an organization designed to bring the same advantages,

generally speaking, to all those engaged in a business—the owners of tools and raw materials, the operatives working as apprentices and journeymen under these owners, and those who finished the processes of production by finding and supplying markets.

The craft gild was no easy master. It was proud of its place in the social and economic world, and that place it guarded jealously. To that end, minute regulations covering a wide range of activities were drawn up and rigidly enforced. Long periods of apprenticeship were required as a guarantee of efficiency, prices were fixed, and standards for products were established. As a protection for those within its ranks, the gild restricted the numbers of apprentices, repressed all efforts to form journeymen gilds, and saw to it that not too many masters were permitted to set up for themselves. What they had in mind was to keep down competition.

As is to be expected, these various restrictions and repressions gave birth to opposition. The British Parliament passed laws from time to time in an effort to keep the gilds within the bounds of fair play. Especially were the lawmakers opposed to the price-fixing feature of the gild regulations. Against this feature they legislated. Later, during the reign of Elizabeth, they set limits to other gild regulations, all of which was done to open the way for young men to acquire skill, and to protect the purchasers of raw materials and the consumers of finished goods from the evils of unrestrained monopoly.

International trade.—One aspect of the development and expansion of the gild system was the desire to widen markets beyond the narrow boundaries in which for centuries they had been confined. It was a time when national governments were superseding city and other small governmental organizations. The result was that international trade expanded.

The two things in common among the nations contesting for supremacy in foreign trade were: each wished to sell more goods than it purchased, and each wished, by restricting its own goods to its own ships, to increase its merchant marine and thereby to increase its fighting strength on the sea. Some idea can be had of the magnitude of this movement when it is known that, in 1500, at least three thousand English merchants were engaged

in foreign trade, and that a century later even a larger number (3500) traded in the Netherlands alone.

Of the nations of Western Europe, the Dutch were the common carriers in ocean going commerce. This they were because they carried goods cheaper than would, or could, their competitors. Fearful of the consequences, Spain favored its nationals by forbidding its merchants to use foreign-owned vessels except only when no Spanish vessel was to be had. This practice other nations followed, and even in the United States today we impose similar disabilities on foreign vessels in our coastwise trade.

This significant feature of the expansion of international trade had to do with the enmities that grew up among traders of different nations, and with these enmities in time being transmitted to their respective governments. Traders of any one of these nations complained constantly and bitterly of the limitations under which they carried on their businesses in other countries and of the disabilities under which they worked. Having complained, they next called on their countries to impose similar limitations and disabilities on their foreign competitors, and then, for good measure, to go far beyond. The result was inevitable—a race to see which nation could go the farthest in giving its nationals an advantage over their competitors.

Also inevitable was it that these same nations, in their race for trade supremacy, should meet in armed conflict, both in Europe and in the New World. Wars, royal marriages, alliances, international understandings, one followed another, as nation after nation strove to secure for its people the rich profits to be had in foreign trade. Even treaties made in good faith had to give way before the advance of the merchant in search of trade.

2. Dreams of Colonial Empire

Spain in the New World.—Columbus was an Italian (Genoese) by birth, but, at the time of his discovery of America, he was in the employ of the Spanish Crown (Ferdinand of Aragon and Isabella of Castile). His first official act, therefore, after landing in what he at the time thought was the Indies, but which later proved to be a small island lying to the eastward of the American Continent, was to take possession of the land in the

name of the government which he represented, and to proclaim their Christian Majesties its rightful rulers.

This event marks the beginning of an epoch that promises to have no end, the epoch of the New World. Also, it gave Spain an advantage over her rivals in the race for possession of the New World. Following Columbus came other discoverers and other explorers carrying the Spanish Royal Standard. Balboa discovered the Pacific Ocean and proceeded to declare the lands washed by it to be Spanish territory. In Central and South America rough soldiers overcame the efforts of simple, native peoples to protect their homes. This these invaders did with a severity that now shocks the sensibilities of right thinking people. Cortez conquered Mexico, and in doing so he seized great quantities of precious metals, much of which was sent to the home land. Likewise, in Peru Pizarro robbed those he found there and reduced them to slavery.

Further north, in what is now the United States, the quest for gold went on. De Soto and Coronado marched and counter marched across the lower Mississippi Valley in search of treasuries which they never found. Always just ahead was the goal, the rich mines of precious metals, the seven cities of gold.

SPANISH DISCOVERY AND EXPLORATION

1492 —Columbus discovered America
1513 —Balboa discovered the Pacific Ocean
1519 —Cortez entered Mexico
1533 —Pizarro robbed the Peruvian Inca of $15,500,000 in gold
1539–43—De Soto exploration
1540–41—Coronado hunted for the seven cities of gold
1545 —Potosi mine opened in Peru. (This mine and others nearby estimated to have produced over $2,000,000,000 of silver up to 1864.)

The activity of the Spanish people in discovering and settling the New World was, in itself, of minor importance compared to their attitude of mind toward the lands which they conquered, toward the native tribes that inhabited them, and toward solid labor in the acquisition of wealth.

The typical Spanish adventurer had little interest in America as a permanent home. Instead, he sought gold and silver for himself and for his sovereigns. With his easily secured wealth he dreamed of buying favors at the Royal Court and, on his return home, of living in luxury. To his way of thinking the weak native tribes which he despoiled possessed no rights either in

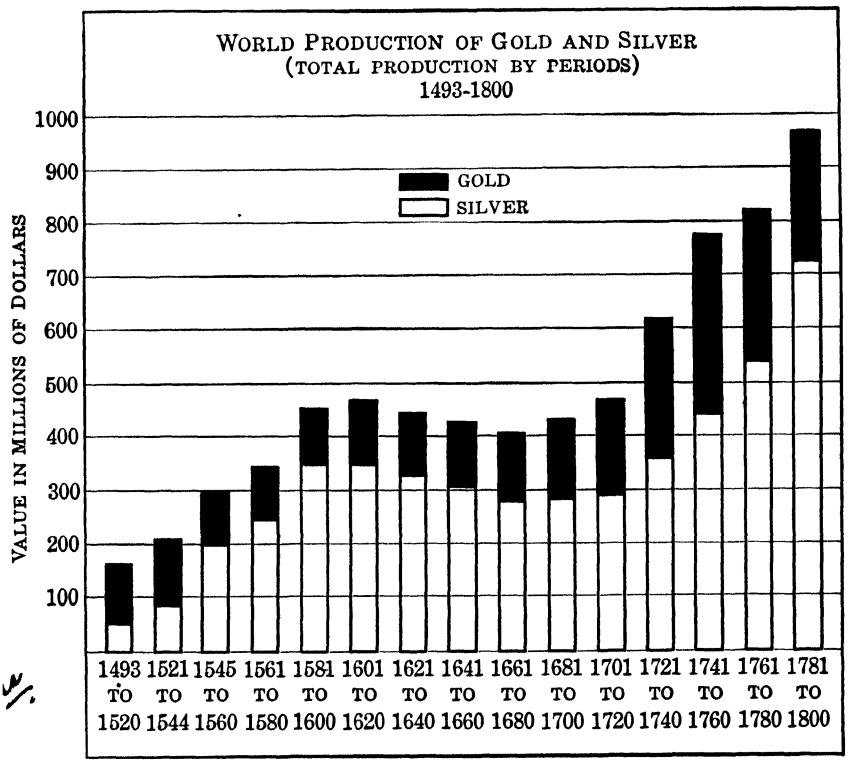
what they had already earned or in what they might earn in the future. Accordingly, he robbed them first and enslaved them later.

This attitude of mind unfitted the Spanish to become colonizers in the best sense—colonizers as the French, and particularly the English, became after 1600. This was largely true because the Spanish looked on the New World as something to exploit and not as a place to build a permanent home. The same blight fell on the people in the home land. They saw great wealth acquired without hard labor, and as a consequence they came to believe that they too could grow rich without work. As a result the people of the Spanish Peninsula soon found themselves overtaken by idleness and unconcern, and their industries by neglect and decay.

Drake and his fellows.—For many years following the first Spanish conquests in the New World, the English appear to have taken little note of what was going on across the sea. Then they awoke to the possibility of obtaining great wealth without going to the trouble either to toil for it, as they had always done, or to take it from the native tribes of America. What they did was to waylay the Spaniards on the open sea. During the year 1563, for example, four hundred privateers (English and Huguenot) captured in excess of seven hundred prizes valued at millions of pounds Sterling. Some notion may be had of the volume and value of this type of enterprise by the fact that, during a royal wedding ceremony in London in 1554, the people saw carried through the streets of that city twenty-seven chests of bullion, ninety-nine horse loads and two cart loads of gold and silver coins, and ninety-seven large boxes filled with silver bars. The tales of such vast wealth must have stirred the imagination of the future pirate, Sir Francis Drake, for he was to spend much time in raiding Spanish territory and in robbing Spanish ships. One single raid in South America gave him, in 1578, twenty-six tons of silver, eighty pounds of gold and thirteen chests of silver coin.

Acts such as these were clearly illegal and could not be justified on any ground whatever. The Spanish Government protested vigorously, pointing out that the two nations were at peace, and should, therefore, treat each other with consideration. These protests the British Government received with a feigned show

of regret, promising punishment for those who had despoiled their neighbor. Nothing came of the promises; it was even hinted that the sovereign herself (Good Queen Bess) profited from the robberies of Drake and others. In time, Spain saw the futility of attempting to protect herself through protests. Then she set about to punish those who were raiding her coasts and robbing her ships. Accordingly, she assembled a huge navy,



known in history as the Spanish Armada, and sent it northward to engage in battle with her tormentors. Aided by the elements, the British fleet, consisting of war vessels, privateers, merchantmen, and fishing smacks, sank many of the slow-moving vessels of the Armada and forced the rest to flee (1588).

With this naval battle—one of the decisive engagements of all time—began the ascendency of Great Britain and the decline of Spain as world powers. From this point on, interest on the part of the British in the New World grew until, in time, that nation became the dominant power there.

British trading companies.—The close of the sixteenth century saw a rapidly increasing interest on the part of the British people in the New World. This interest was made effective through trading companies organized by merchants and others, under authority approved by Parliament and the Crown.

The date of the first charter of the Virginia Company is the year 1606. A section of this highly important document reads as follows:

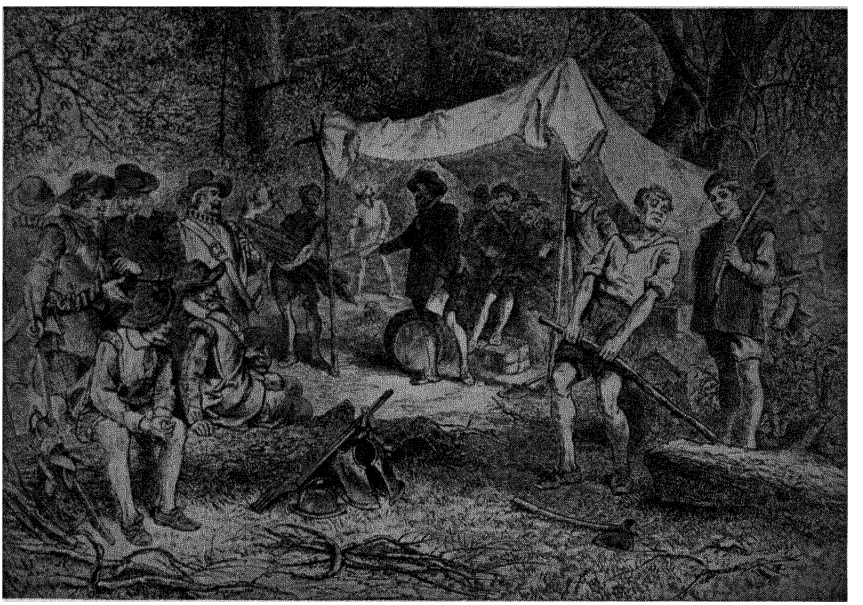
> JAMES, by the Grace of God, King of *England, Scotland, France,* and *Ireland,* Defender of the Faith, [does] . . . GRANT and agree, that the said Sir *Thomas Gates,* Sir *George Somers, Richard Hackluit,* and *Edward-Maria Wingfield,* Adventurers of and for our City of *London,* and all such others, as are, or shall be, joined unto them of that Colony, shall be called the *first Colony;* And they shall and may begin their said first Plantation and Habitation, at any Place upon the said Coast of *Virginia* or *America,* where they shall think fit and convenient, between the said four and thirty and one and forty Degrees of the said Latitude; . . . [Also] that the said *Thomas Hanham,* and *Ralegh Gilbert, William Parker,* and *George Popham,* and all others of the Town of *Plimouth* in the county of *Devon,* or elsewhere, which are, or shall be, joined unto them of that Colony, shall be called the *second Colony;* And that they shall and may begin their said Plantation and Seat of their first Abode and Habitation, at any Place upon the said Coast of *Virginia* and *America,* where they shall think fit and convenient, between eight and thirty Degrees of the said Latitude, and five and forty Degrees of the same Latitude; . . . each of the said Colonies shall have a Council, which shall govern and order all Matters and Causes, which shall arise, grow, or happen, to or within the same several Colonies, according to such Laws, Ordinances, and Instructions, as shall be, in that behalf, given and signed with Our Hand or Sign Manual, and pass under the Privy Seal of our Realm of England; . . . .

It is obvious then that those in authority in Great Britain expected these trading companies to establish permanent colonies in the New World. They dreamed of treasuries of gold and silver to be discovered there—certainly they would have welcomed such discoveries—but beyond this dream was the determination to settle great areas of America and, by encouraging migration, to guard these settlements against foreign aggression.

The first permanent English settlement in America was made by the Virginia Company in 1607 at a point named Jamestown,

after the King, in what is now the State of Virginia.* The next such settlement was made in 1620 at Plymouth, Massachusetts, by a second venture known as the Plymouth Company.**

As sources of profit for their sponsors, these two companies were failures. Neither gold nor silver mines were discovered, and the natives, such as they encountered, possessed nothing worth having. The result was inevitable; both companies in time were dissolved, the Virginia Company in 1624 and the Plymouth Company in 1627.



Hard labor met unaccustomed hands at Jamestown

Early settlements.—The first years of the settlement of Jamestown were discouraging ones, and would have turned back a less hardy group. Food was scarce, disease carried away the settlers, and the Indians were, on the whole, unfriendly. Added to these handicaps was a yet greater one which required that all the produce of the land should be the property of the Company that fathered the settlement. Even the settlers themselves sometimes showed an utter disregard for their own well being. They

* An advertisement of the Virginia Company is the first selection of the *Selections from Contemporaries*. Note the kinds of colonists wanted.

** Selection 3 is the agreement between the Plymouth colonists and the London merchants.

disagreed violently among themselves. On occasion they would steal the very tools and implements on which they depended to build houses and to till the land and would trade them to the natives. In 1616 there appear to have been in this settlement about three hundred fifty persons.*

The first New England settlement suffered much. The people there, like those in Virginia, attempted the experiment of holding the products of their labor in common. Both experiments failed largely because they ran counter to human nature.** By 1628 there were about eight English plantations along the New England Coast. Boston was settled in 1630. A little later (1634), Governor Winthrop estimated that the total population of what then was called Massachusetts exceeded four thousand.

The settlers in New England had, for the main part, come to America because they desired to live where they could think as they pleased. The result was inevitable; soon within the ranks of the various groups differences of opinion arose. In time these differences split the inhabitants, forcing migration into the wilderness. Some merely moved a short distance away, retaining contact with the mother settlement. Others declared their independence and set up new communities. From these early settlements in and near Boston, what is now New England was peopled by dissenters seeking the freedom which their fathers had sought when they left the Old World.

3. The Lure of New Opportunities

Easy wealth.—Many and varied were the influences that caused men to leave their homes in the Old World and to brave unknown dangers in order to seek out opportunities in a strange land. Already some reference has been made to these influences; their significance in the history of Civilization during the past three centuries merits more detailed examination.

Human nature has, from the very first day of recorded history, been susceptible to the prospect of acquiring economic goods without being forced to undergo toil and sacrifice. Tales of the fabulous wealth of the New World fired the imagination of all

* John Smith described the life and difficulties at Jamestown, Selection 2. Smith's account reflects his bitterness at not being permitted to continue in control of the colony.

** Governor William Bradford explains why the agreement with the London merchants failed, Selection 4.

classes from the highest to the lowest. These tales, however exaggerated in detail any particular one may have been, had some basis in fact. The people could see with their own eyes the gold and silver stolen from the natives, and they could well believe, without being prompted, that the source from which this supply had come was inexhaustible. Believing this, the next step was to go about laying plans to share in it.

It is on no other ground that a valid explanation can be made of the hardships which the early explorers in the New World endured. Other considerations might turn them back; the promise of an easily acquired treasure just ahead steeled them as nothing else could have done. The earliest recorded history of America is the history of the desire of Europeans to amass wealth in the form of gold and silver without having to work for it in the ordinarily accepted way.

Land ownership.—The typical man has an inherent desire to own land. Being denied the fulfillment of this desire by a combination of circumstances over which he as an individual had no control, the European of the sixteenth and seventeenth centuries learned with eagerness of the long stretches of fertile lands to be had in the New World for the taking. To him here was an opportunity such as the civilized world never before had seen.

The lure of land ownership affected different classes differently. Those enjoying the favors of the King saw the possibilities of building up in the New World regal land holdings equal in value and extent to the richest to be found in all western Europe. Here they would be Dukes and Counts, with their soldiers and retainers and their tenants. It is easy to believe that they could see in their imagination a great new world empire set up in America, with themselves as the governing heads.

The landless man, the man who desired to have a piece of land as his own to use as he pleased, was moved by no such consideration. What he wanted was the opportunity to own his home and to enjoy, to the fullest extent, the fruits of his labor. This matter of pomp and splendor he was willing to leave to his betters. Such a frame of mind led, as might be expected, to permanent settlements in the New World. Others might return to the home land to spend their ill-gotten wealth, but he looked longingly on America as a place where he could rear his family in decency and in some degree of comfort. Here lies the explana-

tion for the abject failure of the grandiose schemes of the trading companies and the great proprietary schemes that followed, and for the success of the colonizing enterprises having as their main objectives the settlement of a Continent. One was built on the desire for great wealth and power; the other, on the desire to be free from economic shackles and fetters.

Political equality.—The Europe of the sixteenth and seventeenth centuries was one of favoritism and corruption in government. A thin "upper crust" held power; the man in the shop or out on the land had no political influence worth mentioning. At the top was the King. After him came the royal family, and then the nobility of various kinds and degrees. Here and there, men of genius emerged to become generals or poets or merchants, but even they had little political power compared to the power exercised by the noble land holder.

It must be understood, however, that the spark of political equality that is inherent in every human being was not entirely gone. Here and there in many places it threatened to break into flame. The sentiments expressed by John Ball found favor among the masses.

> When Adam dolve and Eve span,
> Who was then the gentleman?

The New World met the expectations of the supporters of political equality. Unfettered by precedent, and less affected by tradition than they had been in their old environments in Europe, those coming here to make their homes advanced far in giving reality to their ideas. They did not go all the way, but they went far. From the beginning, whether Puritan or Cavalier, the settler in America recognized to a high degree the political rights of his neighbors. To that end agreements were made, compacts drawn up, and constitutions adopted. The New World was the testing ground for trying out political theories that had lain dormant since the days of the Roman Republic.

Religious freedom.—An influence not to be overlooked or minimized is that of the desire on the part of groups of Europeans to be able to worship God as they pleased. Early in the sixteenth century the Protestant Reformation divided the people into many religious camps. Those who, with Martin Luther and his followers, left the Catholic Church, soon found themselves

differing on matters of creed and procedure. What followed is a dark page in the history of civilization. Men persecuted one another in the name of a common creator, and sometimes, in an attempt to force their religious views on their neighbors, they resorted to the most extreme cruelties.

Persecuted groups sought a way out of their difficulties. Some migrated to countries friendlier to their cause, but as a rule they were not happy there, for they found themselves strangers in a foreign land, strangers in customs and manner, in speech and

Cold comfort and religious freedom greeted the Pilgrims

deportment, and in racial and national attitudes of mind. All of them longed for the freedom of the New World, where they could worship according to their own beliefs.

The first and best known of the migrations to the New World, prompted by the desire to secure religious freedom, was under the auspices of the Plymouth Company. A small group of approximately a hundred sailed away in the summer of 1620 for America. Late in the year this handful of men, women, and children landed in what is now the State of Massachusetts at a place they called Plymouth, after their sponsors. Here on the bleak coast they went to work to establish a permanent

home under circumstances that would have turned back mere adventurers.

Other religious groups sought similar opportunities. To Maryland came the Catholics from England, and to other places along the Atlantic Coast came Huguenots from France. Even the Quakers, soft spoken and retiring in manner as they were, found in America a haven denied them at home.

Those driven to the New World by religious persecution proved in every respect to be first-rate settlers. They had severed many of their dearest connections with the home lands; they were here to remain, they and their children after them. What they sought, they had found, and while they were not always willing to grant to the fullest extent the freedom which they had demanded in their old home, they did cooperate with men of widely different religious ideals without attempting to tear them on the rack or torture them at the stake.

The spirit of adventure.—A fifth factor in causing men to leave their homes and to undertake long and perilous journeys is the human desire for adventure. This desire every normal European of the time felt in some degree, and, without being conscious of the fact, he often explained it to himself and to his neighbors on other grounds. The landless man combined it with his desire for land; even the most religious fanatic felt its influence, however little he may have been aware of its existence in his mind.

On no ground can we explain the enthusiasm with which thousands of men sailed away for America during the time it was being explored and settled. They had little expectation, if any at all, of being able to share with their leaders in the gold and silver that might be forced from the natives; they were unfitted for farming; they lacked mechanical skill; they had never felt the weight of an extravagant government; their notions regarding religion were not their own but came from the outside. To them this going to the New World was a lark, and in that lark they were resolved to play a part.

Chapter II

ADAPTING OLD METHODS TO NEW CONDITIONS

THE first English settlers in America encountered new and unfamiliar conditions. These they met as best they could by adapting to the conditions thus encountered such methods as they had brought with them from their homes across the sea.

In this new land they faced, from the very beginning, the necessity of setting up machinery for making and for enforcing laws and regulations suitable to sparsely settled communities. They had brought with them a knowledge of how such matters were handled in their home land, and with that knowledge they set about at once to apply it to situations demanding modifications here and there—modifications based on the need of fitting themselves to their surroundings.

Economic life in early Colonial America was a hard task master; those lacking the ability to adjust themselves quickly and rather completely soon fell by the wayside. The first settlers turned to the crudest of manufacturing processes, built their homes of unhewn logs, and in the cultivation of corn (maize), depended for advice on their savage neighbors. However much these settlers might have wished to follow the customs and practices of their fathers, they found themselves forced by cruel necessity to resort to expedients as new as they were strange and sometimes startling.

The system of land ownership and land holding which they had known at home they found themselves forced to abandon. So also, the labor systems in which men from their youth were geared to particular tasks had to give way, in part, under the stress of frontier conditions where neither caste nor wealth had a dominating place.

It has been said, and with some semblance of truth, that the earliest settler along the North Atlantic Coast had, when he landed, little more of what the world calls wealth than "the shirt on his back." Certain it is that the stock of economic goods which he had brought with him was meager in amount, and con-

sisted, in large measure, of articles of simple construction. Soon he found his clothing worn to rags and his tools and implements in want of repair. Then he began to do for himself what, in his old home, he would have depended on others to do.

Here our settler faced a stark truth such as all pioneers have faced since the beginning of time: "Necessity is the mother of invention." Facing this truth, he set about to invent ways and means of meeting this necessity. In other words, he fell back on a native ability, which, among all men, lies dormant unless forced into use. The result was the beginning of new methods that in time came to be regarded the world over as American. The term "Yankee ingenuity" has now for centuries been used to describe a certain facility in meeting emergencies.

4. Productive Processes

Manufactures.—The first permanent settlers in Virginia (Jamestown, 1607) found from the very beginning the necessity of resorting to the crudest sort of manufacturing processes in order to supply their simplest wants. For shelter the settler built a rude cabin of unhewn logs. For a floor he used the bare earth, and for a roof great slabs of sod secured by the vine of the wild grape. A huge stick fireplace, plastered inside and out with river mud, furnished such heat as he needed and provided means for cooking. The single door he fashioned from split logs pinned to cross timbers, while the windows, few in number, were merely openings for light and air. Cruder even than the home which he built were the pieces of furniture with which he equipped it. His tables and chairs were logs and his bed a pile of leaves in the corner of his cabin.

The wants of the settler were few and lacked variety, but they were wants nevertheless. Bits of ship iron furnished materials for tools with which he manufactured such implements as he must have to till his fields. The first craftsman in Virginia was the blacksmith. His was a trade requiring strength and skill. The general run of settlers could clear the land and farm it, but his work was specialized. The result was, as is usual on the frontier, that about his shop the community grew.

The milling of breadstuffs is a simple process, consisting of little more than the crushing of grain; but because of the desirability of refining the crushed material, the pioneer miller took

his place alongside the blacksmith as a leading citizen. In time, with an increase in population and with an accumulation of economic goods, other primitive manufacturing processes developed outside the home. Among them were weaving and spinning, tanning, boot and shoe making, hat making, and the brewing of beer and ale. In an early broadside printed by the Virginia Company, blacksmiths, coopers, carpenters, shipwrights, turners, metal workers, and other artisans of like character were urged to cast their lot with the enterprise.

The whole colonial period of America was characterized by a backwardness in manufactures. The homes produced such articles as the women themselves could make. They carded wool, spun thread, and wove cloth. Outside the home small crudely built establishments were set up for producing iron and grinding grain. As early as 1620 attempts were made to establish iron works in Virginia. In Massachusetts (at Lynn) an early establishment produced directly from the ore, as was the custom in England at the time, such common household articles as pots and kettles.

From the very beginning, the settlers in America—particularly those along the New England coast—gave attention to shipbuilding and to navigation along the shore and up and down the deep, short rivers of that region. Compared with present day conditions, the building of colonial vessels was a simple matter. The cost involved and the time then required to build such a vessel falls short of what is now spent on the cabin of a second-rate ocean liner. Two centuries later (1813) Captain Perry built a whole fleet of war vessels on Lake Erie in less time than is now consumed in preparing the blue prints of a fast cruiser.

Conditions in many parts of the New World lent themselves to the building of all sorts of water crafts. Along the banks of the rivers the finest of timber, to be had for the taking, grew in abundance; the building of ship yards was a simple matter; labor accustomed to the use of tools was available. These natural advantages, combined with a people inured to hardships and accustomed to the sea, led to the development of a hardy race of adventurers.

Agriculture.—The English settler, in tilling the land, found himself faced by a two-fold problem difficult of solution. First, he must plant and cultivate old world crops under New World

conditions. He found, for instance, that certain plants did not do well in a virgin soil. Among these plants were wheat, hemp, indigo, rice, cotton, millet, spelt, madder, lentils, lucerne, rape, and calza. Over and over again from Maine to Carolina the settlers planted such crops, with varying degrees of success, and this went on for two hundred years. In time, as might be expected, the plants themselves made their own adaptation to the soil and climatic surroundings.

His second problem had to do with food plants indigenous to the New World and hence unfamiliar to him. Among these were:

Indian corn (maize)	Tomato
White potato	Cranberry
Sweet potato	Squash
Tobacco	Strawberry
Pumpkin	Peanut

Agricultural tools were crude indeed and anything but plentiful. Towns sometimes paid bounties to owners of plows who would keep them in repair and make them available to neighboring farmers. Such plows, although privately owned, were public property in the sense that their uses could be had by anyone who was willing and able to pay the going rates permitted to be charged by the towns.

The one new farm crop that soon bulked large in the lives of the early settlers was Indian corn, and it is no exaggeration to say that without it the first English colonization schemes in the New World would have been greatly retarded and the subsequent conquest of the Continent by white men would have been greatly delayed.

This food crop is grown with comparative ease over a wide range of climate. Given sunshine and moisture it thrives in many different types of soil. Even more significant, Indian corn, unlike the older varieties of wheat—the varieties known to New World settlers—grows from the seed and reaches maturity during a single growing season. Thus it was that the American pioneer found it possible to set out during the late winter, to travel many miles on foot, to plant a crop of corn among the forest trees after girdling them, and finally to gather his crop before the coming of cold weather.

Another native American plant is tobacco. At the time of the Jamestown settlement, the custom of pipe smoking was making

its way in England even against the opposition of the King himself. Shortly, the markets of Europe took all of the tobacco our colonial farmers could grow and ship to them. On a comparatively new product, therefore, and on the need it supplied, the well being of Virginia, and indirectly, the well being of the entire English coast, rested. In exchange for tobacco, the colonists received a great variety of manufactured goods, as well as credit to be used in their trade with the West Indies. Instead of money for making exchanges the Virginians used cured tobacco, going even to the point of paying their church tythes in it.*

Carrying on business.—The earliest attempts of the English to colonize America reach back into the desire to expand trade and commerce. Moreover, the first settlements (Jamestown and Plymouth) were financed by trading companies made up, in the main, of gentlemen adventurers, many of whom were engaged in a variety of businesses located in cities like London. Those comprising these companies dreamed of profits both large and easy, and not until they had suffered serious financial losses, did they awaken to the hard fact that merchandising on a large scale had no place of importance on a far away frontier.

From the very beginning the English settlers in America had need of English goods. These settlers, generally speaking, possessed neither money nor credit. The only way open to them, therefore, if they wished to trade with the peoples of Europe, was to set about acquiring economic goods of their own to be exchanged abroad for what they needed.**

Aside from the precious metals, western Europe had, for a time, no keen desire for American products able to bear the excessive freight charges of a three thousand mile sea voyage. Fortunately for the stability of the early colonists, they found all about them what at the time must have seemed an unlimited supply of fur-bearing animals of various kinds. Soon an extensive trade sprang up between these colonists and their red neighbors, who, having no adequate knowledge of the value of skins in the European markets, eagerly exchanged them for trinkets of little value. In time this trade, expanding far to the westward across the Mississippi, became exceedingly profitable and did

* For farming methods in New Netherland see Selection 7.

** Carrying on business in Virginia about 1697 is described in Selection 5.

much to keep alive in the New World the enmities between the English and the French.

A common practice among merchants was to send to American towns ships loaded with a variety of goods for sale either to local shop owners or direct to consumer. One of these ships would anchor at Boston, for example, and through the town crier the captain would announce his arrival. Later, such announcements were made in the local news sheets. The shops themselves very generally carried stocks of European goods intended to meet a wide variety of demands. In the language of today, they were general stores catering to every purse and to every member of the family.

Compared with modern methods the colonial merchant was hard put to find means to pay what he owed abroad and to collect that which he had coming to him. Communication was exceedingly slow and anything but reliable. To guard against the loss of letters he sent copies by different routes, and in drawing bills for paying or collecting debts he made out his drafts several in number, all carrying the stipulation that the payment of one of them invalidated the rest.

As might be expected, much of the business of any one community was carried on by barter. Farmers exchanged their produce for furniture, craftsmen helped in the harvests, school teachers boarded out with their patrons, and to the shops customers took the products of their own labor and traded for what they needed.

Much of the exporting done during the early years of the colonies was by tramp vessels of small tonnage. In the south, where the rivers were wide and sluggish, these vessels loaded at the homes of the plantations. From Mount Vernon, Washington often sent his crops of tobacco directly to the European markets.

Means of inland transportation, however primitive they may now appear, had to be adapted to new conditions. The only highways available to the first settlers in America were narrow Indian trails, which, in most part, had once been animal trails running along highlands near water holes and salt licks. These trails the settlers gradually widened, but beyond that they scarcely went. Here and there a road passably good connected two relatively populous communities; later, over these roads

stage coaches were operated on fairly regular schedules. The English settlers, as they traveled up rivers seeking new lands, made use of the light Indian canoe, built of the bark of trees; for transporting goods they employed the ponderous pirogue, a split log hollowed out and tapered at its ends the better to force its way through the water.

5. The Land System

In the New England Colonies.—The colonists who settled in New England brought with them to the New World certain notions concerning the ownership of land, and these notions they proceeded to put into effect, with such changes as might be necessary on the frontier.

One of the first considerations of the early colonists was to lay out a village with its building lots and common grounds, and to provide such streets and highways as were needed for communication and transportation. The social and governmental unit of these early settlements being the village, it was but natural that rules and regulations governing the disposal of lands, and protecting the owner in his possession of it, should be drawn up by them and enforced. Later, these functions were taken over by the town.

In so far as the holding of land was concerned, the village regarded, in theory at least, the inhabitants as being equal. In practice, however, those who had invested most heavily, and those who gave greatest promise of being productive, were favored over their neighbors. Lands were assigned and their boundaries marked and recorded, regulations concerning fences set up, pounds established, and punishments provided for trespass.

The village common was, as its name indicates, a field owned in common and used by the villagers for pasturing their herds and flocks. Here, too, the people of the villages gathered to celebrate gala days and to engage in competitive sports. Thus, in time, the village common came to be the center of community interests. High in the annals of New England history are its commons, particularly that at Boston, where even to this day it is guarded jealously against the encroachment of streets.

Most important of the adaptations of land tenure to colonial conditions in New England was that providing for the ownership

by the individual, complete ownership against every other individual, and responsible to the community only for certain obligations such as tythes and taxes. Here the landless man became a landed proprietor on the easiest of terms; here the general ownership of land, as widespread as it was simple, held back the tendency imported from Europe to set up social and economic classes. Gone, in so far as the New World was concerned, was the opportunity for ambitious men to elevate themselves to positions over their fellows through the ownership of large areas of land.

In the Proprietary Provinces.—These provinces were, at the beginning of their existence, based on princely estates in land, and therefore, in their essentials, resembled their European models. A huge tract of this newly found country was, for example, granted in 1681 to William Penn in lieu of a debt owed by the King of England to Penn's father. The result was that for years following its first settlement the Colony of Pennsylvania remained under the control of members of the Penn family. Titles of land came from them, and it was they who granted to traders permits to traffic with the Indians.

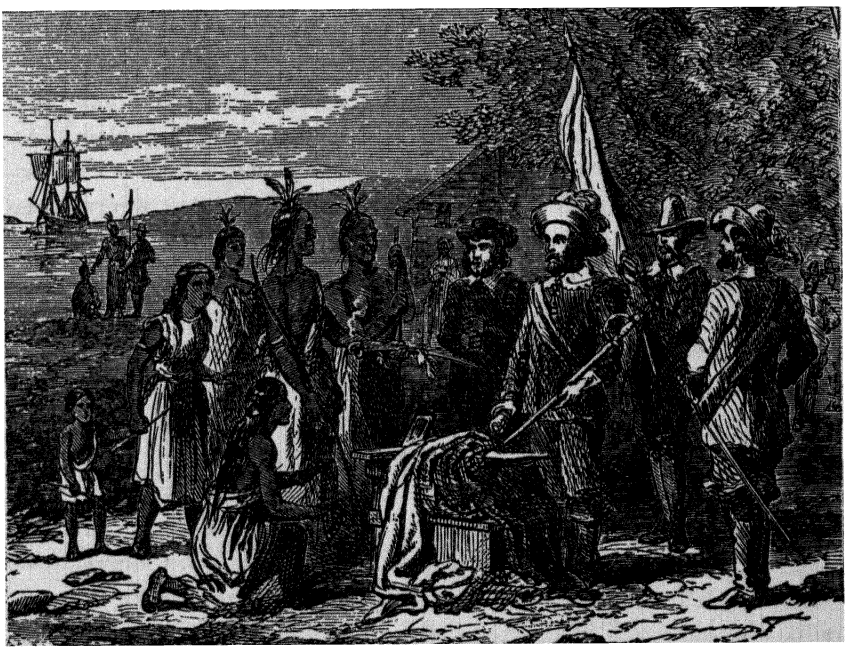
These proprietors assumed, under protection of the English sovereign, the right to grant lands to individuals and to groups, to locate and survey such lands, and to collect the rents flowing from such lands. Having these rights, these same proprietors had many of a nature largely political. They dominated such land legislation as might be initiated and carried out, kept themselves in the favor of the royal court, and managed the affairs of their colonies with an eye for personal profit.

Such methods could not endure on the frontier, for it is there that the forces of nature conspire to make men equal. In time the people themselves took matters in their own hands. They demanded and secured, sometimes with a struggle, the right to own land on the sole condition that they pay such taxes into the treasuries of the colonies as they themselves might determine through representatives of their own choosing.

In New Netherland.—The Dutch set up in America a system of large land holdings possessing features differing from those found in either the chartered or the English proprietary colonies, and these features, though weakened, the British found when they conquered the Dutch in 1664. In the charter of the West

India Company, a Dutch organization designed to colonize the New World, it was provided that any member who would within four years plant a colony of fifty adults in a certain area should be designated as a patroon. To all intents and purposes persons so designated were to be feudal chiefs, much on the order of such chiefs then recognized in western Europe.

These landed estates were expected to face on navigable streams and might extend as much as sixteen miles along the



Merchandise for Manhattan

bank and indefinitely into the interior. Each chief had granted to him certain rights and privileges. He might dispose of his estate by will, have conferred on him extensive legal authority, and be given a monopoly of fishing, fowling, and trapping within his grant. In addition, he was authorized to appoint magistrates for any towns or cities which he might establish.

With scarcely an exception, this plan of setting up Old World conditions of land tenure in the New World failed.* The reason is simple; the frontier refused to recognize the relation of master to man.

* The methods of granting land in Virginia were abused, Selection 6.

6. Systems of Labor in the Colonies

Free labor.—It is to be expected that the colonists brought with them to America the systems of labor they had known in their old homes in Europe. There, for example, they had been familiar with the practice of certain favored laborers being permitted to hire themselves out on terms satisfactory to themselves, while others labored under restrictions imposed either by law or by custom. Here they resumed such practices with little or no regard, at the beginning, for the differences in surroundings between their old home and their new one.

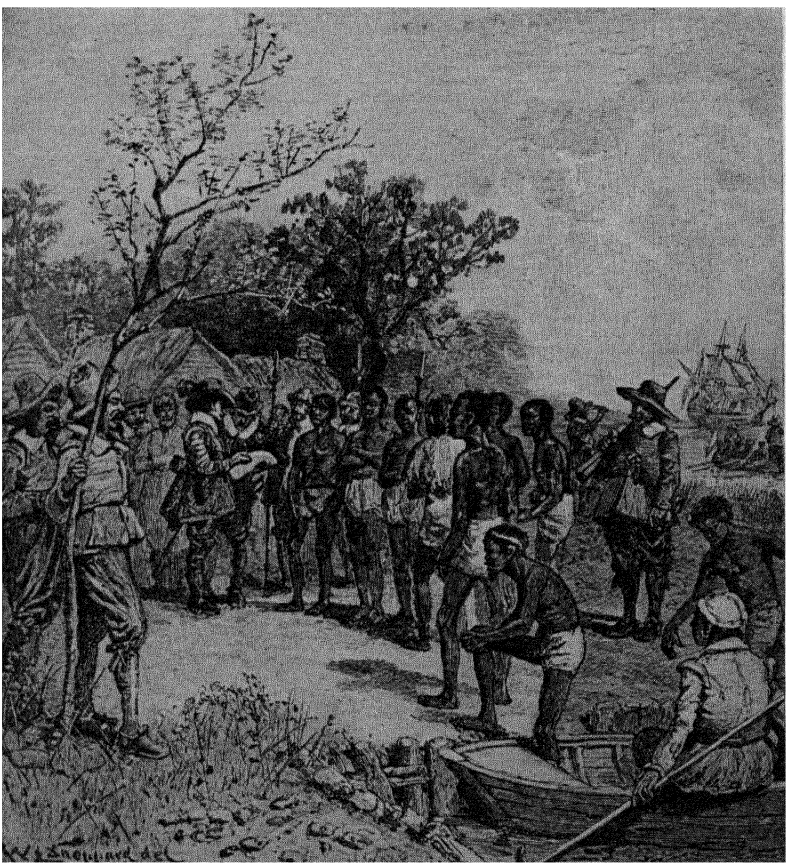
Those in the highest ranks of workers were the men and women whose status gave them freedom to sell their labor to the highest and best bidder. Such persons were under no particular obligation either to the state or to masters. They were, generally speaking, free to come and go as they pleased and to follow their own economic advantage without let or hindrance. They were the prototype of the present-day laborer.

Conditions on the New World frontier encouraged the growth of free labor and discouraged any and everything that tended to set one man over another. Here, close to nature, those who might have been content in their old homes to spend their lives as underlings soon developed a point of view that ultimately led to complete freedom.

It would be a mistake to assume that the settlers themselves recognized, on the day of their arrival, that many of the practices which they had brought with them must give way on the frontier. The facts are otherwise. Just as the first automobile had right seat steering wheels, so those in authority in the early colonies attempted rather naturally and rather logically to transplant into the New World what they had learned in the Old. In New England, for example, early attempts were made to fix rates of wages by law, and provisions were made for fining laborers for accepting more than the law stipulated. In 1633 two shillings (approximately one half dollar) per day was regarded as fair wages for skilled carpenters, sawyers, masons, bricklayers, tilers, joiners, wheelwrights, and mowers. Such wages were regarded as being high and were paid only when the workers boarded themselves. When, however, the employer furnished board, fourteen pence (roughly twenty-eight cents)

All of this was possible because the frontier cared little about who a man was, but everything about what he could do. Nowhere else in our whole history can we find reflected more accurately the philosophy on which American life has been built.

African slavery.—Very early in the history of Colonial America we find the coming of the first slave ship. That was



The Dutch bring black slaves to Virginia

in 1619, when to Virginia a Dutch vessel brought twenty negroes and sold them to the settlers. For a while the importation of slaves showed little growth. Thirty years after their introduction, less than three hundred could be found in all of Virginia. By 1700, however, slavery had been generally accepted as a fact, and the number of slaves in some of the colonies was relatively large.

Slavery, as such, never thrived in New England. The logic of economics there was against it. That area did profit from the institution, but indirectly through the practice of its ship captains and merchants buying slaves in the West Indies and exchanging them in the southern states for tobacco and other products. To that extent, therefore, the very section of the country that later opposed slavery with marked vehemence was responsible for the extension of a system of labor characteristically southern.

Chapter III

STRUGGLE FOR POWER IN THE NEW WORLD

DURING the century preceding the American War for Independence, the two great European powers, Great Britain and France, battled for control of what was later to become the richest and one of the most populous nations of all history. First, the English whipped the Dutch and took New Netherland (1664); then they turned their attention to the French, who by going up the St. Lawrence and Mississippi Rivers, had preempted a claim to the rich lands across the Alleghenies. There followed four long and expensive wars, known in American history as King William's (1689–1697), Queen Anne's (1702–1711), King George's (1744–1748), and the French and Indian (1754–1763).

Back of this long struggle was the desire of each of these two nations to enjoy the profitable fur trade of the Mississippi Valley and to have vast colonial possessions to supply raw materials and to buy manufactured goods. Annually, the fur trade mounted into millions of dollars. This trade provided merchants with an article generally in demand in the markets of the world and gave an outlet to a large variety of merchandise produced in Western Europe. Even more important, particularly to the British, were the profits, both present and prospective, to be gained from a monopoly of trade between the mother country and her colonies.

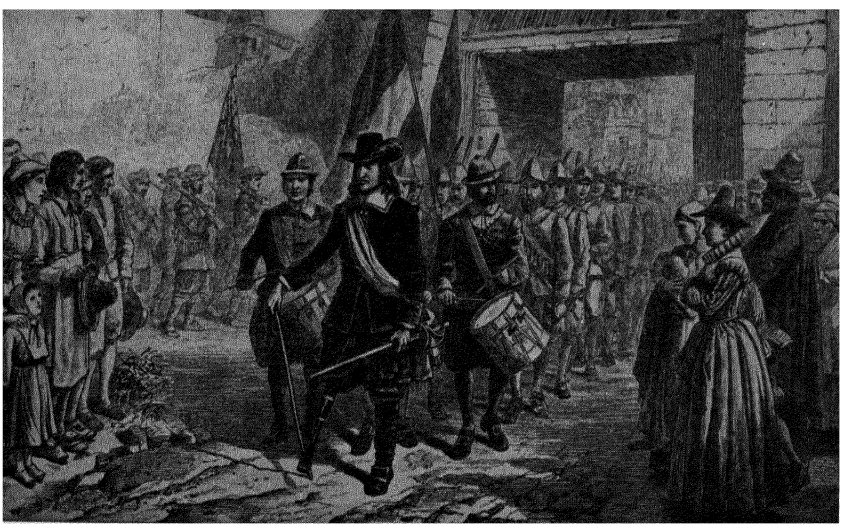
Wars or no wars, Great Britain saw fit to control the trade and commerce of her colonies in the New World. This she did through regulations of various kinds dealing with colonial manufactures, colonial foreign trade, and trade among the colonies. These regulations consisted of restrictions placed on the manufacture of goods that might compete with home products, on what could and could not be sold in the British and other markets, and on the exchange of goods between the colonies.

The colonists themselves were more than interested spectators in what was going on. They had their own notions concerning their rights and obligations, and, as events proved, they were

prepared to support these notions by force of arms. Accordingly, there developed in each colony trade policies dealing with neighboring colonies, as well as with the mother country. These policies had to do with intercolonial trade agreements, with common defense, and with common resistance to outside influences.

7. Ascendancy of the English

Conquering of the Dutch.—The conquering of the Dutch in North America in 1664 came during a war between Great Britain and Holland and removed what to the way of thinking



New Amsterdam is surrendered to the English

of many was a standing threat to English control in the New World. New Netherland, with New Amsterdam as its capital, controlled the most spacious seaport in the Western Hemisphere; moreover, it stood as a barrier between the New England colonies on the north and the English colonies on the south. With the occupation of New Netherland (name changed to New York, in honor of the King's brother, the Duke of York) and the settlement of Pennsylvania by the Quakers, Great Britain could boast of an unbroken control of the North Atlantic coast from South Carolina to Maine. This control gave to the mother country an advantage in that section of the New World denied to all other nations.

Intercolonial Wars.—The four armed conflicts known in American History as Intercolonial Wars were waged by Great Britain and France, and were echoes, more or less, of wars carried on in Europe. At the bottom of them was greed for political power bolstered up by a burning desire to profit from the settlers in America. One country dominated the great portion of the North Atlantic Coast; the other controlled the vast interior lying east of the Mississippi River. Here and there the frontiers of the one touched the frontiers of the other.

These wars were, speaking generally, little more than raids and counter raids. Supported by Indian allies the armed forces of one colonial group would invade the territory of the other, burn homes and kill or capture isolated families. The important aspects of these wars are not the success or failure of any particular attack, but rather, in so far as the colonies of the two powers were concerned, the reasons back of them.

There was plenty of room for the nations of both countries, had they been willing to go about their daily work in a spirit of fair competition. What each wished was a monopoly. Each aspired to control the fur trade; each dreamed of dominance in the West India trade; each regarded the presence of the other in the New World as inimical. These conditions weighed heavily with the colonists in America. Their interest was strongly economic; in dynasties, royal marriages, and political alliances it was slight at best.

The wars themselves must take second place to the effects of the wars. The English colonists responded to the calls of the mother country for help, and in so doing they made two important discoveries. One was that, in spite of many differences, they had much in common. The second discovery was that they had, when united, power and influence that might be used to advance their common cause. Men from one colony became acquainted with men from other colonies as they marched shoulder to shoulder against the French or sat about council tables discussing public affairs. Out of this acquaintance grew a better understanding of one another's problems. The New Englander returned home with a keener appreciation of the competition the Virginia tobacco grower met in the markets of the Old World; the Virginian, on his part, carried back to his neighbors some understanding of a life to the north where a

lack of soil fertility forced many of the people to earn their livelihood in fishing and trading.

Indian relations.—Much of the early history of colonial America is a history of the relations between the newly arrived settlers and their red neighbors. There was, from the very first day, the question of land occupancy and land ownership to be answered. Explorers could and did take possession of vast areas of land in the names of their respective sovereigns, and these sovereigns might war over their various royal claims, more or less valid, but without disturbing in the least the rights of the native peoples living there. As a matter of expediency, therefore, those in authority often extinguished Indian land claims through the distribution of presents among tribal chiefs. The mere acquisition, however, of many square miles of area by any one town or colony did not in itself solve completely the problems arising along the frontiers; as long as trade with the Indians was profitable, ambitious white men would continue to go among them carrying an endless variety of merchandise to be exchanged for beaver and other skins.

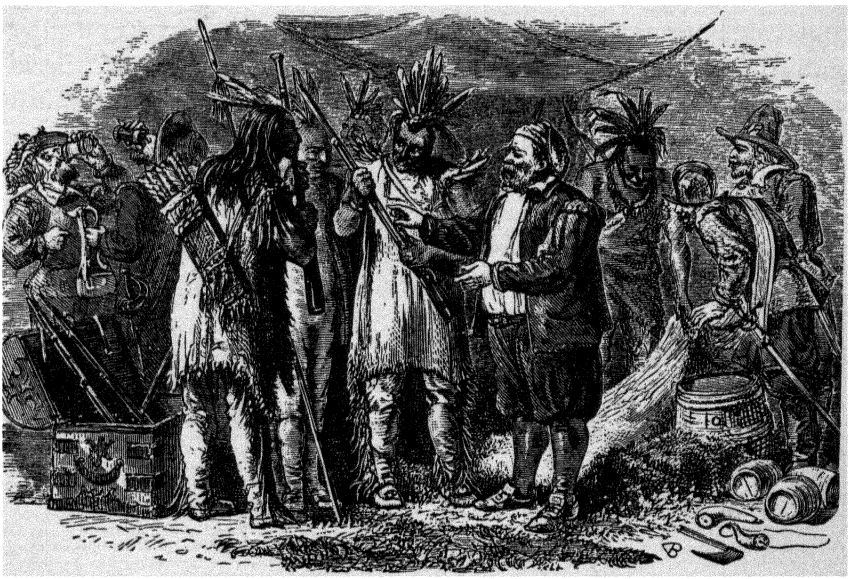
Fortunately for the welfare of the earliest colonies, the Indians very generally received the settlers kindly, and with little hesitation they gave over to them stretches of land comparable in size and potential wealth to the mother country. This they did sometimes as a gesture of friendliness, sometimes in return for a "handful of baubles." In any case, the newcomers found themselves in possession of great areas of land, both extensive and fertile, at a trifling cost.

The land question was not always so easily settled. With the passing of the first contacts between the two peoples, the natives awakened to the realization that their new neighbors were grasping and unscrupulous and not averse to taking advantage of them at every turn. With this realization came a determination to resist further encroachment on the hunting grounds of their fathers. Accordingly, they made sporadic attempts to expel the whites. Such attempts failed in the long run, but many of them were bloody, particularly when they were combined with the colonial forays carried on by the French in Canada.

The spread of civilization along the North Atlantic seaboard lengthened the frontier line, thereby increasing the opportunities for trade with the Indians. Surrounding the native red men was

a form of wealth greatly desired in the European markets. The beaver was to be had for the taking; so also were the otter and the mink and the muskrat. It is little wonder then that there sprang up and developed a trade in animal pelts that reached great magnitude.

The fur trade was, at its source, essentially barter. What the Indian wanted was not money but consumers' goods of the simplest sort. Mirrors, razors, bells, hatchets, rifles, gunpowder,



Firearms and firewater for furs

lead, rum, whiskey, calico, ribbons, made up the stocks of merchandise sent across the frontier westward to be exchanged for the annual fur harvests. Trading was, at first, largely an individual matter and hence subject to little if any regulation. Soon, however, owing to the profits to be made, it began to assume vast proportions. Then the various colonial governments found it necessary to set up rules and regulations, which, with the passing of time, came to be more and more complex and, so those in authority hoped, more and more difficult to evade.

The typical fur trader bore the reputation of being a "sharper," whose sole ambition in life seemed to be to get a valuable beaver skin for some trinket as useless as it was worthless. By the higher class chiefs his presence among the savages

was regarded as a menace to their well being, if not to their very existence. This attitude leaders throughout the colonies shared, many of them voicing this feeling in no uncertain terms.

In an effort to give some protection to the savages without at the same time losing the profits to be gained from trade, colonial officials regulated such trade. No one, for example, could traffic with the Indians unless he held a license from the hands of the governor. Nor were traders permitted to sell to the Indians wares like rifles, gunpowder, and whiskey. Despite regulations, traders, greedy for easy profits, carried on their enterprises along the frontier from Maine southward. As a consequence, the very existence of settlement after settlement was threatened by armed Indians made drunk on colonial liquor.

Of exceedingly great significance was the relation of the Iroquois Indians to the English settlers. These Indians lived in what is now New York, and their first European contacts were with the French early in the sixteenth century. These contacts included a battle with the invaders. From that point on they supported the English, sometimes at tremendous costs to themselves.

Between the French frontier along the St. Lawrence and the English frontier along the North Atlantic Coast, the Iroquois found themselves constantly at war and their ancestral lands invaded by armed foes. Curiously, these same Indians, learning as it were at the feet of the Great White Fathers, set out to make themselves overlords of weaker tribes to the westward. Accordingly, as the seventeenth century was coming to a close, war bands of Iroquois invaded the area along the south shore of Lake Michigan and conquered the natives they found there. Thus it was that a group of American natives managed to profit from exploiting the lands of neighboring tribes. What they really did was to force the weaker tribes of the interior to sell to them their furs, which they, in turn, sold to the English traders.

With an increase in colonial population came a corresponding increase in the amount of land necessary for homes and business operations. The inevitable result was that hunters and traders found themselves forced to go farther and farther westward in search of suitable furs. Along with them went the pioneer

trading post; today populous American towns and cities mark the sites of many of these early posts.

Socially the typical Indian preferred the French traders to their English competitors. He found them more companionable and hence easier to live with on intimate terms. In a business way he preferred the English, for the goods they brought to the posts were superior to those handled by the French. It was this superiority that gave the English first place among the natives of the interior of the continent. It requires no great stretch of imagination, in fact, to hazard the statement that the greater part of North America became English instead of French because of the preference of the Indians for the manufactured goods of the British Isles.

Because of the profits to be made in the fur trade, the history of colonial America is, in a degree, the history of the trapping of the fur-bearing animals of the continent, and of the trafficking of their pelts in the markets of the Old World. Down through the annals of the colonies the lowly beaver takes its place as a figure of first-rate importance.

The fisheries.—This industry, as carried on in New England, was of major importance politically, as well as in an economic sense. It provided a livelihood for many families and brought its operation into sharp conflict with the French of the maritime provinces of Canada. This feeling of hostility was mutual. To make a bad matter worse, the colonists of both powers claimed extensive rights in the same fishing waters.

Because of this situation, the New England colonies eagerly followed the lead of the mother country in her various attempts to oust the French from Canada. During King William's War (1689–1697), Sir William Phips led a successful expedition against the Canadians. At the close of the war, however (by the treaty of Ryswick), such fishing grounds as had been taken by the English forces were returned to the French. Thirteen years later (1710) combined English and colonial forces again captured the fishing grounds about Nova Scotia. This time they remained in the hands of their captor.

Under a treaty drawn up by the two powers, the French were prohibited from fishing within thirty leagues from the coast of Nova Scotia, while the whole of Newfoundland and the Hudson Bay territory were ceded to England, with the provision that the

French might at certain points be permitted to take fish and to dry them on the neighboring shore. England granted other fishing concessions to the French, but in doing so firmly believed that the competition, which for many years the New England fishermen had encountered, was greatly weakened and would in time be completely destroyed.

8. Control of Commerce

England for the Englishman.—One of the purposes back of the establishment of European colonies in America was the desire of each mother country to open up new opportunities in trade to her merchants and manufacturers. That purpose would have defeated itself, however, had not each government at the same time enacted laws to restrict the trade to its own nationals and the carrying of the goods thus involved to its own ships. No one country could follow such a policy without encountering opposition at the hands of all other interested countries. Restrictions set up by the British Parliament against the citizens of France, for example, met immediate retaliation on the part of the French Crown. Likewise, similar restrictions imposed on Dutch trade had the immediate effect of forcing English merchants and traders to carry on their business affairs in Dutch territory greatly handicapped by obnoxious Dutch laws enacted as retaliatory measures against Great Britain.

Closely associated with these struggles to capture and to hold the colonial trade of America, was the spirit of nationalism that characterized the thinking of the peoples of Western Europe during the centuries immediately following the discovery of the New World. Such a spirit clouded clear reasoning along sound economic lines and prevented legislation that would recognize the eternal principles of common interest and mutual gain.

Western Europe was caught up with the idea that in a business transaction one of the parties to the transaction must of necessity be the gainer and the other the loser. Few, if any, even among the ruling classes, had any adequate notion concerning the true function of economic production and economic exchange. The prevailing idea was that the only way for a nation to become rich was to sell more goods than it purchased abroad, receiving thereby the difference in precious metals.

Early British trade acts.—Not long after the establishment of the first English colonies in America, civil war broke out in Great Britain between King Charles and his supporters, on the one hand, and the regularly constituted Parliament, on the other. For years the two parties in the conflict were too busy with affairs of state near at hand to give much attention to far-away problems that could easily await a more favorable opportunity for solution. The result was that, not until the King was dead and Parliament had gained control, did those in authority give any evidence of setting up strict regulations to govern colonial trade.

In 1651 a law was enacted with the idea of keeping British trade in the hands of the British.* This law provided that no goods might be brought into any of the English possessions from Asia, Africa, or America in any ships other than English. A slightly different regulation controlled the movement of goods produced in Europe. Such goods must be transported either by English ships or by the ships of the country producing the goods in question. This law provided also that goods of foreign origin must be brought directly from where they were grown or produced. An exception to this regulation was to the effect that countries shut off from the sea might use foreign ports for loading vessels with their products.

The intent of this early act is evident. The English people held the belief that the quickest and surest way to maintain a position of importance among the nations of Western Europe was to bar, as far as they could, the participation of foreigners in their domestic, as well as in their colonial, trade. Curiously, however, owing to the neglect of Parliament to provide for enforcement, the law thus enacted remained, on the whole, inoperative, and hence without significance except as it provided a precedent for subsequent legislation.

Navigation Act of 1660.—With the restoration of the King (Charles II) in 1660, the British Government set about to strengthen itself in the New World. This it did by reenacting, in principle, earlier laws and regulations concerning trade and commerce. Under them, goods shipped out of all British possessions, as well as into them, were restricted to British ships.

* Josiah Child, a governor of the East India Company, explains why the Navigation Act was beneficial to Great Britain, Selection 9.

It was further provided that such commodities as sugar, tobacco, cottonwool, ginger, indigo, and fustic, produced in any of the British plantations, might be sent only to the mother country or to some other plantation. The significance of this regulation is that it was put into force for the purpose of restricting (1) the transportation of goods of British growth and manufacture to British vessels, and (2) the markets of certain specific goods produced in the colonies.

Navigation Act of 1663.—This Act varied somewhat in its provisions from those which preceded it. All European goods except those produced in England and in a few other favored localities must, if they were to be shipped to any English possessions, first be sent to some port in England, Wales, or Berwick on Tweed, and from there transshipped to the original point of destination. Exceptions set up in the Act were salt for the New England and New Foundland fisheries, wines from Madeira and the Azores, and servants, horses, and all sorts of victuals from Scotland and Ireland.

The practical application of such a regulation meant that colonial importers, if, for example, they desired French goods, must pay, as it were, a tribute to some seaport in England. This they did by shouldering all port expenses and, in many cases, the expenses of unloading the cargo in question and reloading it on another ship.

Navigation Act of 1696.—Regardless of the intentions of those who enacted such laws and those who enforced them, evasions were relatively easy on the part of ship captains. Along the colonial seacoast goods might be landed at many places without detection and their identity easily concealed. More scrupulous traders protested against what they called unfair and illegal competition. The result was an effort on the part of the Crown and Parliament to heed these protests by strengthening existing laws and by enacting new ones.

The Act of 1696 was entitled "An Act for preventing Frauds and regulating Abuses in the Plantation Trade." Its purpose was to bring together and to clarify laws then on the statute books of the Realm. Some idea may be had of the intentions of the framers of the law from reading of some of its provisions.

". . . That after the Five and twentieth Day of March One thousand six hundred ninety eight noe Goods or Merchandizes whatsoever

shall bee imported into or exported out of any Colony or Plantation to His Majesty in Asia Africa or America belonging or in his Possession or which may hereafter belong unto or bee in the Possession of His Majesty His Heires or Successors or shall bee laden in or carried from any One Port or Place in the said Colonies or Plantations to any other Port or Place in the same, the Kingdome of England Dominion of Wales or Towne of Berwick upon Tweed in any Shipp or Bottome but what is or shall bee of the Built of England or of the Built of Ireland or the said Colonies or Plantations and wholly owned by the People thereof or any of them and navigated with the Masters and Three Fourths of the Mariners of the said Places onely (except such Shipps onely as are or shall bee taken Prize and Condemnation thereof made in one of the Courts of Admiralty in England Ireland or the said Colonies or Plantations. . . ."

The Board of Trade.—During the last quarter of the seventeenth century and until the Revolution, the affairs of the English colonies were administered from the mother country by a group known as the Board of Trade. This Board was in reality a committee of the Privy Council, and its duties were, in the main, to administer a set of colonial regulations drawn up by the Board and based on certain broad principles of colonial government laid down by the Council itself.

The Board was empowered to study the instructions of colonial governors with the idea of keeping such instructions in line with the wishes of the home government, to examine the reports coming annually from the colonies, to consider the qualifications of candidates for royal posts in the colonies, and to submit to the King for appointment such names as they might approve. More significant yet was the duty of the Board to weigh and examine the acts of colonial assemblies and legislatures. The Board held its authority from the Privy Council, and to this body it was responsible. The end of Queen Anne's reign (1714) saw the original powers of the Board greatly curtailed.

The organization of this Board was the outcome of a desire on the part of the King and his advisers to center colonial matters in the hands of a group that would protect to the utmost the interests of the Crown. This they were expected to do by seeing that whatever was done across the sea might be done with an eye for the advancement of British prestige and for securing profits to British traders. Such policies often ran counter to the

desires of the colonists. Whatever the attitudes of the British King and his subjects at home, that of the colonists was always in the direction of their own welfare. Regulations, therefore, established to benefit the London trader might, and did, harm the Boston merchant. It was but natural that colonial Assemblies should favor the interests of the New World, particularly those of their own colony. Natural was it also that many of their acts should be regarded in England as prejudicial to the welfare of the Kingdom. Here was a source of irritation that led eventually to revolt and freedom.

The regulations set up by the home government were numerous and in many instances harsh. None was more bitterly fought by the colonists than were those dealing with trade and commerce. The colonial merchant might proclaim long and loud against innovations in government, but when his purse strings were drawn, he was ready to fight for what he considered justice and fair play. With him stood the farmers, who had tobacco to sell, the ship captain, who waited for a cargo, the fur trader, whose very existence as such depended on wide European markets. What Great Britain failed to recognize then—no nation has in all history recognized it fully—was that the frontier, by its very nature, breeds opposition to interference and meddling on the part of law makers.

Piracy.—During the early part of our history, piracy thrived along the Atlantic seacoast and among the islands of the West Indies. With piracy there thrived also a trade clearly illegal but not piracy in the modern sense. Our notions of this subject are confined, on the whole, to such bold adventurers as Captain Kidd, and our interests to the treasures reported hidden in numberless secluded spots along the shore. Captain Kidd was a pirate, and in carrying on his piracy he set high standards for others to follow. More important for our purposes is some knowledge concerning his methods of disposing of his stolen goods and how under the guise of an honest trader he found means to secure protection.

Piracy could be made profitable. This rather sordid fact colonial governments soon discovered. Having discovered it, they turned it to their advantage. To live, the Captain Kidds of the colonial era had to find markets for their plunder. The governments, hard pressed for public funds, winked at illegal

practices, if and when by doing so they could see an honest dollar coming into the public treasury through license fees, or port duties, or through the pocket of some tax-paying citizen. Colonial governors might rage against the nefarious practice and even hang in public the more enterprising ones of the leaders, but with the excitement gone and in the absence of prodding from superiors in England, they were likely to close their eyes to what was going on about them. Governor Markham of Pennsylvania is reported to have said that piracy was beneficial to the country, because it brought money into it which otherwise would have gone somewhere else.

The whole business of piracy about 1700 was something more than merely overhauling a ship on the high seas and taking from it, by threat or force, such treasures as the captor might wish. Pirates required food and equipment in excess of what they could steal; moreover, they must find a market for their loot—in modern parlance a "fence." Accordingly, citizens upright and law-abiding in every other respect, dealt with these pirates, and in doing so made a neat profit. More than one American name written high in the social and business life of the New World—name as well as face—must have been familiar to Captain Kidd and his kind.

Whether or not a certain person was a pirate at any particular time, depends in large measure on a definition of terms. Sea captains grew rich transporting foodstuffs from the colonies to their piratic customers among the West India Islands, and to the waters of the Island of Madagascar. The captains, certainly many of them, carried duly signed passes from some colonial governor, and to that extent they were honest seafaring men engaged in legitimate trade. Some idea can be had of the magnitude of the whole business from the fact that in 1718 more than two thousand pirates used the Bahamas as their headquarters.

An even more important aspect of what currently passed as piracy is our inability to separate it from irregular trade. We have seen how the British Government attempted to regulate commerce in a way distasteful to those colonists engaged in trade. With this knowledge, and with an understanding of human nature, we can readily conclude that neither the government nor those directly involved regarded seriously such irregular trade as piracy in any sense. Both groups knew what was

going on and both groups could, when occasion required, look in the opposite direction. In Newport, Rhode Island, to cite a single example, the stores carried a greater variety of goods of European manufacture than could be found in the stores of the city of London. Strangely enough, not one vessel sailed directly between Newport and England, the point of departure according to existing Navigation Laws, of all such goods to be shipped to the colonies.

9. Confederation and Intercolonial Problems

New England Confederacy.—Many and strong were the forces that operated to unite those colonies facing common problems. Some of them were defense against Indian raids, French invasion, and English restrictions on colonial trade and commerce.

The New England colonies had much in common. They depended in large measure for economic well-being on shipping and the fisheries. Any interruption of these industries, therefore, meant loss to those engaged in them. In the face of such interruptions the colonists, fully aware of the futility of protesting individually to the home government, followed the natural course of joining their forces in what to them was a common cause and formed in May 1643, a confederation, to be known as *The United Colonies of New-England.* The attitude of the home government toward the Confederacy was, so far as the casual observer could see, one of indifference. To those in authority it was merely a manifestation of the natural desire of people to organize. To the student of history it is the beginning of a common effort that led to union under the Constitution.

Boundary disputes.—Another force back of the necessity for cooperation among the colonies was the need for settling numerous controversies concerning the control of large areas of land. In giving charters to trading companies and to other groups of colonizers, the King was not always careful to prevent an overlapping of land grants. The Connecticut Charter of 1662, for example, extended the boundaries of that colony to the South Sea, while that of Virginia included much of the Mississippi Valley. During the early years of the colonial period lands thus granted and regranted remained uninhabited and hence unprofitable. Their settlement, however, called attention to their im-

portance. The result was that colonial claims of varying degrees of validity were set up and supported sometimes by show of arms. In time—it was inevitable—colonial leaders were forced by the need of self-protection to attempt to settle these differences through counsel and cooperation.

Intercolonial trade.—After the first hard years there began to develop in the typical English colony a simple division of labor among its workers. A surplus of economic goods emerged. Then exchange among the colonies became a fact. Obviously such exchange had its enemies as well as its friends, those profiting by such trade comprising one group, those harmed comprising another. Apparently the latter group generally prevailed, for in time one colony after another set up barriers against the importation of goods from other colonies, these barriers ranging all the way from prohibition to trifling taxes.

In 1715 Maryland prohibited a number of imports from Pennsylvania. Among them were bread, flour, and beer. About 1721 the colonies of Massachusetts and New Hampshire engaged in a tariff war. In 1699 New York levied a duty of ten per cent on the manufactures of wool brought in from other colonies. Twenty years later the same colony taxed barrels brought across its boundaries on the ground that "the importation of great quantities of empty casks out of the neighboring colonies into the city of New York by experience is found to be very hurtful to the coopers inhabiting the said city, and will lay the said coopers under the necessity of deserting their habitations and employments, which will be a great discouragement to the trade and manufacture."

Money in the colonies.—Fortunately for the very existence of the early colonies, money played but a minor part in their economy. What they at first possessed—little at the most—they had brought with them from England; what they were later able to add to their original stock they secured in exchange for the products of their own labor. As might be expected, the coins that circulated among the colonies came from many sources. Most of them, however, were, for many years, of Spanish origin. The piece-of-eight was as much at home in Boston as it was in Mexico or Cuba.*

* Dr. William Douglass describes the money used in the various colonies, Selection 8.

The use of coined moneys raised difficult problems and opened wide the door to abuses. There was, first of all, no generally accepted standard into which all other coins might be converted in making everyday exchanges. The value of money was variously regulated by statute in different colonies. The result was a confusion in stating prices and an opportunity for the unscrupulous trader to overreach his customers. Next, the practice of clipping and sweating coins was widespread, especially in the ports of the West Indies. A piece-of-eight, for example, might be, and often was, clipped and sweated until its value was only a fractional part of what it had been at the time it was coined. Added to the confusion arising from the use of coins issued by different countries was the uncertainty that came with their changes in size and weight.

As a practical matter, full-weight coins refused to circulate along with clipped or sweated coins bearing the same name. To put the matter in another way, one group of coins, the lighter ones, continued to circulate as money, while the others passed current by weight just as tobacco, wheat, or rice, or any other commodity was accustomed to pass. It would be a mistake, however, to infer from what has been said that the various governments, colonial as well as Old World, gave no attention to the nefarious practice of decreasing the weights of coins. The facts are on the contrary. Strict laws carrying heavy penalties were enacted, but without putting an end to the abuse. Likewise, merchants of the better class did what they could to maintain the confidence of the people in the money used to carry on the businesses of the colonies. To that end they weighed the coins coming into their hands and stood ready to evaluate them on presentation by a customer.

In 1690 Massachusetts issued paper bills of credit. This was a radical experiment in money making and served for years as a precedent. Soon after their issue these bills declined in value. Then they were made legal for all payments and, to give them strength as a monetary unit, they were received by the colonial treasury at something above par. Such a practice kept them in circulation and prevented their driving coins out of circulation. In a further effort to maintain these two kinds of money side by side, the colonial legislature prohibited the exportation of coins, except only a person leaving the province might carry with him

as much as £5 to be used for necessary expenses. What occurred in Massachusetts occurred, generally speaking, in the other colonies. The surprising thing about it all is that trade and commerce could make any headway whatever against a disorganization that inevitably accompanies an unsound currency.

Chapter IV

ECONOMIC LIFE IN THE ENGLISH COLONIES

THE English colonies in what is now the United States were more than English colonies. They were English in dress and manner, in speech and habits of thought, in methods of carrying on business, and in their theories concerning the functions of government. Such liberties as the English claimed after centuries of struggle against the Crown, the colonists claimed as their own. To them Magna Carta was as real as it was to the most devoted Englishman. What they wished were the opportunities afforded to native Englishmen—opportunities to be free from what they considered obnoxious regulations, and a chance to share in such social betterment and economic progress as the world at large might enjoy.

As is to be expected the colonists gave attention to a wide variety of economic activities. As an aid to trade and commerce they did what they could to improve methods of communication and travel. To that end they converted Indian trails into wagon roads and in time set up in different sections of the country facilities, crude they were, for sending letters and newspapers from place to place. In spite of their efforts movement continued to be slow and the expenses involved relatively high.

English colonists busied themselves in many kinds of economic enterprises. They were farmers and merchants and traders. Some engaged in the skilled trades and personal services, some sailed the "Seven Seas," some fished, some carried on manufacturing. They resembled in their economic activities and in their economic relationship those of a more modern day. All consumed economic goods, all produced such goods in order to live, all recognized the opportunity for free enterprise.

Such manufacturing as the colonists carried on was crude, to say the least, for even the mother country had not yet felt the impulse that gave her first place for a time among industrial nations. Much of what was done was done in the home by the women and girls of the households. There wool was spun into

thread and the thread woven into cloth. There, too, the cloth was dyed and fashioned into garments. These home processes combined with blacksmithing, and other economic activities similar in nature, to form the backbone of colonial industry.

While the colonists produced a great deal of what they consumed in the nature of manufactured goods, they did depend in large measure for such goods on the mother country. These they secured through the exchange of other goods and by providing ships for the carrying trade, and with money gained in the West Indian trade.

Slowly but surely, as events proved, the English colonists laid the foundation of the New World's greatness as an industrial power. This they did by producing what they could, depending on trade and commerce for what others could produce more economically.

10. Communication and Public Markets

Communication.—The early English colonists felt no need of direct communication among settlements; rather they sought isolation. In time, however, led by merchants and traders, they established what today would scarcely be considered as a mail service. The first postman in the New World was an Indian runner, who carried an important letter from one plantation to another. His uniform, we may suppose, was little more than a breechcloth, but he was a postman nevertheless. Public letters, those written by His Majesty's servants, were required to be sent from plantation to plantation until they were finally delivered to the person addressed. The simplicity, if not the uncertainty, of such a system is well illustrated by the fact that thirteen years after La Salle's death in the Lower Mississippi Valley, a letter written by Tonti, his faithful companion, and left in care of a friendly Indian, was delivered in France.

With the spread of population there grew a desire for faster and more frequent "mail deliveries." In 1673 the Governor of New York established a mail service between New York and Boston; the project failed for the time being because of the hostility of the Indians. In the same year the lawmakers of Massachusetts legislated in favor of better methods of communication. A little later Connecticut did the same thing. Letters for foreign destinations might, in many coffee houses in the

towns along the coast, be deposited in bags hung there by ship captains about to depart.

The practical difficulties met by colonial officials in their attempt to communicate with fellow officials in other colonies is set forth by Lord Cornbury in a communication (1704) to the Lords of Trade.

> "The post that goes through this place New York goes eastward as far as Boston, but westward he goes no further than Philadelphia, and there is no other post on all this continent, so that if I have any letters to send to Virginia or Maryland, I must either send an Express who is often retarded for want of boats to cross those great rivers, they must go over—or else for want of horses, or else I must send them by some passengers who are going thither—The least I have known any Express to take to go from hence to Virginia has been three weeks, so that very often before I can hear from Coll. Nicholson what time the fleet will sail and send my packets the fleet is sailed."

Four years later he wrote, ". . . sometimes a letter is six weeks coming from Virginia, sometimes longer."

Communication by mail was as expensive as it was slow. In 1698 the rates on colonial single letters were as follows:

Not over eighty miles.....	9 cents	Boston to Maryland..	48 cents
Boston to New York.....	24 cents	Boston to Virginia.....	48 cents
Boston to Jersey.....	30 cents	New York to Maryland....	24 cents
Boston to Philadelphia.....	30 cents	New York to Virginia.....	24 cents

In 1711, an Act of Parliament authorized the establishment of a postal system in the colonies with New York City as headquarters. Local rates, as they had been since the beginning, were maintained, and provisions were made for foreign mail service. The rates from London to New York were fixed at twenty-five cents and the rates from the West Indies to New York at eight cents. This same act made an effort to speed up the service but without any success. A few years later a prominent citizen of Pennsylvania complained that letters sent from Boston to Williamsburg in Virginia were on the way four weeks under the best of travel conditions and twice as long during the winter months.

The bulk of the travel was at a pace even slower than that of the mail service. The chief towns of the colonies were situated on navigable water, and from one to the other boats of many different kinds sailed at irregular periods. Overland routes

among them were for years little more than widened Indian trails. In traveling people went in groups; except for short distances, no one, not a hardy woodsman or trapper, ventured to go alone. As settlers moved inland they united in a demand for improvements in the roads to the older communities. Gradually, these demands colonial authorities met, until in time roads radiated from the chief towns into the hinterland. Such travel as might have been found on the roads during the colonial period was, in the main, on foot or by horseback.

Along the river, craft suitable for shallow water carried on much of the commerce and afforded means of travel. Various names, according to local usage, shape of hull, or to the rigging used, were applied to these craft—punks, pinnaces, ketches, schooners, lighters, shallops, sloops, piraguas.

The early authorities in the colonies regarded printing presses and newspapers with suspicion. In 1664, for instance, a Massachusetts law prohibited the establishment of printing presses in that colony in every place except Cambridge. Philadelphia had its first printing press in 1687; New York, in 1693.

The first newspaper printed in America—*Public Occurrences*—appeared in 1690. After a single issue it was suppressed. Fourteen years later (1704) came the *Boston News-Letter.* This sheet—it really was a sheet nine by twelve inches—marks the beginning of the newspaper industry in the English colonies. It copied from its contemporaries issued in London, and as late as 1722 its news was as much as thirteen months out of date. In 1721, James Franklin, brother of the immortal Benjamin, began the publication of the *New England Courant.* In a little while he was in trouble with the authorities over a too liberal use of "live language." Then he was sent to jail leaving Ben, a mere lad, in charge of the enterprise. In 1728, young Franklin, now a seasoned newspaper man, secured control of the *Pennsylvania Gazette,* ancestor of the *Saturday Evening Post,* and with that he began his climb to world eminence. At that time there were seven such news sheets in the colonies—three in Boston, one in New York, one in Annapolis, and two in Philadelphia.

The colonies were more than a century old when the printing press came to be recognized as an influence for the good. In the meantime such news as came to the colonists did so through personal letters and through English papers kept at the colonial

coffee houses and there read aloud for the edification of those who cared to listen. Such news was long delayed, but being the only news available, it was heard with eagerness by a people far removed from its source.

Public markets.—The public market was an institution that rendered a real service to producers and consumers alike. In New York City, for example, those in authority provided (in 1683) that the three days, Tuesday, Thursday, and Saturday, be designated as market days. Detailed regulations were set up. The market was to be opened and closed by the ringing of a bell, a clerk was empowered to see that weights and measures were correct, no goods bought at the market could be resold there. Some idea can be had of the place the market occupied in the economy of the city when it is known that in 1698 more than three thousand cattle were slaughtered and the meat sold to local residents.

In Philadelphia, Wednesday and Saturday were designated (1693) as market days. Here could be had all kinds of meats, fish, butter, eggs, cheese, herbs, and roots, and they could be sold nowhere else within the city. No sales, under penalty, could be made prior to the opening of the market (between six and seven o'clock in the morning during the summer months, and eight and nine o'clock at other times) except to the Governor and Lieutenant Governor of the colony. Those bringing goods to the market might not offer their goods to prospective buyers, nor could hucksters make purchases until after the market had been open two hours. Fees were collected from sellers (except people from the country with their own produce)—twelve cents per head on all slaughtered cattle, four cents on sheep, calf, and lamb, and six cents on each pig.

The Boston market resembled in general outline those of New York and Philadelphia. An additional provision was to the effect that twice a year a fair should be held in connection with the market. Considerable opposition developed among the neighboring farmers; its basis was that fairs tended to bring into Boston, at stated intervals, more produce than could be sold at a profit. What these objectors desired was a more even and more orderly demand for the products of their farms.

Markets such as these occupied a high place in the economic life of the colonies. In most of the larger towns the name

Market Street has come down as a reminder of this place. What is even more significant, the idea of providing a publicly controlled place where food producers can offer their wares for sale to the housewives of the community still prevails with only minor modifications.

11. The Advance of Industry

Household industries.—Much of the industry of the colonial period was carried on in the home by the women and girls of the

"That there might be light"

household, assisted at times, particularly in the work requiring physical strength, by their men folk. Chief among these industries were the carding of fiber, usually wool, the spinning of thread, and the weaving of cloth. The typical colonial family was well-nigh self-sufficing in so far as clothing was concerned, for with the fiber grown or raised on the farm as raw material the mother and her daughters carried the necessary processes to completion. Thus the homespun of the pioneer people has come to mean in modern language something lacking in beauty and color but abounding in honest workmanship and genuineness.

Many of the industries were carried on outside the house in

which the family resided. What today we know as the slaughtering of animals and the packing of meat products, was, during the colonial period and for many years following it, a simple process indeed. Such food animals as the farmer himself raised he killed during the winter, and with smoke and salt he preserved the meat for his own family and for the next summer's market. Other farmers, more mechanically inclined, spent their spare time in fashioning the tools they needed for their work and for sale to their neighbors. What is really important in this connection is the fact that the family of the colonial period was a highly important economic, as well as social, unit of society.

Shipbuilding.—As during the earlier days of the settlements, shipbuilding as an industry continued down to the latter part of the eighteenth century as one of major importance. In Massachusetts the chief centers of the industry were Boston, Charlestown, Salem, Ipswich, Salisbury, and Portsmouth. Some of the vessels built in that region exceeded two hundred fifty tons in carrying capacity; most of them, however, were smaller in size, hundreds of them ranging from six to ten tons.

In those colonies in which agriculture predominated at the expense of shipping, the authorities sometimes offered bounties to the builders and owners of ships. Virginia, for example, made such offers in the form of tobacco—fifty pounds of tobacco per ton for small ships; two hundred pounds per ton for ships of over one hundred tons' capacity. In South Carolina bounties were paid to shipbuilders according to the size of the vessel, and to shipwrights for settling in the colony.

As is to be expected, the building of ships in the colonies was frowned on by those in England engaged in the same industry. In 1724, for example, a group of Thames master ship carpenters, sixteen in number, lodged a complaint with the King of England to the effect that many of their best workmen were being enticed to the New World by the offer of higher wages and of bounties being paid by the colonial governments.

Production of naval stores.—Closely akin to shipbuilding was the production of naval stores—mast timbers, ship timbers, tar, pitch, rosin, and hemp. Prior to the first settlement of America, and for almost a century later, English shipbuilders had depended in the main on the Scandinavian countries and on Russia for such stores. Two events of major importance influenced

this dependence and turned it into other channels. A war with France early in the eighteenth century increased the needs on the part of the English for additional supplies of naval stores—an increase which the Eastland Countries could not meet. The second factor was the insistence by the Stockholm Tar Company that England buy her naval stores from no other concern and that her shipbuilders accept delivery at English ports. Neither of the demands would the English government meet. One meant excessively high prices; the other a withdrawal from the position that goods of foreign extraction shipped into the realm must be carried in English ships.

In 1705 Parliament met the situation by enacting a law that provided for bounties to be paid on the importation of colonial naval stores into England at the following rates per ton: tar £4, pitch £4, rosin £4, turpentine £3, hemp £6, masts £1, yards £1, bowsprits £1. The effect of this act on the colonial production of naval stores was good, although not altogether up to the expectation of its framers. In 1718 more than eighty thousand barrels of tar and pitch came to the shipyards of England from the colonies. At about the same time, the number of masts received annually from the same source exceeded two hundred. The bounty act failed to add materially to the production of colonial hemp, owing, it is usually explained, to the difficulties of cultivating that plant in the New World.

Manufacturing.—Colonial manufacture, measured by present day notions, was primitive and crude. Power machinery was scarce and its use was confined to preparing raw materials for the use of craftsmen employed in a rather narrow range of finished products. This power was employed, for example, to saw lumber for the cabinetmaker and to forge iron for the blacksmith. These craftsmen, many of whom had a working knowledge of a number of related crafts, stood between the ultimate consumer and what then was regarded as the finished product of the manufacturing process.

Considered from the point of view of industry, the American colonial period may be regarded as an age of wood. That is, such machinery as existed was constructed, in the main, of wood. Pulleys, shafts, and machine frames, of the sturdiest of oak timber, served, in general, the same purposes served today by iron and steel.

Throughout the late colonial period, iron continued to be scarce and high priced. The steel age was yet in the future. Some iron was produced in domestic furnaces; most of it, however, came from abroad. None of it was ever wasted. The local blacksmith fashioned horseshoes from broken wagon tires, and, if occasion required, could turn a common file into a keen edged knife or razor. Many household utensils—necessities to us moderns—now so familiar, were unknown to our colonial forefathers and foremothers.

Closely associated with colonial manufactures were the numerous waterfalls easily accessible in the short rivers that drained the highlands along the Atlantic. These waterfalls the colonists harnessed for productive purposes—for grinding flour and sawing lumber, and later for the spinning of thread and the weaving of cloth. Today an observer in the coastal region, especially in New England, can see here and there the old mill pond with its heavily constructed dam and, in some cases, its abandoned mill. These primitive sources of power are no longer of economic importance, but during the years of the colonial era they played an important part in laying the foundation for an industrial nation.

Colonial markets.—The colonial manufacturer found a variety of markets for his goods. First, there was the home market narrowly restricted by slow and costly land transportation, but far flung along the coast and up navigable streams. Some wares, owing to their great weight compared to their value, sought consumers close at hand. Those better able to bear the charges for carrying them to far away places found markets from Georgia to Maine.

What to the colonists were foreign markets, comprised two general groups of nations and peoples. One of these was western Europe; the other was the group of islands lying south of Florida with the adjacent mainlands. Of these two groups, the Islands—some carrying the name Sugar, others the name Wine—were regarded as the more important. To them they shipped foodstuffs of different kinds and materials for making pipes, tuns, hogsheads, barrels, and casks. The materials consisted of staves, hoops, and headings. Sometimes the vessels carrying them carried workers who spent their time on deck making the various containers in demand on the islands. They carried away cargoes of sugar, molasses, rum, cotton, dye, cabinet woods, and a variety

of coins. A modification of this trade was three sided, in which the colonial shipmaster, after unloading his cargo in Europe, sailed to the west coast of Africa for slaves to be traded for island goods.

To Europe went naval stores and furs, to be exchanged for a variety of manufactured goods such as cloth, tools, and implements, and the less expensive products of the Far East.

12. Dependence on the Mother Country

For manufactured goods.—Already we have given some attention to the economic relations of the colonists to the mother country. We have seen, in a general way, how transplanted Englishmen turned to the country of their nativity for examples, and how the Parliament of the same country made capital of the opportunity to enact laws in what its members considered the best interests of the colonists. Such enactments, regardless of the motives of the King or anyone of his advisers, were expected to aid the country in its economic developments, both at home and across the sea.

Relatively speaking, the population of England was becoming crowded, with a corresponding pressure on the food supply of the country. The result was that the people already working their tillable lands to capacity were forced into manufactures. What they made in their shops and mills they had to exchange for provisions and other products arising from the world's extractive industries. The natural thing for the lawmakers of England to do, therefore, was to regard the colonies in America as natural markets for English manufactured goods. Here we have the explanation of the restrictive legislation imposed on colonial manufactures.

For markets of raw materials.—The converse of the efforts of the English Parliament to discourage manufactures in the colonies on the one hand and on the other to prohibit the importation into the colonies of goods not manufactured in England, was to develop the extractive industries in the colonies and, in doing so, to "keep trade at home" and to weaken competing European powers by not trading with them. For centuries England had depended on the Scandinavian countries and on Russia for shipbuilding materials of all kinds. Such dependence in times of peace was galling enough to the patriotic Englishman;

in time of war it was, to his way of thinking, dangerous to the well-being of the nation. Having arrived at this state of mind, the next step was to set up restrictions on the exportation of raw materials from the colonies to foreign countries, and, in some cases, to pay bounties for such materials shipped to the mother country.

For a medium of exchange.—We have noted already how, throughout the colonies, a great variety of coined moneys circulated, and how, in most instances, there was absent a common medium by which all such moneys could be evaluated. Despite what appears to have been a "hodge-podge," the tendency was for the colonists to translate values into pounds, shillings, and pence, and to depend on these coins in paying trade balances, particularly with England.

From time to time the English Parliament legislated in the interests of a sound money system, giving preference to the coins of its own country. This legislation did much to stabilize the currencies of the colonies, and it would have done even more could it have broken down the habits—clearly illegal—of the people in using foreign moneys for making purchases and for paying debts.

For protection against the French and the Indians.—The points of view of the colonies were much the same regarding the relation to the French, as long as that people contested their supremacy east of the Mississippi. These same colonies might war among themselves over such matters as trade and commerce, and proclaim in one voice their hostility to home government regulations, but when they came to the French or English question, they depended in large measure on the strong arm of the English government.

French raids from the north meant a call to the mother country for help. Here was a type of dependence which the home government could, and did, capitalize to advantage. America provided a place for soldiers about to be retired to serve their last days in the army and a place to be settled with a minimum of trouble to Parliament. Moreover, the presence of another power along the colonial frontier gave color to the arguments advanced by the advocates of placing restrictions on colonial manufactures, and forced their acceptance by a people whose protection from hostile neighbors was of the utmost importance.

The colonies depended on England for setting up and carrying out policies having to do with the Indians. Agents of the home government lived among the savages, and from their warehouses the gifts distributed at stated intervals were carried to the tribes.

At the bottom of this dependence was a lack of coherence on the part of the colonies. No one of them was populous enough and rich enough to stand alone either in resisting French attacks or in dealing with the Indians. Isolated as they were, each looked across the sea for protection, with the result that, instead of being one people with a common purpose, they were thirteen peoples with such purposes at any given time as emergencies might thrust upon them.

13. Colonial America in 1733

Population.—Some notion can be had of the state of colonial affairs by an examination of life in the New World at a given moment of time. The last English colony—Georgia—was established in 1733; George Washington was then a year old. In a sense, that year marks the end of one era and the beginning of another.

Of the thirteen colonies, Massachusetts was the most populous, Virginia came next, followed by Maryland. Bringing up the rear was the youthful colony of Georgia. According to reliable estimates, the populations of the different colonies were as follows:

Massachusetts	140,000	Virginia	119,000
Maryland	96,000	Pennsylvania	80,000
New York	55,000	Connecticut	40,000
New Jersey	40,000	North Carolina	36,000
South Carolina	20,000	Delaware	20,000
Rhode Island	18,000	New Hampshire	11,000
Georgia	500		

Of the colonial cities, Boston stood first with a population of 14,500, followed by New York with 9,200, Philadelphia with 8,000, Providence with 6,000, Newport with 5,000, Charleston with 4,000, and Salem with 3,500.

The combined population of the thirteen English colonies in 1733 fell short of seven hundred thousand. The significance of these figures becomes apparent when compared with modern population figures of the United States. In 1930 the state of

Rhode Island boasted of having 687,497 persons within its borders, while each of the cities, St. Louis, Baltimore, Boston, and Pittsburgh had a population approximately equal to the combined populations of the English colonies two centuries ago.

Agriculture.—Colonial agriculture comprised a wide variety of crops. Among them were corn (maize), wheat, beans, peas, tobacco, squashs, pumpkins, muskmelons, watermelons, white (Irish) potatoes, sweet potatoes, cotton, rye, apples, pears, cherries, peaches, hemp, rice, and meadow grasses. The typical farmer, south as well as north, raised live stock for food and power. In Rhode Island a breed of horses known as Narragansett pacers was developed to a point where it was widely admired and desired.

An important agricultural crop likely to be overlooked is hay. In the north, where severe winters forced inside feedings, great quantities of this product were stored. In the south, cattle were permitted to graze the year around, usually on unsettled lands. In comparing the two sections as to agricultural wealth, it is necessary, therefore, to match growing grasses against stored hay and forage.

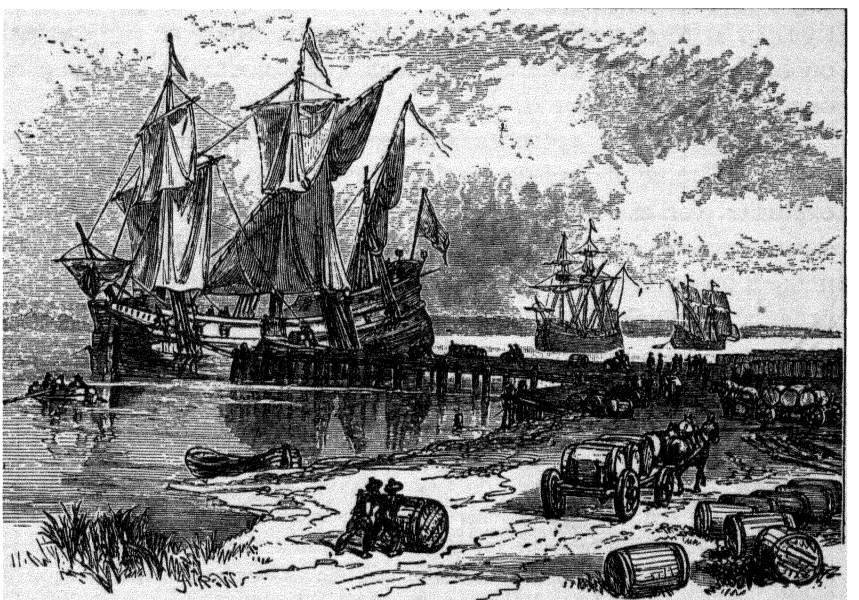
New England, generally speaking, was never suited to farming. It is true that here and there along streams fertile land could be had in relatively small areas. A yield of from twenty to twenty-five bushels of corn per acre on good soil was considered satisfactory, although yields as high as fifty bushels per acre were sometimes reported.

Wheat was a middle colony crop. There the yield ran from ten to fifteen bushels per acre. The acreage on any particular farm was likely to be small. The tools used in preparing the ground and in seeding the crop were primitive in the extreme, and the facilities for harvesting and for processing the grains placed sharp limitations on the ability of a farmer to produce.

The early settlers took the soil as they found it; they had no concern in maintaining its fertility. The result was land butchery year after year with little regard for crop rotation and none at all for applying fertilizers. The colonial farmer took from the land without giving anything back to it. Particularly in the long stretches of fertile areas of the south, where staples such as tobacco, cotton, and rice grew luxuriously, and where land was plentiful and to be had for the asking, the colonists began a

program of soil depletion that continued down into the nineteenth century with disastrous results.

Northern agriculture was carried on, in the main, on small farms by the owners and their families; in the South the tendency was toward the plantation system with hired managers and negro slaves. Circumstances combined to develop this difference. In the one section the available fertile lands were scarce and scattered; in the other they were plentiful. In the one, owing to the climate and the kinds of crops that could be grown to advantage,



The tobacco fleet comes to Virginia

slave labor was unprofitable; in the other conditions were reversed. In the north the farm was essentially a home unit; in the south it might, and often did, resemble a manufacturing establishment.

Trade with England.—The trade carried on between the mother country and her colonies in 1733 exceeded a million pounds sterling.* Of the colonies, Virginia and Maryland led, with exports of slightly more than four hundred thousand pounds and imports of about half that amount. In exports the Carolinas came second, while in imports New England ranked next to

* The commodities entering the trade between England and the various colonies are pointed out by Joshua Gee, Selection 10.

Virginia and Maryland. New York exports amounted to more than eleven thousand pounds, her imports to a little less than sixty-six thousand pounds.

The colonial merchant was a versatile business man; he carried on a general shipping and commission business. From foreign correspondents he received a variety of manufactured goods, and in turn he sold them ships, furs, fish, wheat, tobacco, and lumber. Sometimes he loaded a ship with a cargo of his own merchandise and sent it abroad to trade in the ports of the West Indies or of western Europe. Often he shared such ventures with relatives or with foreign merchants. Usually, however, he carried on his business on a percentage basis, the normal charge being one shilling in the pound.

The settling of accounts among these merchants so far removed in point of time was a long drawn out affair. A colonial exporter, for example, often waited months and even years for a return cargo in payment for what he had shipped abroad. To make a bad matter worse, that is from his point of view, business practices required him to extend long term credit to local shopkeepers. Thus, in a way, the colonial merchant of prominence was a banker as well as a buyer and seller of merchandise.

The problem of the colonial exporter is set forth in a statement made by a resident of New York.

> "Wheat is the staple of this Province, and tho' that comodity seems literally to interfere with the product of Great Britain, It do's not so in fact, for its generally manufactured into flower and bread, and sent to supply the sugar Collonys, And whenever a Markett in Spain Portugal or other parts of Europe has encouraged the sending it thither in Grain, the Adventurers have often suffered by the undertaking, for at this remote distance, the intelligence of a demand reaches us so late, that the marketts are supplyed before our Vessells come there, and even if it were otherwise our Merchants lye under vast and certain disadvantages besides for freight of Wheat from hence in time of warr was at least two shillings and six pence, and in time of peace is eighteen pence Sterling per bushell and by the length of the passage it often grows musty at least cannot come so fresh to Markett as from Great Britain; whence freights (as its said) are not above one quarter part of what they are at here."

Manufacturing.—Some consideration has already been given to this phase of colonial industrial life, particularly to its early beginnings and developments. What was its state about 1733?

In 1732 the Board of Trade reported to Parliament on the state of manufactures in the colonies.* Information collected by the Board showed that in New England domestic cloth was gradually displacing calicos from India, that paper was being produced in that region, that attention was being given to the weaving of shirting and sheeting, that iron in various forms was being produced, and that the home industries, such as spinning and weaving, were on the decline. So far as the Board was able to learn, manufacturing in New York amounted to little.

The Board expressed the opinion, in its report to Parliament, that colonial manufactures were detrimental to the best interests of the home land, and urged on that body the enactment of laws that would discourage the production of goods coming directly into competition with English manufactures. As a compensation to the colonists, the Board suggested the advisability of doing something to encourage the production of naval stores by favorable legislation of various kinds.

The important consideration in this connection is the state of mind of the English leaders at home. To them, to repeat, the colonies were to be used to advance the interests of the mother country. Accordingly, therefore, they must not be permitted, whatever natural advantages they might possess, to carry on any business that might harm English business. This policy was both narrow and shortsighted, for it set up differences among a people possessing identical views on matters concerning government and industry, and, in doing so, worked to the advantage of some and to the expense of others. This policy, it may be said, was not altogether English; it colored the thinking of all the peoples of Western Europe.

* For excerpts from the report see Selection 11.

Chapter V

EARLY RESTRICTIVE MEASURES

THIS chapter and the one that follows concern themselves, in the main, with a restatement of much that has already been said, and with an emphasis on those aspects of colonial development which led to general dissatisfaction on the part of the colonists and eventually to their successful efforts to become a nation freed from the domination of European considerations. Such repetition as occurs, therefore, is in the interest of fullness and clarity and of a desire to view colonial America from many angles. To reach those ends, a candid examination of the political and economic theories of the time, with particular reference to the colonial situation, is necessary.

The English King and his Parliament held certain rather definite opinions concerning the relation of the American colonies to the mother country. However much they might have been conscious of the fact, these opinions were part and parcel of the wide-spread Western European opinion.

At the bottom of these opinions was the idea—still alive in the minds of many persons, some of whom are supposed to be statesmen—that in making exchanges, one of the parties to the exchange must of necessity gain something and the other lose something. It is true, it must be said in justice to those who held this idea, that for centuries much of the trade, both domestic and foreign, was under grave suspicion, and justly so; short weights, fraudulent representations, and the substitution of one good for another, were all too common.

As had been pointed out, a second and closely related idea concerned the possession of gold and silver money. Each nation held that the way to become rich and powerful was through the acquisition of precious metals. On the surface, Spain, after the discovery of America, seemed to offer positive proof of the soundness of such an idea. Into her ports flowed a stream of yellow and white wealth; trade and commerce flourished; her citizens slackened their productive efforts. If ever proof were

needed that the nation with the largest stock of precious metals was the wealthiest and the most powerful, Spain, in the heyday of her colonial supremacy, appeared to offer that proof.

These two ideas colored the acts of the King and Parliament in enacting laws concerning the American colonies. Colonial trade with foreign countries was discouraged, if not prohibited, and in particular instances bounties were paid by the home government to insure a monopolistic trade in goods and wares regarded as essential. Such regulations the colonists accepted, sometimes favorably, sometimes otherwise, depending on their effects on colonial trade and industry. To put the matter in another way, the American business man was first an American and then an Englishman. On this basis, and on no other, can any satisfactory explanation be made of the ease with which the colonists, after accepting bounties of one kind or another, were able to bring themselves to separate from the mother country.

14. British Commercial Policy

The theory of Mercantilism.—Our acquaintance with the efforts of the English government to regulate colonial trade prepares us for a discussion of Mercantilism, a name given to a certain associated series of ideas prevalent during the years the American colonies were subject to England and for a time following the War for Independence. The theory underlying Mercantilism may, for purposes of discussion, be broken down and examined part by part, with the understanding that these parts are not in themselves separate and unrelated. Any notion to the contrary will mislead thinking and go far to destroy a proper conception of the ideas back of this theory.

The first of these parts has to do with what was called a favorable balance of trade.* This meant that the measure of a country's economic progress was the difference between the value of the goods exported from that country and the value of the goods imported into it. Thus if England, for example, found, in casting up accounts at the end of the year, that she had bought more from France, Spain, and the other nations with which she traded than she had sold to these nations, she felt that the country was losing rather than gaining ground.

* That Prince of Mercantilists, Thomas Mun, states the balance of trade theory, Selection 12.

If, on the other hand, her accounts showed more sales abroad than purchases, she felt exactly the opposite. Back of this notion was a second one as fallacious as the first. Such balances, if they are favorable, had to be paid, so the people thought, in gold or silver or in both metals. Little consideration seems to have been given to such important aspects of foreign trade as price levels, international credits and debits, freight charges, insurance premiums, and bills of exchange arising from immigration and travel. What each nation desired above everything else was the power and prestige supposed to accompany the accumulation of precious metals.

A second consideration involves the nature, rather than the volume of foreign trade. In the time of Good Queen Bess, and for many years following her death, the lawmakers of England pursued a well defined theory of discouraging trade in certain classes of goods and encouraging it in others. This they did, in the one instance, by making such trade burdensome, or, as sometimes happened, by prohibiting it altogether, and in the second instance, by facilitating exchanges and, occasionally, by paying bounties. Just how these laws operated we have seen already: how manufactured goods shipped to the colonies from foreign countries, such as France, were either burdened by restrictions or forbidden, and how the production and sale of naval stores were stimulated by affording a monopolistic home market for the colonists backed up by payments of money. At the bottom of such legislation was the Mercantilistic notion that trade within a country was to be preferred to foreign trade, when that trade threatened to withdraw gold and silver with which to pay unfavorable balances.

A third aspect of the theory of Mercantilism considered itself with the relation of a country to the trading activities of foreign merchants. It held that no foreigner should be permitted to engage in any business which could and would be carried on by its own nationals. It did recognize the desirability of making exchanges among nations, but only when in so doing the importing nation secured goods in exchange which it itself could not, or had no desire to, produce. Especially was the exchange among the detached sections of the same nation a function to be denied to foreigners, for here was the opportunity each sought of establishing and maintaining economic self-sufficiency, and,

what was of even greater importance, of furnishing an outlet for excess population and of building up a strong navy through a merchant marine. Such restrictions had as their end the promotion of industry and the strengthening of the country's naval power.

The desire on the part of each nation for superiority in naval strength leads to a consideration of the fourth aspect of the theory. In those days a fighting vessel differed little from a merchant vessel. Both were built along the same general lines, and with slight alteration one could be made to take the place of the other. Every merchantman, therefore, was a potential fighting ship.

In setting up restrictions against foreign shipping, England, in common with her neighbors of western Europe, had in mind the enlargement of her naval power. Here lies the explanation of a national policy in which Englishmen were encouraged to engage in economic activities which foreigners could carry on more efficiently and at less cost. Such money losses Parliament charged against the need for strength on the sea.

Mercantilism, as it was practiced in the eighteenth century by the peoples of Western Europe, was nationalism in the raw. It was selfish and self-seeking, blind to its own best interests, and productive of inefficiency and waste. While pretending to build up the industries of a particular nation at the expense of other nations, it did little more than build Chinese walls along its borders, thereby cutting itself off from the advantages that must of necessity accrue from the exchange of goods over a wide area. All this England did in the spirit of the times, firmly in the belief that her own economic well-being had no connection whatever with the well-being of her neighbors. Her justification was the belief that in so doing she would in due time recoup her losses through her own industries and through her increased naval strength.

A fifth and final consideration deals with trade among the colonies and trade between the mother country and the colonies. England, as has already been pointed out, considered the settlements in America as plantations. On the basis of this consideration she set about from the first to foster them as sources of raw materials for English industry and as markets for English manufactures. In following this policy, the mother country did

exactly what any other of the western European nations would have done under similar conditions. All of them were in a race for supremacy in trade as well as in national prestige and power. The combination of an industrially inclined population well trained in carrying on foreign commerce with long stretches of virgin territory across the sea was, to the ways of thinking of the English leader, a circumstance to be accepted as a gift from providence. To turn his back on it would be to fly from the face of fortune.

Applying the theory.—A theory is one thing; its application to a practical situation may be somewhat different. Mercan-

tilism as a theory underwent modification as it was applied to matter-of-fact situations.

Such modifications applied to the carrying trade Parliament denied, and made every effort to restrict the carrying of goods into and out of English possessions to English built and English owned vessels. This legislation was not always clear and consistent, and as a result, its provisions could be, and often were, evaded through sharp practices and subterfuge. Moreover, the Dutch, because of their command over labor and capital, were able to build ships cheaper and to operate them more economically than were the English. The inevitable result was that Dutch ship captains offered in the English markets their services at a rate lower than their English competitors. The reactions to such offers were immediate demands on Parliament, on the part of merchants, for a lowering of the barrier against foreign vessels.

The same merchants, so far as their own particular businesses were concerned, believed whole-heartedly in the theory of Mercantilism and in its strict application to trade and commerce. When, however, it ran counter to their best interests, they were willing, sometimes eagerly so, to see it set aside, if not completely annulled. In this willingness to accept such modifications of a doctrine to which they were wedded, the merchants of England met the united opposition of all those whose interests might be advanced by close adherence to it. Among them were mechanics of every sort and description, suppliers of materials for building and equipping sea-going vessels, contractors, and ship crews. The various and sundry groups were of one mind in supporting the principles of Mercantilism, but, being human, they differed violently in its application to a particular situation.

What concerned the English merchant was not the efforts of Parliament to develop the carrying trade, but the efforts of that body to unite the mother country and her colonies so as to give them a monopoly of the trade between them. To that end certain commodities of colonial origin—known as *enumerated commodities*—must be shipped to England, if shipped abroad, and to no other country. For a time the enumerated group included sugar, tobacco, cotton-wool, indigo, ginger fustic, and other dye materials. Later, hides and skins were added, and (in 1739) sugar was taken from the list.

Generally speaking, non-enumerated articles produced in the colonies could be shipped to all parts of the world; in particular instances, zones into which each exportation might be made were established. During the reign of George III (beginning in 1760) colonial articles of commerce not enumerated could be shipped only to countries south of Cape Finisterre (westernmost headland of Spain). Whatever the particular requirement at any given time, the main purpose of setting up these regulations was to give as much of an advantage as possible to the industries of England, without at the same time arousing opposition on the part of those who might be harmed in their operation.

Students of economics regard the regulations set up by Parliament to control the importation of goods into England as being reasonable if not generous. Under Charles II, an act required that goods produced on the European Continent for colonial markets must first be shipped to England and there

reconsigned. This Act was designed as an aid to English industry at the expense of the colonies. In practice, however, owing to drawbacks being allowed on such goods, the colonists were benefitted rather than harmed.

Certain aspects of the theory of Mercantilism, when put into operation, were helpful to the English colonies. Parliament prohibited the importation into England of foreign (i.e. from other European countries) sugar, tobacco, and pig iron, thereby giving to the English colonies a monopoly on the production of these commodities. As an additional encouragement, the law makers of England paid bounties on the production of naval stores.

The offer of the English government to pay bounties on ship timbers failed in its purpose. There the Crown had reserved for the royal navy the tallest and straightest trees, leaving for colonial use those of an inferior grade. The result was that resentful colonists cut down these reserved trees and used them in colonial ship building. The Crown Surveyor reported on the situation, "I have showed the people the directions for making pitch, hemp, and tar, but, while they can cut pine trees and steal them, they don't think it worth while to do anything else, and are inclined to laugh at us for proposing it."

Despite the advantages to colonial industry in the practical operations of the theory of Mercantilism, the merchants and traders in the New World resented what to them appeared to be obnoxious regulations and restrictions on the one hand, and useless rewards on the other. They were sensitive to being

held back; they could easily see that with an unlimited supply of fertile land sparsely populated, they had no immediate future in manufactures. Furthermore, life along the frontier gave to them a point of view radically different from that held by their brethren across the sea. They could feel, without being able to describe, a sense of opposition to anything that threatened to restrict them in following their own best interests, in this instance their economic advantage.

15. Regulation of Manufactures

Restrictions on manufactures.—Already attention has been called to the efforts of the English government to restrict the development of the manufacturing industries in the colonies. There remains, however, an examination in detail of the extent to which such efforts were carried and an estimate of their effectiveness.

It seems clear that the development of colonial manufactures on a large scale—to the point of making the colonies self-sufficient—would have run contrary to the principles of Mercantilism, and would, therefore, have defeated the attempts of the mother country to integrate her industries, those of an old and thickly settled community, with the industries of the sparsely populated colonies abounding in unlimited natural resources. Seeing this, the King and his Parliament enacted laws over many years in an effort to discourage manufactures among the people in the English colonies.

What England needed most, industrially, was a continuous supply of certain raw materials at a relatively low price. She herself had no such supply; even that which she did produce was brought to the market at a price that made large profits in processing them impossible. Her second need was for a profitable outlet, one not subject to the hazards of war. Both needs the colonies in America could supply, in part at least.

The Acts of Parliament, in so far as they related to manufacturing in the colonies, dealt with three general groups of commodities. One of these comprised woolen goods intended for export; another, hats; a third, iron.

In 1699 Parliament, in response to numerous complaints on the part of English manufactures, by an act becoming effective on December 1 of that year, prohibited, under severe penalty,

the exportation of colonial wool, woolen yarn, and woolen cloth. This prohibition went farther than merely cutting off an European outlet for such goods; it forbade intercolonial trade in these products. The effect of the act was to force the producers of raw wool to weave cloth for their own clothing.

A generation later (1732) the lawmakers of England legislated against the exportation of hats made in the colonies. The reason back of this prohibition was that in Boston and other New England towns, where raw material for hats was to be had in abundance and at a low price, several establishments for making hats had been set up and were then flourishing. Their chief markets seem to have been in Spain and in the West Indies. Part and parcel of this bit of legislation was the provision that in the hat industry the practices in force in England regarding apprentices should be followed in America, and that under no circumstances should negroes be employed.

Just how effectively those in authority were able to enforce this law is a matter of speculation. The general opinion is that evasion was common. Especially in New England, where a tide of opposition to trade restrictions was setting in, the manufacturers of hats openly disregarded the laws and in so doing had the support of the dissatisfied element of the merchant class.

The payment of bounties.—The payment of bounties on a specified list of colonial products was in line with the policy of the English government to discourage manufactures in the New World. The King and his advisers saw that in order to buy fabricated goods from the home land, the colonists must have something to sell in return. The King and his advisers also saw, that of everything the colonists might send to market, those commodities coming directly from the soil would offer the least competition to English industry. Which commodities should they select for special attention?

Generally speaking, England was not in need of colonial foodstuffs. Moreover, the transportation costs on such relatively cheap commodities would, in many cases, be prohibitive. England did need naval stores. These she herself could not produce; nor was she willing, except under the direst necessity, to depend for such commodities on foreign powers. For national supremacy England must depend on her navy; products going into

the construction and operation of ships must be available at all times. Here then was the opportunity to reach two goals by a single path—to discourage colonial manufactures by encouraging the production of naval stores, and to provide greatly needed war material produced by Englishmen on English soil.

Some attention has already been given to the production of naval stores in the colonies and to the means employed for encouraging it. What about the details of operation?

The payment of bounties, however liberal, was not enough in itself to insure an adequate supply of materials needed in shipbuilding and ship maintenance. Following their own economic advantage, the American colonists were prepared to cooperate with the home government in the production of naval stores only if and when by doing so they could secure a profit equal at least to what might be secured by selling such stores to foreign countries. Sensing what might happen in this respect, Parliament from time to time provided penalties for those failing to comply with the regulations concerning the industry. Crown officers, for example, went through the colonial forests marking trees to be reserved for the use of the English navy. Unauthorized persons, like Ali Baba in his dealings with the forty thieves, did likewise. The result was confusion. Penalties were imposed for cutting down immature pine trees. That is, they were imposed, which was seldom, if the culprit were apprehended in the act. Also, penalties were imposed for cutting pine trees outside the bounds of a township. This the colonists met by creating new townships and enlarging old ones.

The principle of bounty payment, like most artificial methods employed to direct industry out of its natural course, can be said to have failed. The home government could not hope to enforce, through Crown officers stationed in the colonies, a set of regulations that ran counter to what the colonists themselves regarded as their best interests. Those on the ground obeyed or violated these regulations according to their best interests; colonial governors might fume and fret, and port officials might send to their home offices long reports on the lawlessness of the English colonists. This they did with little effect other than stimulating the setting up of more stringent regulations to be violated.

16. The Molasses Act

The economic background.—With the enactment in 1733 of a law designed to destroy the lucrative trade which the colonists had built up with the foreign owned islands of the West Indies, the English government gave evidence, if indeed any evidence is needed, of the glaring inconsistencies into which it had fallen in setting up regulations for colonial industry. This act, known in history as the Molasses Act, was the crowning glory of a theory based on economic fallacy.

Over the years, as we have seen, the King and Parliament had passed one law after another in an effort to give preference to the manufacturers and merchants of the mother country. Some economic activities were prohibited, some restricted, some encouraged. The colonists might not, for example, manufacture certain commodities; others they might manufacture for local consumption only; others they were paid bounties to produce.

Back of these laws was the keen desire on the part of English business men to sell their goods in the colonies. Obviously the colonists could buy such goods only with money, or by exchanging for them such goods as they themselves were able to produce or to secure through trade with other countries. These colonists had no stock of precious metals such as were to be found through the Spanish possessions to the southward. Their only way to engage in foreign trade with the mother country, therefore, was either to exchange directly with the merchants there, or, by a process of indirection, to ship them money or goods acquired in trade with other countries.

English business men had goods for sale; the colonists needed these goods, and wished to buy them. A direct exchange of commodities between the groups would meet the situation. English laws restricted many such exchanges. This, in essence, is the situation in which colonial commerce and industry found itself with the opening of the eighteenth century.

Trade with the French West Indies.—The first trade of consequence between the English colonies along the North Atlantic and the Islands of the West Indies was largely a local matter, for the islands with which colonial ship captains traded comprised those owned and controlled by England. In due course of time, these islands could not consume all of the goods shipped

in from the northern colonies. Then the colonists turned their attention to the French Islands, and this trade grew to large proportions.*

At the bottom of this growth were, first, a liberal policy on the part of the French government regarding foreign trade with its possessions in the West Indies; second, an increased demand for foodstuffs on the part of the islands; third, the inability of the English possessions there to provide a demand sufficient to meet the constantly growing supply coming from the farms of the northern colonies; and fourth, the inability of the English Islands to compete with the French Islands in matters of price. These forces combined to enlarge the volume of exchanges between people of different economic environments. It was a natural situation in which each group, following its own economic advantage, did what it could do easiest and most profitably.

Important items in this exchange were wheat and sugar. In the northern colonies wheat grew in abundance; in the West Indies sugar cane grew even more abundantly. Wheat was in fact the "staff of life"; from sugar rum was manufactured, and because France, in an effort to give protection to the brandy industry at home, forbade the importation of rum, the only important outlets for French Island sugar were the English colonies on the mainland.

Sometimes this trade was direct; sometimes, indirect. A New England sea captain might carry a cargo of wheat and exchange it directly for a cargo of French sugar to be converted somewhere on the mainland into rum. At other times he might carry a cargo of rum to the western coast of Africa and there exchange it for slaves to be traded later for more sugar to make more rum with which to buy more slaves. Not all rum was exported. Much of it went to Indian traders to be exchanged for furs to be sent to the English markets.

Significant in this connection is the fact that the home government frowned on a trade that made possible the ability of the settlers along the North Atlantic to purchase English manufactures. No other way was open to the colonists, and this way

* The importance of this trade to Rhode Island is pointed out in Selection 14. Note also the argument as to how this trade fit English mercantilism by strengthening the navy.

they took, laws carrying heavy penalties to the contrary. What England actually did was to say to her colonies "You must do so and so without the means of doing it." Herein lies the economic fallacy on which the whole program to regulate trade was built.

Operation of the Act.—In attempting to enforce this act the English government failed, and it should have failed, because it was both illogical and unenforceable.* Its success would have destroyed the English markets for manufactures in the colonies and hastened the day of separation. What it did do was to encourage illicit trade, and to create in the minds of the colonists a feeling that their economic well-being was never secure as long as they were subjects of the English Crown.

What the ship captain of the time did was this. He would leave Jamaica with a cargo of empty casks, carrying with him a certificate signed by a thieving customs official to the effect that they were filled with English grade sugar or molasses. He would sail away to one of the French Islands and then fill his casks. Then, like any hard working, honest master, he would put in at New York or Boston with his vessel and present his papers duly signed and in proper order to His Majesty's servant. All this he did in order to escape paying the duties imposed by the Molasses Act. Such evasions were common, and they constituted the chief illegal trade of the Middle and New England colonies for the period following 1733. These evasions, and others similar in nature, the colonists condoned. This they did because they recognized that the enforcement of the Act would be a matter of grave injustice to them.

* The main provisions of this act are given in Selection 13.

Chapter VI

ECONOMIC BACKGROUND OF THE REVOLUTION

No single event, not even a related series of events, explains fully the American War for Independence. Back of it lay causes many and varied, causes social, political, and economic. Our concern is with the last named, and it has specifically to do with particular legislative and administrative acts on the part of the British Government. These acts, while perhaps no more important than many that had gone before, led the colonists in America to the conclusion that the only ground on which the differences between the mother country and her colonies might be settled once and for all was the battleground.

We have given some attention to the various attempts of the King and his Parliament to use the British Colonies in America in such ways as to provide for the people at home an economic advantage. This they did by a series of discriminations against the colonists in matters of manufactures and trade. They went even beyond manufactures and trade; they interested themselves in such aspects of colonial life as finances, territorial expansion, commerce among the colonies, and the rights and privileges of the colonies to regulate their own economic affairs.

The heavy restrictions laid from time to time on foreign commerce irked those colonists directly affected; restrictions on domestic affairs irked practically every one, for practically everyone felt them. The typical Boston mechanic might, and often did, complain of the loss of foreign markets for Virginia tobacco, but, in this respect, it was as nothing compared to the complaint he voiced when under an Act of Parliament he could be required to take a British soldier into his home and there maintain him on his own expense or at the expense of Massachusetts.

In time it was inevitable that the efforts of the British Crown to utilize colonial America as a source of raw materials for home-land industries, and as an outlet for goods processed from these same raw materials at a handsome profit, would estrange

the commercial and trading interests of the colonies. Equally inevitable was it that a continuation of meddling policies on the part of the British Government would drive the rank and file of the people to join with the commercial interests in protest.

The meddling policies included prohibitions against western migration, nuisance taxes, quartering soldiers in the homes of the colonists, currency regulations, nullification of colonial legislation by a body in England that could have no proper understanding of needs across the sea, and the rights to enter colonial homes denied to officials in the mother country. These policies, some of them petty and inconsequential in themselves, galled the colonists and laid the groundwork for united opposition on their part to a government that attempted to treat Englishmen as it might choose, regardless of the general feeling among them that they, as subjects of the Crown, had certain inalienable rights which no power could take from them.

17. British Expansion into the Mississippi Valley

The Proclamation of 1763.—At the close of the French and Indian War in 1763, the British found themselves in possession of the greater portion of the lands that stretched from the western limits of the colonies to the Mississippi River. At once, the King, unmindful of the services which the colonists themselves had rendered in winning the War, drew a line along the crest of the Allegheny Mountains and directed that in the future no settlements should be made beyond it without his consent. This line is known as the *Proclamation Line.*

One of the ideas back of the Proclamation was that this vast region should be restricted to the Indians and to those who carried on trade with them.* It was to be, in fact, a great Indian reservation comprising millions of acres where, under the protection of the King, the natives might hunt and trap unmolested by settlers' ambitions to carve out new homes in the wilderness.

Colonial reaction.—The colonists very generally resented the King's action; they regarded it as harmful to their best interests. Men of affairs had for years looked longingly at it as an ideal place for setting themselves up as landowners on a

* The westward movement of the colonists did not harmonize with English mercantilism. The reasons advanced by the Board of Trade for prohibiting westward expansion are stated in a part of its report, Selection 15.

grand scale. The Proclamation blocked them and turned their plans aside. Their feelings were aroused. Landless men shared these feelings but for different reasons. Their dreams had nothing to do with empires; they envisioned a log cabin of their own surrounded by cornfields and horned cattle. A gift of land along the frontier would compensate them for the services they had rendered their King in driving the enemy from the Continent. The *Proclamation of 1763* was a political blunder. America was a land of home ownership. Here every man regarded his right to move onto unoccupied land as something that could not be taken away from him. Moreover, it deadened the spirit of loyalty to the Crown on the part of those who had key positions in the colonies as traders and merchants and as men of large affairs.

18. Internal Interference

Regulation of colonial finances.—Like all pioneer people, the colonists lacked the financial machinery necessary for carrying on their exchanges at home and with foreign countries. They had no sources of precious metals, and as a consequence the only "hard" money available was that which they could acquire in exchanging for it the economic goods of their own production.

Such being the situation, some of the colonies adopted a policy of issuing paper money based in the main either on general credit or on unsettled public lands. In doing this they broke new ground, for up to that time the world's experience in such matters was practically nil. It is little wonder then, to run ahead in our story, that the British Government opposed such policies, and that in the end they failed to accomplish what their advocates and supporters claimed for them at the time of their adoption.

What happened in Massachusetts is typical of the early attempts of society to provide a paper money currency. There a bank was organized in 1740 with land as security. Invitations were solicited on the basis of forty shillings for each £1000 being paid in money and the rest secured by a mortgage on land. Each subscriber to the amount received £1000 in paper money, and the debt owed the bank he was privileged to pay with hemp, flax, cordage, bar-iron, cast-iron, or with certain other specified wares of trade. Obviously, little metal money secured the notes

thus issued. A subscriber might repay his loan, which was done in many instances, with various kinds of goods.

The British Government frowned on the scheme, regarding it as chimerical and productive of a situation in which the people would suffer more than had it not been projected. Accordingly, the "Bubble Act," originally passed in 1720, in an effort to prevent the recurrence of such schemes as those of John Law, was applied in the Massachusetts situation.

The reaction to this interference on the part of the mother country is described by a contemporary writer: "As to the temper of the people at the time [,] the Land Bank Party, which was very numerous throughout the Province, was irritated and inflamed to such a degree that they seemed ripe for tumult and disorder; they had persuaded themselves that the Act of Parliament could not be carried into execution, . . . Nor was the Temper of the House of Representatives in a much better frame than that of the populace, two-thirds of the members at least being either partners or abettors of the Land Bank Scheme, from whom a general opposition to all the measures of Government necessary at that time for his Majesty's service and the public welfare of the Province seemed in their present disposition to be much feared."

Smuggling.—The colonial reply to the efforts of the British Government to regulate commerce was smuggling on a large scale. Several circumstances contributed to its success. First of all, the smuggler as such did not lose social caste among his acquaintances. Second, the irregular coast line, coupled with the remoteness of central authority, made the landing of goods along the shore a simple matter. Moreover, many of the customs house officials were inefficient in carrying out their duties—some of them were even dishonest.

Strictly speaking, the British Government was well within its right to do what it could to put an end to smuggling.* It erred, however, in its methods of enforcement. Instead of forcing a compliance on the part of colonial merchants from the day of the enactment of any particular law, the Government had, by its lack of activity, permitted smuggling to spring up and to prosper. Then, with scarcely a word of warning, this same government

* Josiah Tucker, an English economist and theologian, shows that Great Britain was only enforcing the standing laws of the kingdom, Selection 18.

set itself the task of putting an end to what, for years, it had tolerated if not encouraged. The result was inevitable. Merchants and traders faced ruin; colonial industries, loss of customers; ship captains, idleness. These groups combined to form an effective opposition to the mother country, and, when the time came to declare the colonies free, its members provided strong and intelligent leadership.

As an aid in attempting to put an end to smuggling, British officials in some of the colonies appealed to the courts for Writs of Assistance, which authorized these officials or their agents to search homes and ships, to break down doors, to open trunks and boxes, and to seize goods and merchandise. In case of physical resistance, those holding the Writs might call on the civil authorities for assistance. A Writ issued by a Massachusetts court in 1761 reads in part: "We strictly Injoin & Command you and every one of you that, all excuses apart, you & every one of you permit the said Charles Paxton . . . to enter & go on board any Ship Boat or other Vessel riding lying or being within or coming to the said port of Boston . . . to enter & go into the vaults cellars warehouses shops & other places where any prohibited goods wares or merchandise . . . are suspected to be concealed."

Such acts on the part of the British Government aroused the resentment of the colonists and contributed directly to the conviction acquired later that separation alone would free them from obnoxious treatment.

The Parson's Case.—The scene of this famous case, in which Patrick Henry came into promise as an advocate of American liberty, was laid in Virginia. There the lawmakers, in anticipation of a short tobacco crop, had ordered that debtors owing specified amounts of tobacco might discharge their debts by paying, in lieu of tobacco, two pence per pound. Obviously, the higher the price of tobacco went, the easier it was for debtors to discharge their debts.

The law penalized all creditors. The one group hardest hit comprised the church ministers of the colony. Their salaries had been set at seventeen thousand pounds of tobacco a year, worth at the time approximately four hundred pounds Virginia money. The Two Penny Act set the salary at one hundred forty-four pounds in money. After they had been paid the reduced

amount word came from England that the King had set aside the law under which the commutation had been made. Then the clergy sued for the difference between what they had received under the Two Penny Act and what they would have received had it never been in effect. The courts supported the contention of the parsons, but Patrick Henry so excited the prejudices of the jury that his client was awarded only one cent damages instead of several hundred pounds.

Vetoing colonial laws.—The action of the British Government in annulling the Virginia statute on the payment of tobacco debts in currency, was but one of many such actions. Between 1696 and 1765 the Crown disallowed approximately four hundred laws enacted by colonial assemblies covering a variety of subjects. In numerous instances the King acted on the advice of his Board of Trade, and usually the ground on which he acted adversely was that the act in question encroached on the royal prerogative. In other words, it tended, according to the sovereign in power, "to hamper the home government or lessen its authority over local officials or governments."

Especially irritating in this respect was the inability of the King to act promptly and to have his actions transmitted to America. In the Parsons' case, for example, the Crown's veto message reached Virginia months after the Two Penny Act had been in operation. Weeks were consumed in getting the colonial laws into the hands of the Board of Trade; other weeks, in arriving at a decision; still other weeks, in the veto's return across the sea. As a matter of expediency rather than of well-ordered government, it would appear that Great Britain might very well have foregone such oversight without serious loss of right or prestige. Little was gained; much was lost.

19. Strengthening the Colonial System

The Molasses Act revival.—Great Britain felt the need of taxing the colonists. Accordingly, in 1764, Parliament, after much discussion, passed the Sugar Act, which renewed the Molasses Act of a generation earlier but with duties on molasses reduced by one-half. This action was received in America with grave concern, for its enforcement meant increases in prices of many goods of daily consumption. No longer would colonial importers be favored with drawbacks on foreign goods shipped

to America. One observer remarked that all the British West India Islands combined could not furnish enough molasses to supply the rum makers of Rhode Island, much less New England. He estimated that of the fourteen thousand hogsheads of molasses consumed annually by that colony alone, more than four-fifths of it came from foreign islands.

The news that old taxes were to be renewed and new ones laid raised a chorus of protest in the colonies.* It acted to bring the people together in a common cause and to unite them for concerted action. They predicted that the financial burdens thus imposed would cripple, if not destroy, the one colonial industry that made possible the payment of specie for manufactured goods. Without its revenue the colonists could no longer buy from the mother country.

Opposition to this Act—first attempt to raise revenue in the colonies on a relatively large scale—took various forms. In Boston fifty merchants met in 1764 to voice their protests. This they did by agreeing to discard laces and ruffles, to buy no English clothes except at a fixed price, and to give up in periods of mourning the elaborate and expensive displays then in vogue. A month later Boston tradesmen agreed among themselves to wear only leather of domestic production for their work clothing. The height was reached when in one voice the students of Yale University voted to abstain from the use of foreign liquors. In one city, merchants organized a society for encouraging domestic production to replace taxed British goods; in another they joined together to petition their colonial assembly to aid in the law's repeal.

The Stamp Act.—The purposes of this act are thus expressed, "An act for granting and applying certain stamp duties, and other duties, in the British colonies and plantations in America, toward further defraying the expenses of defending, protecting, and securing the same; and for amending such parts of the several acts of parliament relative to the trade and revenues of the said colonies and plantations, as direct the manner of determining and recovering the penalties and forfeitures therein mentioned."

* Colonial business was in a slump following the French and Indian War. Consequently, there probably was more protest against taxation than would have been the case had trade been prospering. For conditions in Rhode Island see Selection 17.

This Act imposed a tax on a wide variety of papers and documents. For "every skin or piece of vellum or parchment, or sheet or piece of paper," on which there was engraved, written, or printed any "plea, replication, rejoinder, demurrer, or other pleading" a tax of three pence was laid. Other charges, many of them much higher, were imposed, thereby laying a burden

GEORGE III

To the Americans he was a tyrant

on those having business with the colonial courts. Penalties for evasion were set up and amounts fixed by the Act.

Back of this and other revenue acts made operative about this time was the desire of the British Government to saddle on the colonies what the King and his Parliament considered to be a fair share of the expenses incurred in expelling the French from North America. They reasoned, and with justification, that the colonists more than anyone else had profited by being freed

from the constant danger of armed conflict with their late neighbors in Canada. Having reasoned thus, they reached the logical conclusion that these same colonists should be required to share in the expenses as well as in the profits.

The Act met violent opposition on the part of colonial leaders. In 1765 the Massachusetts House of Representatives submitted a proposal to the other colonies that committees be appointed to meet later in the year "to consult together" how best, as loyal and dutiful subjects of the Crown, to present their grievances and to ask for relief.

On October 7, 1765, delegates from nine of the thirteen colonies assembled in the city of New York. Two weeks later as a body they submitted to the British Government a series of resolutions in which they set forth in guarded, but nevertheless emphatic, language their ideas concerning the power of Parliament to tax a people without their consent. This declaration was in line with that voiced by Patrick Henry in the Virginia House of Burgesses when, in May, 1765, he had taken the ground that the authority to tax the people rested not in the hands of Parliament alone, but in the hands of the various colonial legislatures in cooperation with representatives of the Crown.

Repeal of the Stamp Act.—Opposition to the Stamp Act grew until finally, on March 18, 1766 (four days short of one year after its passage), Parliament repealed it, much to the satisfaction of the colonists. The weight of the Stamp Act rested squarely on the commercial interests of the colonies. It laid tribute on the execution of legal papers. The merchant paid fees for a wide variety of privileges—fees on charter parties, on protests, on letters, and even on advertisements. The result was that the colonial business man provided the leadership that developed against this and other obnoxious acts of Parliament. Printers and lawyers, too, opposed the use of stamps, for they, like the merchants, felt its heavy burden. Colonial newspapers, aided and abetted by the members of the legal profession, carried on a campaign of propaganda against the Act.

The most effective opposition to the Stamp Act was the refusal of those concerned to use stamps as required by law. Merchants simply did business without the use of them. In doing so they incurred the risk of having their transactions declared illegal, but this risk, it turned out in actual practice, merely threatened.

The people were out of sympathy with the Act, and being out of sympathy with it they supported those who violated its provision. Even the courts closed their eyes to overt evasion, and, with a few exceptions, newspapers were issued as though the Act had not been passed.

British statesmen, unmindful of the storm that was already showing itself on the western horizon, made reply, and in so doing they went far to convince colonial leaders of the futility of seeing redress of a body of men far removed in conditions as well as in distance. What Parliament really did was to declare void in advance all acts of colonial lawmaking bodies dealing with the authority of the mother country.

> "And be it further declared . . . , That all resolutions, votes, orders, and proceedings, in any of the said colonies or plantations, whereby the power and authority of the parliament of *Great Britain,* to make laws and statutes [governing the colonies] as aforesaid, is denied, or drawn into question, are, and are hereby declared to be, utterly null and void to all intents and purposes whatsoever."

The Townshend Acts.—These acts are three in number. One established colonial customs Commissions; another provided for general revenue; the third dealt with a tax on tea. Back of all three was the desire of Parliament to find sources of revenue, coupled with a determination to force the colonists to agree that the British Government had the right to make laws for them regardless of their wishes and desires.

The general revenue act provided taxes on a wide variety of British imports into the American colonies. White lead, red lead, and painters colors, paid a duty of two shillings on every hundred pounds imported; tea three pence for each pound. The revenues expected to be raised were authorized by the Act to be spent first in maintaining colonial government, and second in "defending, protecting, and securing, the *British* colonies and plantations in *America.*"

The Quartering Acts.—The close, in 1763, of a successful war against the French found several thousand native British soldiers quartered in the colonies. These soldiers, the home government decided, could be kept in America at a great saving in money costs and, by their presence, bolster the authority exercised in the colonies by Crown officials. This decision led to

a second one; it had to do with providing living quarters for the soldiers.*

The colonists had, generally speaking, always welcomed British soldiers in time of war; and had cooperated with the home government in providing them with living quarters. Peace, however, was another matter. Colonists of every rank resented the enforced presence of the troops. To provide a place for a fighting man, the typical colonist would readily agree; to provide the same place for a blustering braggard, whose only qualification was his right to wear a British uniform in times of peace, was something that ran counter to his ideas of citizenship.

20. Wars and Rumors of Wars

The colonial point of view.—The New World, with an environment strange to the civilization of Western Europe, worked to remold the thinking processes of the Englishmen who had settled here. Their notions of orderly government and sound business practice had, over the years, undergone radical changes under the stress of adjusting themselves to frontier conditions. Much of what they had brought from across the sea they and their children had forgotten; much of what they knew at the opening of the War for Independence they had learned in the school of hard experience.

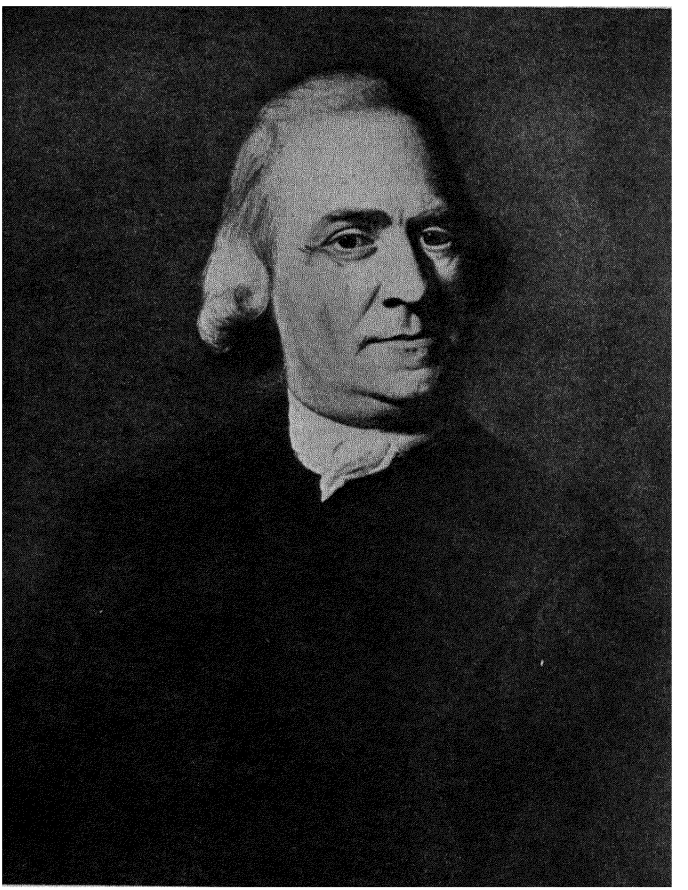
The typical colonial leader held to the notion that being taxed was a matter of agreement. He took the position that if Parliament assumed the right to lay tribute in any form on the colonists, it should, in the interest of common justice, consult those to be taxed, or better yet, to make a place in its councils for representation from the colonies. In other words, he decried the practice of "one group taxing another."

The cry "that taxation without representation is tyranny" was something more than a slogan. It represented a new concept in government, a concept acquired by the colonists through actual experience in a country freed from precedent. Great Britain clings yet to the notion that lawmakers know neither section nor interest in performing their duties as legislators. In this country, on the contrary, the idea has prevailed since long before the outbreak of the War for Independence that law-

* Thomas Pownall, Governor of Massachusetts, 1757-1760, names the quartering tax and others in a summary of causes of colonial resistance, Selection 16.

makers should be chosen on the basis of geographical distribution.

Preparing for armed resistance.—United opposition to British policy began to take form during 1774. On June 17 of that



SAMUEL ADAMS

"He has given his assent to legislation for cutting off our trade with all parts of the world"

year the Massachusetts House of Representatives, spurred on by the enthusiasm of Samuel Adams, went squarely on record as favoring a meeting of representatives from all the colonies called to take such action as might be necessary to protect their common interests.

[Be it resolved] "That a meeting of committees from the several colonies on this continent is highly expedient and necessary, to consult

upon the present state of the colonies, and the miseries to which they are and must be reduced by the operation of certain acts of Parliament respecting America, and to deliberate and determine upon wise and proper measures, to be by them recommended to all the colonies, for the recovery and establishment of their just rights and liberties, civil and religious, and the restoration of union and harmony between Great Britain and the colonies, most ardently desired by all good men."

This call evoked a hearty response on the part of neighboring colonies. On September 5 (1774) delegates from all of them except North Carolina and Georgia met in Philadelphia. (Nine days later representatives from North Carolina appeared.) Two days later a committee was appointed to "state the rights of the colonies in general, the several instances in which their rights are violated or infringed, and the means most proper to be pursued for obtaining a restoration of them."

The report of this committee took final form in a state document known as the Declaration and Resolves of the First Continental Congress. In this document are to be found set forth in language clear and unmistakable the grounds on which the colonists dared within a year to oppose force with force. After presenting their grievances, the delegates to the Congress gave the position and stated definitely what course the colonies should pursue.

"To these grievous acts and measures, Americans cannot submit, but in hopes their fellow subjects in Great-Britain will, on a revision of them, restore us to that state, in which both countries found happiness and prosperity, we have for the present, only resolved to pursue the following peaceable measures: 1. To enter into a non-importation, non-consumption, and non-exportation agreement or association. 2. To prepare an address to the people of Great-Britain, and a memorial to the inhabitants of British America: and 3. To prepare a loyal address to his majesty, agreeable to resolutions already entered into."

Chapter VII

THE WAR FOR INDEPENDENCE

THE revolt of the American colonies in 1775, and the declaration of their representatives a year later that they no longer looked to the mother country for authority to govern themselves as they pleased, were undertaken in larger measure for economic reasons. Over the years (for a century and a half) these same colonies had observed the largely futile attempts of the British Parliament to use them to the advantage of home industries. Against these attempts they had vigorously protested with indifferent results. The one thing that impressed the colonial leaders of the time was the effectiveness with which such protests could be made when supported by threats of physical force.

In taking up war against a powerful European nation, such as was Great Britain in 1775, the colonists as a group faced obstacles that would have turned back less hardy men. There was, first of all, the disparity in population, something like one to three. Among these, relatively few, a strong and influential element, looked on British colonial rule as being benign in its intentions and just in its administration. Second, there was a woeful lack of preparation, on the part of the colonists, for armed conflict. They who were to fight the country's battles were, when the first blood was spilled on the road to Concord, in their fields and shops and sailing on the high seas. A third obstacle to the prosecution of a successful war was a lack of financial support. The Army must have food, clothing, and the implements of war. To secure these, great sums of money would need to be expended.

The Continental Congress met first in 1774, the year preceding the outbreak of hostilities, and for a time its members did little more than talk among themselves and issue addresses to the public. In 1775, however, it took up the serious business of getting ready for war. In June of that year it ordered the raising of an army; four months later it provided for the beginnings of a navy. Planning for the establishment of the fighting

army of the United Colonies was a simple matter, however, compared to the efforts that would be necessary to keep them supplied with war materials.

Throughout the struggle Congress resorted to various means in securing funds. It issued paper money, borrowed at home and abroad, and requisitioned the states for money. Altogether, something like eighty million dollars came through these channels into the Continental treasury during the years 1775–1783. That is, this sum represents the amount measured in specie received by the Central Government to carry on the War for Independence.

Money in itself would not have solved the whole problem. Great Britain controlled the sea, and could, therefore, cut off the importation of war supplies from the outside. What the soldiers must have were supplies in hand, not in some arsenal in Europe. It is clear then that the colonists would have to rely on themselves as never before in providing their own wants. Far-sighted men reacted favorably to the situation. They undertook the productive processes necessary in the production of war materials, and improved existing methods of making the materials available wherever needed. They and their kind constituted the Army back of the Army.

The necessity of depending on themselves for war supplies developed among the colonists an economic point of view hitherto strange to them. For the first time as citizens of the New World they came to the realization that under the stress of necessity a group of people can do what appears to be the impossible. The close of the War saw an industrial society with points of view radically different from what they had been at the beginning. A people largely dependent on Europe for manufactured goods had opened hostilities; at Yorktown American soldiers wearing domestic made clothing fought with weapons bearing the insignia of the new nation.

21. Population and Wealth

Numbers and distribution of people.—Thirteen colonies undertook to enforce by arms their independence of the mother country. They formed a contiguous territory along the North Atlantic seaboard from Canada on the North to Florida on the south. The greater portion of the population lived along or

near the coast, most of the inland settlements being on or near the many short rivers that crossed the narrow coastal plain lying to the westward. Altogether the total population did not exceed two and one-half million, and these were predominantly English in language, ideals, and points of view. Agriculture and shipping were the major industries; manufacturing occupied a minor position.

South of the Mason and Dixon line, Virginia and North Carolina led in population; north of it, Pennsylvania, Massachusetts, and New York stood in the order named. The most important cities, although centers of trade and commerce and enjoying great prestige among the people of the back country, were but little larger and perhaps no wealthier, than scores of our modern county seat towns and small industrial centers. These communities, like the inland settler, enjoyed a splendid isolation. They could be reached with any degree of ease only by water, and the journey from one to another was a life's event.

Wealth and its nature.—The colonists were anything but wealthy. They had little money, and the reserves which they had been able to accumulate along the frontier were relatively small. Much of this wealth consisted of land; in the South, African slaves bulked large in this respect. The important consideration to keep in mind in this connection is that much of the wealth of the colonists at the outbreak of the War for Independence was in a form not adapted to providing revenue for governmental purposes. An idea of the situation can be had by an understanding of some of the motives back of the selection of Colonel George Washington to head the Continental Army. But few men among the colonists could *afford* to be the Commanding General. Washington was one of them; John Hancock of Massachusetts, was another. Regardless of other considerations involved in choosing Washington, Congress had to keep in mind the eminently practical one of giving attention to personal finance.

22. The Question of Taxation

Shifting war costs.—Like most deliberative bodies handling war matters, the Continental Congress hesitated in asking the people to pay even a fair share of the costs while the War was in progress. Accordingly, its members resorted to a variety of

devices for raising revenue without making the facts obvious that the greater portion of the direct expenses of every war must be borne by the people engaged in it, and that it cannot be shifted to succeeding generations. What really happened—we have it on all sides—was that Congress arranged to persuade the people to support the War by promising either them or their children a monetary reward now or in the future. The important consideration is that the largest portion of the economic burden of the conflict lasting from 1775 to 1781 was borne by the people living at the time, and not by their successors.

Drawing money requisitions.—Congress could not tax the people directly; it could call on the states for contributions, but this call had no force back of it. A state might or might not heed the request at any particular time. The first requisition for state support went out in November, 1777. Others followed, varying in amounts and conditions of payments, and with inflation under way, they grew in amounts until they became absurdly high. The first four requisitions (1777–1779) called for $95,000,000 in paper money; of this amount $54,667,000 was paid, valued at $1,856,000 in specie. Later, specie requisitions were drawn with slightly better results. During the year 1780–1781 three requisitions were drawn, amounting to $10,642,988. The proceeds were only $1,592,000. Measured in specie, the states provided in the form of money exactly $3,448,000 (a little more than one dollar for each person) for carrying on the War.

Commodity requisitions.—In 1780 Congress turned to the most primitive of methods for support. It requisitioned the states for such articles as corn, pork, beef, liquor, and forage; results were unsatisfactory.* It lacked an organization for collecting such articles and accounting for them to the proper official. As a result, the states, being in the dark as to what was going on elsewhere, resorted to evasion on the ground that already they had responded more generously than had any of their neighbors. Just how well this method of acquiring war supplies succeeded, no one appears to know with any degree of assurance. It seems clear, however, that it failed in the main, and that its failure can be traced to two important defects:

* A French traveller, François Jean Chastellux, saw New Hampshire farmers filling one of these requisitions, Selection 21.

Congress had no power to enforce collection; Congress failed to provide even a fairly adequate system of collecting and accounting.

The Continental Congresses had no power to lay taxes; Congresses under the Articles of Confederation (operating in 1781) could within narrow limits, plus the approval of the states, lay such taxes. Following certain suggestions that came out of a convention sitting in Hartford, Connecticut, the Confederation Congress, early in 1781, recommended a five per cent duty on imports. Exceptions included arms, ammunitions, clothing for public use, also wool and cotton cards (and wire for making them), and salt.

To this recommendation the State of Rhode Island refused its approval, taking the ground that the tax, if and when assessed and collected, (1) would bear unduly heavy on the commercial states, (2) would set up offices within the state not under control of the state, and (3) would give Congress the power to collect money in the states without accounting to the states. Authority to lay an import tax required an amendment of the Articles, and since, in order to secure an amendment unanimous consent of the states must be obtained, the proposals to lay such taxes in the face of the opposition of Rhode Island came to nothing.

23. Use of Paper Money

Issues authorized.—The simplest method of raising money—the one to which the lawmakers of the time resorted to most frequently—involved the issuing of paper money. These bills of credit were issued by the states as well as by the Central Government, and they amounted to the staggering total of approximately four hundred fifty million dollars, in denominations from one dollar to sixty-five dollars.

The first issue of such bills was authorized under a resolve of the Continental Congress dated June 22, 1775. Colonial credit was back of them and the colonies were to redeem them between 1779 and 1782, according to a carefully worked out schedule adopted at the time. During the next four and one-half years Congress authorized thirty-nine other issues totalling $239,552,780. In addition the colonies (states, after the Declaration of Independence in 1776) authorized and issued paper money to the amount of $209,524,776. Of this total, more than

a half originated in Virginia, about one-third in the Carolinas, and the remainder (one-sixth) in the middle colonies (states) and New England.

Plans for retirement of continental currency.—Congress assumed the right to issue bills of credit, but it had no authority to retire them. What it did at the time of the first issue in 1775 was to request the colonies to arrange to redeem them at stated intervals. The next year, Congress voted that the thirteen United Colonies be pledged to adopt redemption measures as that body might later direct. Such actions on the part of a body possessing no powers of enforcing its own acts, were little more than gestures. It could advise and even bluster, but beyond that it could not go in compelling the colonies (states) to support its actions.

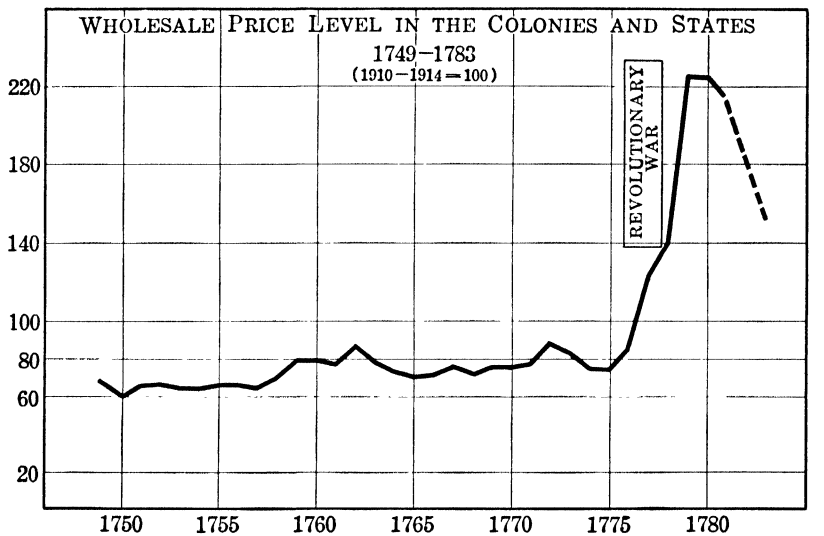
Congress had no power to declare its notes legal tender. It did, however, urge the colonies (states) to take such action as might be necessary to force creditors to accept them in payment of debts. On this suggestion, colonial (state) law makers looked with considerable favor, for such a requirement promised for a time to relieve them of their obligations to redeem. Congress went further in this respect; it passed resolutions denouncing all persons refusing to accept such bills. In 1775 it was resolved by that body "That if any person shall hereafter be lost to all virtue and regard for his country as to refuse [Continental Currency] . . . such person shall be deemed an enemy of his country." To the same end, attempts were made from time to time to fix prices, and in several instances the states called "price conventions" to plan for fixing both prices and wages. On every hand those who attempted to profit through monopoly were soundly denounced.

Depreciation of paper money.—Despite Congress and the several states, depreciation set in and continued until the currency of the Revolution was "not worth a Continental." It had no basis of support other than a series of promises by political bodies newly and loosely organized and lacking a common purpose beyond securing freedom from the mother country.* To say to a man that he must accept any form of money for the

* A sane but discouraging view of American finances in 1778 is found in the selection from the *Secret Journals of Congress,* Selection 19.

commodity he has to sell is a simple matter; to expect to force him to comply with the order goes beyond reason.

By 1779 the depreciation in currency had gone to a point where a dollar in continental money was worth but a few cents. To make matters worse, its value was declining sharply. In January of that year a dollar would exchange for 12½ cents of silver; in February, 10 cents; in June, 5 cents; in September, 4 cents; in October, 3 cents; in November, 2½ cents. The next year Congress itself set the value of a continental dollar at 2½ cents in silver. Following the acceptance of a hard fact, Con-



gress provided for replacing all notes with new ones. Under this provision, approximately $120,000,000 in old bills were presented for cancellation. Congress then issued new bills to the amount of $4,400,000, to bear interest of five per cent, to be redeemed within five years, and to be receivable for taxes.

Such efforts by the Congress, while made no doubt in good faith and with a reasonable expectancy of success, proved futile. Inflation was on the way and nothing could stay its progress. In January, 1781, one hundred dollars in Continental Currency would buy but a single silver dollar or its equivalent in commodities or services. Four months later it ceased to pass as currency. A keen student of the situation says that after about May, 1781, it was "bought and sold as an article of

speculation, at very uncertain and desultory prices, from five hundred to one thousand to one." So complete was the depreciation that, according to another authority, "barber-shops were papered in jest with the bills; and the sailors, on returning from their cruise, being paid off in bundles of this worthless money, had suits of clothes made of it, and with characteristic lightheartedness turned their loss into a frolic by parading through the streets in decayed finery which in its better days had passed for thousands of dollars."

Inflation, while it lasts, tends to lead those affected into the belief that it stimulates business, and, as a consequence, brings about good times. That happened during the War for Independence. Men bought at one price and sold at a higher one without apparently recognizing that all the while the value of the money used was on the decline. Another characteristic of monetary inflation is the crash that oftentimes comes at the end. So it was during the struggle for independence. As we have already seen, the time came when the paper money in circulation was "not worth a Continental." That is, it was about as worthless as money can become and continue to be money.

24. Borrowing Money

Sources of borrowed funds.—Early in the War the Continental Congress took up the matter of borrowing money for supporting the Government. Two sources were available. One comprised patriotic citizens at home who were willing to risk their fortunes in a dangerous enterprise. The second source was foreign, being made up of nations hostile to Great Britain, and of citizens of these and other nations honestly interested in doing what they could to aid a people willing to sacrifice everything in an effort to establish the principle that all men were equal before the law, and hence not subject to any ruling class whatever its condition of birth or wealth. Obviously, therefore, appeals for support varied.

Domestic loans.—Except for a small loan contracted in 1775 to pay for a supply of gunpowder, the Continental Congress did not attempt to borrow funds on a large scale until, through successive experiments in trying to raise money by issuing notes and requisitioning the states, they were forced to do so by the needs of the armies in the field. The first of such loans was

negotiated in October, 1776; the amount was $5,000,000, bearing interest at the rate of four per cent a year.

Authorizing a loan was one thing; securing the loan was a more difficult matter. To give effect to the loan, Congress had established loan offices, one in each state, and each state choosing the officials to manage its office. This Congress did in an effort to keep down any feeling among the states that the Central Government, such as it was, might attempt to dictate to them. Those placed in control of these offices were paid a commission on the loans made, the rate being one-eighth of one per cent.

The expectations of the members of the Continental Congress were not realized. One reason for a lack of subscriptions was the interest rate. Four per cent was less than lenders could earn in industry offering no greater hazards. Accordingly, the rate was raised in 1777 to six per cent, but without creating any great demand for government bonds. Altogether, something like sixty-three thousand dollars were subscribed mostly in paper money, the total specie value, raised under the act of Congress of 1780, being only $7,684,000.

Under the strain of War the Continental Congress resorted to a variety of methods for raising supplies for the Army. Quartermasters and other purchasing agents of the Government exchanged certificates of indebtedness for food and forage. Sometimes such exchanges were voluntary; at other times the Government forced them. The Army needed food, clothing, horses, and ammunition. When the Government could, it dealt with the citizens on a peaceful basis; when occasion required, however, it could, and did, resort to force.

Foreign loans.—Outside loans (and subsidies) were resorted to on a comparatively large scale. They came from the Governments of Spain and France and from the bankers of Holland. In 1776 this country received its first foreign aid from France. This was a subsidy, and it was secured largely by the activities of a certain Frenchman named Beaumarchais. Through him, a million francs were advanced in 1776, another two million in 1777, and later, in 1781, six million. These were gifts.

Foreign loans, as such, amounted during the course of the War (1777 to 1783) to almost $8,000,000. Of this amount France advanced $6,352,500, Spain $174,017, and Holland $1,304,000. In the beginning such loans as were made by

France, had to be made in the greatest secrecy. France ostensibly was at peace with Great Britain, and that peace it was desired, for the time being at least, to preserve. What France wished to do was not to declare war openly, but rather to fight her traditional foe through the revolting colonies. This she could do by giving financial support to the new American Government. In negotiating these loans the Continental Congress planned to secure a portion of them with American products, particularly tobacco, to be shipped to Continental Europe. The idea back of the plan was, on paper, a good one, but it never succeeded for Great Britain controlled the sea.

The War for Independence was more than a military affair; it was a financial struggle in which American representatives in foreign capitals resorted to every device known in order to secure assistance. American officials at home drew drafts on these representatives, who, as a result, were forced to spend countless days pleading with bankers and others to honor them. Washington at Valley Forge was a pathetic figure; so also were his contemporaries in Paris as they scurried about trying to secure funds for his Army.*

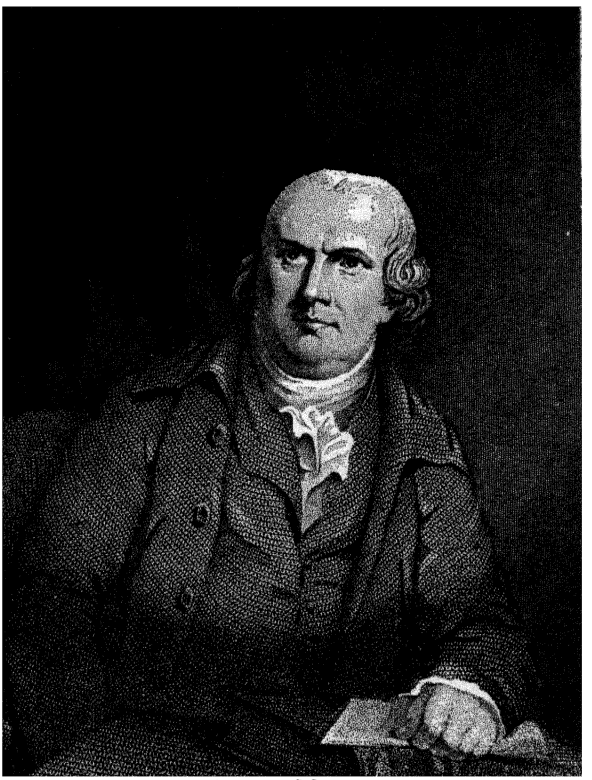
25. An Attempt at Systematic Financing

Robert Morris.—For a long time after the beginning of the War, Congress kept in its own hands the fiscal operations of the Government. In 1775 that body appointed two treasurers. Later, a committee, composed of members of Congress, was set up to examine and pass on claims. In 1776 a standing committee of five was given charge of fiscal matters. The failure of such experiments to produce the results expected was graphically pointed out by Washington in a letter to the President of the Continental Congress.

"It gives me great pain to be obliged to solicit the attention of the honorable Congress to the state of this army, in terms which imply the slightest apprehension of being neglected. But my situation is inexpressibly distressing, to see winter fast approaching upon a naked army, the time of their service within a few weeks of expiring, and no provision yet made for such important events. Added to these, the military chest is totally exhausted; the paymaster has not a single dollar in hand; the commissary-general assures me he has strained his credit, for the subsistence of the army, to the utmost. The quartermaster-general

* Franklin describes his difficulties in borrowing in Europe, Selection 20.

is in precisely the same situation; and the greater part of the troops are in a state not far from mutiny upon the deduction from their stated allowance. I know not to whom I am to impute this failure; but I am of opinion, if the evil is not immediately remedied, and more punctuality observed in future the army must absolutely break up."



ROBERT MORRIS

In dark times he struggled for sound finance

In 1781 Congress authorized the appointment of Robert Morris as Superintendent of Finance. Morris brought to his work an experience that made his contribution to the cause of liberty outstanding. To him the lawmakers gave a wide latitude of authority in matters dealing with public finance. They authorized him to make a comprehensive study of the financial affairs of the nation, to make suggestions for securing revenue, to do whatever was necessary in carrying out the orders of Congress regarding receipts and expenditures, and to control the settlement of public accounts.

Morris threw himself into his work with energy and intelligence. He realized, as perhaps no one else did, that the state of affairs demanded economy wherever possible and that in securing economy he would of necessity meet the opposition of timeservers and overreachers. Owing to the haphazard way in which the finances of the nation had been carried on, no one seemed to know how many men were on the payroll or how much the Government owed for particular items. All this Morris set out to change. Better bookkeeping methods were adopted, offices consolidated, and the drains on the public treasury for administration lessened. This he did in the face of opposition on the part of those who had profited from mismanagement and, in numerous instances, from dishonesty.

The greatest contribution by this man was his knowledge of business in general, but more particularly his knowledge of foreign exchange. As a private merchant he had built up contacts with foreign bankers and others, and these contacts he set about to use in his new position in a way to help his country's cause. On our representatives in foreign capitals he increased the pressure for loans in specie, with the correct notion in mind that with such loans he would be able to strengthen public credit both at home and abroad.

As might be expected, Morris met many obstacles in his efforts to improve a bad situation. Some men were jealous of his new power, while others feared the loss of advantages gained through questionable methods. Even the states refused to lay aside for the time being, and in the interest of a greater cause, the very general feeling that they and not the National Government were the ones to decide what was or was not needed. They had, by their actions, shown a willingness to risk much in revolting against the mother country, but as yet they were not prepared to accept outside authority in reaching a common objective.

Bank of North America.—In his efforts to manage the financial affairs of the young nation, Morris projected in 1781, the Bank of North America with an authorized capital of $10,000,000. In his own words it was "nothing more than a patriotic Subscription of Continental money for the purpose of purchasing provisions for a starving army." The response on the part of men with money was disappointing; the total stock subscription approximated $70,000, an amount wholly inadequate to meet the

situation. Fortunately, there came into the hands of the Government at about this time a quantity of specie borrowed in France. With it Congress was able to advance $200,000 in exchange for stock.

From the beginning Morris had in mind the idea of making this bank a place where the Government might borrow in anticipation of future income. During the last two years of the War it loaned the Government more than a million dollars to good advantage. The Bank loaned money to merchants and others and dealt in foreign exchange. During the years of its existence it earned $29,719 on loans to the Government while paying into the public treasury the sum of $22,867 in dividends. Despite a career as checkered as it was modest, the Bank served this country well. It provided funds for emergencies, facilitated foreign exchange, and assisted in stabilizing the medium of exchange. All in all, it justified the good judgment of the Superintendent of Finance.

26. War and Industry

Self-sufficiency of the country.—With the exception of such help as they could get from France in the way of war supplies, the revolting colonists depended largely on their own efforts to provide for their own wants. The call to arms took thousands of young men from the farms and shops. Many places in industry thus left vacant, a growing population soon filled. Others were never filled; those remaining behind took up the slack by working longer hours. All this came about because of the profit to be made in selling to the Government.

Adapting old methods to new conditions.—The War itself caused no appreciable increase in the demand for such standard commodities as food and clothing. It did, however, force changes in fabricating processes and create new methods in market distribution. The young private in Washington's Army once produced the food he ate and assisted in the production of his own clothing. Now, along with hundreds of others, he followed his leader from one battlefield to another, depending on others to supply his day-by-day needs. The consequence was that huge stores of food and clothing had to be collected and made available at proper times. Thus the necessities of war brought about radical changes in well-known and long-established

methods of producing certain commodities and in getting these commodities from the point of their production and to the point where they were to be consumed.

Development of new industries.—The needs of war forced the economic life of the people into new channels. France could be expected to provide only a portion of the munitions needed to give battle to the enemy. The rest the colonists themselves must produce at home. Fighting ships, small arms, cannon, gunpowder, swords, could be, and were, produced by a people determined to win their independence at any cost. The colonists began the War barehanded; at its close the people of the new republic were well on the high road to becoming self sufficient in the way of producing their own military supplies.

Effect of the War on industry.—The War for Independence was a success in a variety of ways; among other things it taught the people that they could, if necessary, carry on their economic, as well as their political, life free from the domination of a mother country. As long as they had been an integral part of the British Empire, they had accepted the doctrine, often under protest, to be sure, that it was the duty of the colonies to provide raw materials for home processing and, in return, to accept for these materials manufactured goods from Great Britain. The War taught them that they could do what they had been led to believe was impossible among a frontier people. It is reasonably safe to say, therefore, that the beginning of an industrial life that led the United States to the highest achievements had its birth in the struggle of the colonists to free themselves politically from Great Britain.

Chapter VIII

ECONOMIC LIFE UNDER THE CONFEDERATION

THE period in the history of the United States beginning with the Treaty of Peace in 1783 and ending with the formation of the Government under the Constitution in 1789, was in every respect a critical one. Well-wishers, as well as those who regarded the successful revolt of the late colonies as something to be greatly regretted, doubted that the thirteen states making up the loosely formed Confederation would continue long to exist. The basis of this feeling was, in the main, the impotency of the Central Government in dealing with the individual states on the one hand and with foreign powers on the other. In the language of the modern day the United States was a paper organization.

The Congress of the Confederation had little real power. It could suggest to the states what ought to be done and urge them to join in doing the things suggested. Beyond that it could not go. It could treat with foreign nations and agree, as a government, to perform certain acts. Whether or not it could live up to the agreement depended on its ability to persuade the states to support it. The Congress of the Confederation had all the centralized power in its hands, but that power was slight and much of it depended on the greater powers retained by the states. As a matter of fact, that body lacked the general respect necessary in making laws and in executing them.

The Government was a confederation of states, each jealous of its rights and privileges, and each eager to advance its own interests ever at the expense of its neighbors. The ease with which goods cross state lines at present under a highly centralized government, was, at that time, something to be wished for, but not to be realized until after the adoption of the Constitution in 1789. The states hampered the trade that flowed normally across their borders, established discriminating tonnage duties, and determined to a high degree, free from outside interference, what they should or should not do in economic cooperation with the other states.

The difficulty of getting about from one state to another was a factor in this situation. Travel was slow and costly, communication difficult, and the diffusion of information still in its infancy. Seaboard cities might be acquainted one with another, but the inland sections were far removed from these centers. Being removed, they developed their own habits of thought, which were on the whole narrow and provincial. The Boston of 1790 had a better working knowledge of English affairs than of the affairs of the rural areas of western Massachusetts.

Fortunately for the country, trade and commerce made steady advances in the face of discouragement. The textile industry, spurred on by men of means and imagination, secured a foothold which it never relinquished. Shipbuilding flourished, iron production and iron fabrication pushed forward, fisheries continued to grow, and agriculture, while on the decline in some sections, expanded with population and with new opportunities in foreign markets.

27. Inherent Economic Difficulties

Facing new problems.—The late colonies—states by their own declaration in 1776—had won the right to govern themselves free from outside interference, but with this right had come obligations which they were not fully prepared to assume. Over the years these colonies had fretted under what they regarded as obnoxious trade regulations imposed by England, and finally, in an effort to throw them off completely, had taken up arms. What had happened was that in ridding themselves of restrictions they had lost certain valuable privileges not fully appreciated. No longer could they look to a mother country for support either in the way of direct aid or in giving unity to conflicting interests.

From now on the new nation must fight its own battles—battles of peace as well as of war. To do that it needed to turn its attention to the development of a national policy typically American. Such a policy, as events proved, required a broader outlook than was common among the people, a development of a spirit of compromise in which general welfare should rank above narrow interests, and the undergoing of costly sacrifice, both personal and social. To put the matter in another way, the new

Republic faced the hard situation of being required to do for its people what England had hitherto done for them.

Financial difficulties.—The problem that pressed the new Government the hardest was the financial one. As long as the War was in progress the people in general showed patience in pressing their claims before Congress. With victory at Yorktown in 1781, however, came the feeling that such patience was no longer needed. General creditors of the country pressed their claims, while the late soldiers, including officers, clamored for what was due them. Congress had no money with which to pay, and for a time it looked as if the fruits of a successful war would be lost.

It was the soldiers who felt most keenly the inability of the Government to meet their demands. They threatened members of Congress, and on occasion they showed their displeasure by rioting. At a meeting of officers held near New York City, threats were actually made against the Government. Washington was present, and his good sense saved the situation. In preparing to read what he had written, he drew his spectacles from his pocket with the remark that he had "not only grown gray but almost blind" in the service of his country. Such sentiments touched the comrades-in-arms of the Great Commander. They listened intently to every word he had to say and, after his withdrawal at the end of his address, they voted to remain loyal to the Government.

Back of this apparent disrespect for the highest governing body in the nation was the conviction on the part of many that the members of Congress, because of their proneness to be provincial and to play politics, lacked many of those qualities usually associated with statecraft. Moreover, a New Yorker, to cite but one instance, looked on his state with the feeling that to it, rather than to a confederation of thirteen states, he owned his first allegiance. To put the matter simply, the rank and file of the people living under the Confederation had no conception at the time of the advantages to be gained from a strong central government.

The public debt.—A consideration of the number of people living in the states during the days of the Confederation, together with their general lack of wealth, must lead to the conclusion that the debt which the Government had inherited from the Con-

tinental Congress was crushing. Not only was it relatively large, but what is even more significant, it was an obligation undertaken in a common cause without having back of it a common responsibility. The situation was complicated by the inability of the Congress of the Confederation to lay taxes on the people for the purpose of raising money with which to pay the public debt, and the unwillingness of any one state to assume in the absence of a general agreement the responsibility that might lead to its having to pay even its own share.*

ESTIMATED DEBTS

1790

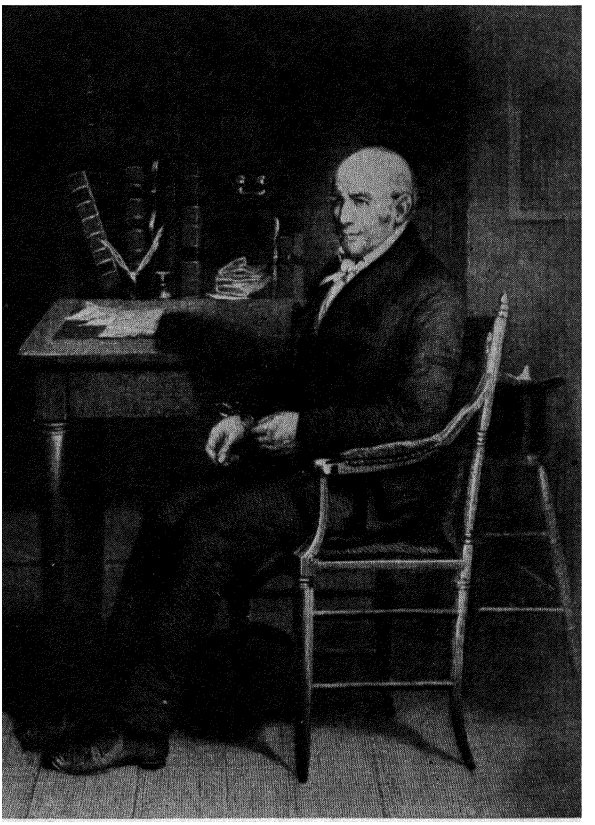
Direct Obligation of the United States	Foreign	$11,710,378.62
	Domestic	40,414,085.94
Continental Currency		2,000,000.00
State Indebtedness		25,001,205.61
New Hampshire	$ 300,000.00	
Massachusetts	5,226,801.29	
Connecticut	1,951,173.33	
New York	1,167,575.25	
New Jersey	788,680.66	
Pennsylvania	2,200,000.00	
Maryland	800,000.00	
Virginia	3,680,743.03	
South Carolina	5,386,232.05	
Rhode Island, Delaware, North Carolina, Georgia	3,500,000.00	

28. Efforts at Readjustment

Attitude of foreign nations.—With the dissolution of the political bonds that had for more than a century and a half tied the English in the New World to the English at home, the systems of regulations under which American foreign commerce had been carried on came to an end. For years European nations hostile to England had encouraged colonial commerce, particularly illegal commerce, as a method of striking in the dark at the mother country. Now that the former colonies were independent states and, as a group, a member of the family of nations, their status was on a different plane. What had once been regarded as children were now grown-ups. The attitude of Eng-

* The weakness of the Confederation Congress in dealing with economic problems was one of the reasons which led to the organization of the Government under the Constitution. Adam Seybert, Selection 24, and Tench Coxe, Selection 22, wrote of this weakness.

land underwent radical changes. Fully aware that she could no longer dominate the North American trade, the mother country removed such advantages as had once been enjoyed by the late colonies and directed against them the general restrictions against foreign commerce. To cite an example, the King imposed limi-



STEPHEN GIRARD
Merchant, banker, and college founder

tations on the trade which his American subjects had once enjoyed with the British West Indies and prohibited altogether the importation of American whale oil into England. The hostile trade regulations imposed by foreign nations the young states met as best they could. Pennsylvania, for example, in an effort to open the ports of Portugal to American products, imposed a higher tariff on Portuguese wines than on similar products from other nations.

Fortunately for the welfare of the commerce of the young nation, neither the Danes nor the Dutch closed their West Indian ports to American commerce. Fortunately, also, the New England sea captain had the initiative and the courage, when turned away from his former customers, to seek new fields of trade. These he found in the Orient. In 1785, the *Empress of China* returned after a long voyage to Chinese ports. Two years later the *Grand Turk* put in at Salem with a cargo of Oriental merchandise.

Interstate relations.—In dealing with foreign nations the states could not act as a united nation. The Congress, to be sure, was made up of Representatives from the thirteen states, and, insofar as there was a single voice to speak to outsiders, that body alone could do so. It had little authority, however, and as a result foreign nations often refused to treat with its agents, taking the position that such agents had no power to enforce the provisions of any trade treaty that might be made. The only recourse then was for each individual state to deal with those nations with which it desired to trade.

We have seen above how Pennsylvania discriminated against Portuguese wines. What we did not see was that some of the neighbors of Pennsylvania, sensing an opportunity to gain profits by leaving their ports open to traders from Portugal, actually encouraged the importation of Portuguese wines and then closed their eyes to the illegal action of their citizens in smuggling such wines across the boundary lines into Pennsylvania. A bitter controversy arose between New York and New Jersey over regulations imposed by the former state on the commerce that entered her ports. New Jersey took offense at the action, and in retaliation imposed an annual tax of $1800 on the New York owned lighthouse at Sandy Hook.

Internal adjustments.—One aspect of the necessary adjustment to new conditions was wholly internal. For a period of eight years the industries of the country had been operated on a war basis. The coming of definite peace in 1783 brought a decided shift in economic conditions. Army supplies were no longer needed; there was the necessity of absorbing into industry those who had borne arms under Washington; prices were abnormally high; the currency was almost worthless.

During the War thousands of farmers and other laborers had

produced for the army. Their products flowed through regular and fairly well-established channels, and disturbance of this flow meant a serious maladjustment in their industrial processes. There were, it is true, the same number of bodies to clothe and the same number to feed, but it is not true that in clothing these same bodies and feeding these same mouths the same channels would be used. Others might in time profit from the diversion of the flow, but for those who had adjusted themselves to it, the change meant economic disaster.

Then, too, the men who laid their muskets aside for more peaceful implements crowded those already employed for a place in industry. They were now producers of economic goods, not destroyers of them. To be able to buy, they must be able to earn. They, too, in time, would find their places in the pursuits of peace, but until that time should arrive, they would suffer from the maladjustment arising from the change to an economic condition out of line with that which had existed for years.

One economic adjustment that must be made at the close of every war relates to prices. Armed conflict increases governmental receipts, speeds up industry, and stimulates the circulation of money. With peace comes contrary influences: governments no longer need to buy war supplies and to pay soldiers; the production of goods slows down; general uncertainty once more calls attention to the virtues of thrift. All of these are factors in determining price level.

This situation the people of the Confederation faced when, in 1783, a treaty of peace with Great Britain brought the war to a definite close. To make worse a situation that was already bad, the money in circulation lacked about every characteristic a good circulating medium should possess. It consisted of coins and currency issued by various governments and had, therefore, no common denominator with which to value them. What was lacking was a standard of measure possessing a value reasonably well-fixed and generally understood by all the people. The currency issued under the direction of the Continental Congress had been expected to serve this very purpose, but, as already has been pointed out, its failure in this respect was practically complete.

During this period of the nation's history, various proposals were made looking to economic improvements. One had to do with the issuing of paper money not adequately secured by

reserves of gold and silver. One group supporting this proposal believed that the economic maladjustments following the close of the war rested squarely on a lack of circulating medium. A second group comprised debtors, who needed no one to tell them that the easy way out of their difficulty was to have made available in large quantities a money cheaper than that which they had contracted to pay. All of the states felt this agitation, but most of them refused to give it legal countenance. Rhode Island followed a different course. There the Legislature issued large quantities of paper money and declared it legal tender. Out of this law grew the famous case of *Trevett vs. Weeden.* The latter, a butcher in Newport, refused to accept this money as required by law, and in the end he won his suit.

29. The Western Problem

Land claims of the states.—By the treaty which closed the Revolutionary War (Paris, 1783), Great Britain gave up all claims to lands in the Mississippi Valley and along the south shores of the Great Lakes.* These lands the states claimed on the basis of their colonial charters. Great Britain did not, therefore, cede them to the Central Government but rather left them contending the title to the various sections. Of the states, seven claimed ownership of lands across the mountains.

North of the Ohio River lay the claims of New York, Connecticut, Massachusetts, and Virginia. Using modern geographical designations they were as follows: New York—northern and western New York and Vermont; Connecticut—a narrow strip extending from the western boundary of Pennsylvania to the Mississippi River and touching the southern shores of Lake Erie and Michigan; Massachusetts—Maine, western New York, southern Michigan, and southern Wisconsin; Virginia—all of the area north of the Ohio and east of the Mississippi from her own western boundaries to the Canadian border. These claims did not all possess the same merit, and obviously they overlapped.

South of the Ohio the four states, Virginia, North Carolina, South Carolina, and Georgia, laid claim to territory extending from their western boundaries to the Mississippi River. Virginia

* The system devised by the Federal Government for surveying and disposing of this land is described in the selection from the Ordinance of 1785, Selection 23.

claimed West Virginia and Kentucky; North Carolina, Tennessee; South Carolina, a narrow strip reaching westward along the southern edge of Tennessee; Georgia, Alabama and Mississippi.

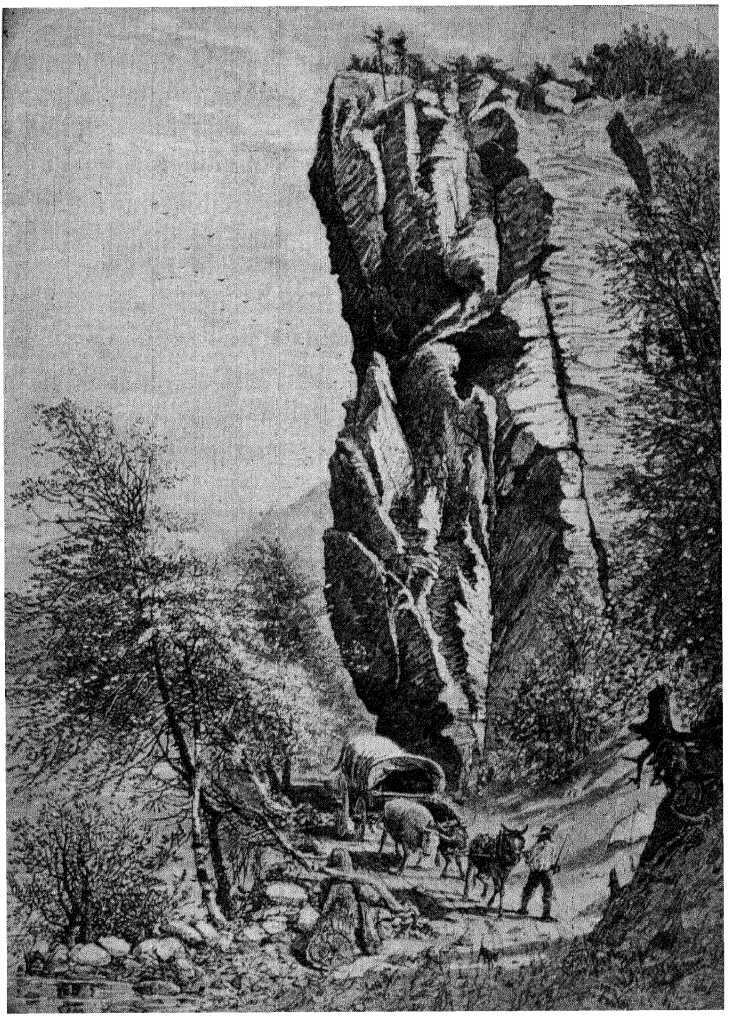
One by one these seven states passed over to the Central Government their rights to the western lands. New York was first. In 1781, that state abandoned all pretension to the ownership of lands west of Pennsylvania. Virginia followed in 1784; Massachusetts came next; in 1786, Connecticut completed the northern cession by giving up her western claims, reserving only a narrow strip of territory along the southern shore of Lake Erie, an area since known as the "Western Reserve." The cessions of southern lands lagged. South Carolina made the first move in 1787 in giving up claims to lands lying between Georgia and North Carolina. Then followed the final cessions of North Carolina in 1790, Virginia in 1792, and that of Georgia in 1802.

Settlements in the West.—The men who led in the settlement of the western lands had little interest in the conflicting claims of the seaboard states. They sought new opportunities, and there in the forests they were determined to find these opportunities and to turn them to their advantage. Already, even while war raged in the East, hardy pioneers had crossed the mountains and planted settlements in strategic spots and provided for protection against Indian foes. With the coming of peace the stream of migration westward, led by traders and trappers, widened and deepened. Men from the states settled their families on the fertile western lands and began building a civilization of their own.

The outstanding leader of this movement was Daniel Boone, who, in 1769, explored the forests of what is now the State of Kentucky. After a series of experiences that thrilled even those accustomed to the romance of western life, he returned to North Carolina, where he spread the news of his exploits. A few years later (1775) his followers built a fort on the present site of Boonesboro. Boone is a symbol of the early movement that led to the settlement of the middle and upper Mississippi Valley. His name is preëminent in the pioneer history of that region.

Closely associated with these early attempts at settlement was the navigation of the Mississippi River. At the time of the Confederation, Spain controlled the mouth of the river, and could,

therefore, regulate the foreign commerce of the whole valley. That is exactly what the Spanish officials in New Orleans did in respect to the states. Without power Congress could do little more than fret and fume. The settlers of the West fretted and



Westward in search of land and a home

fumed also, but they did more. They struck at Spanish authority at every opportunity, and for a time threatened to set up a government of their own. Such was the situation when the Central Government under the Constitution replaced the Articles of Confederation.

The Northwest Territory.—Once in possession of the territory north of the Ohio, Congress set about to give it a government. This it did by drawing up and putting into effect a set of rules and regulations known as the Ordinance of 1787. In this instrument are to be found provisions now held as sacred as the Constitution. It provided for a governor, for a judiciary, and for a legislature. Religious freedom and personal liberty were guaranteed, slavery was prohibited, and education was recognized as the very cornerstone of free government. The honor of being the first Governor of this vast area went to General Arthur St. Clair, at one time a comrade-in-arms of President Washington.

30. The Industrial Situation

Manufactures.—Many of the handicaps under which colonial manufacturing had labored continued with slight change after the coming of peace.* Capital was still scarce, wages high, and the price of raw materials was too high to permit their processing at a reasonable profit to the enterpriser. Moreover, there was no general diffusion of mechanical skill among the people. The lack of easy communication among the colonies, and the excessive costs of land carriage that had held back the development of manufacturers prior to and during the War, showed little improvement during the years of the Confederation. Anyone possessed of the necessary capital and skill and inclined to produce a particular good, knew from the experiences of those about him that he had no assurance of satisfactory markets, and that, finding the markets, he could reach them only after long and expensive delays.

The picture is not all black. Some progress was made in the manufacture of various kinds of cloth, lace, thread, and hats in Connecticut. Shoes, nails, and tools were produced in Rhode Island; iron and cloth in Pennsylvania; wool cards, cloth and iron products in Massachusetts. Some of the states, seeing the great need for manufacturing, paid bounties on specified processes.

Generally speaking, the manufacturing industries did better in the North, especially in New England, than in the South, where from the beginning the emphasis had been placed on agri-

* Tench Coxe, an American economist, pointed out the relative importance of manufacturing and agriculture, Selection 22.

culture. Yet even there, the so-called domestic industries flourished under the supervision of the masters of the plantations, and it can be said that the Southern states were well-nigh self-sufficing in such products as shoes, stockings, and coarse cloth.

The textiles.—Already New England, which was later to become the center of the textile industry in this country, was beginning to show progress. Certain advantages, some natural, some acquired, attached themselves to that section of the country. As a people the New Englanders were machine-minded. They had initiative acquired in making a living under heavy natural handicaps. To them necessity was the mother of invention. They realized that they could not expect much from the land about them; realizing this they turned their attention to processing the raw materials produced by others. A natural factor in the growth of the New England textile industry comprised the numerous waterfalls to be found in that area. There the coastal plain is narrow and, as a consequence, the rivers that drain the nearby uplands drop rapidly on their way to the sea. The industry needed power, and this power the falls there provided in abundance. Also, it should be said in passing that the damp New England air gave that section an advantage in manufacturing textiles.

By far the most important personal element that entered into this development was the intelligence and vision of a single man backed by his friends and neighbors. Samuel Slater, an English textile worker, brought to this country (1789) in his mind a working model of the latest textile machinery to be had in England. This he was able to do because of his keen intelligence, and he was forced to do it because of the restrictions which England placed on the exportation of machines and on written information concerning them. Slater had an idea, and he had the perseverance to stick to his task until he could give reality to that idea. With the assistance of men of means he built machines, and with them he started an industry that grew until it led all the world.

Shipbuilding and the carrying trade.—The separation of the revolting states from the mother country opened the way to a development on the sea that carried the Americans to the very front rank. Despite regulations and restrictions, the colonial shipbuilder and the colonial ship captain had combined to make

shipping respectable. With the removal of these regulations and restrictions they were free to go forward on equal terms with the best Europe had to offer.

The North Atlantic seacoast abounded in the materials needed to build strong and sturdy ocean going vessels. New England provided timbers, the middle states rigging, the Carolinas and Georgia naval stores. From the population came careful builders and seamen inured to the hardships of the longest voyage. No country could boast of navigators of greater skill and courage. With these advantages, vessels flying the flag of the young nation sailed every sea and put in at every port. The initiative and energy of their masters and crews came to be a by-word among the merchants of all nations. Foreign powers might and did lay heavy restrictions on American trade, but they found it impossible to compete with American shipping.

The fisheries.—The carrying trade found in the fisheries an efficient training school. The New England lads of the seaport towns took naturally to the sea. From their earliest experiences they could recall the return of fathers and brothers from the fishing banks to enjoy the relaxation that followed a hard voyage. The catching and salting of fish combined an honorable career offering rewards commensurate with the risks involved.

The New England fisheries comprised a major industry in which hundreds of vessels and thousands of men engaged. Fish for export were cured and made ready for the market. Much of it went to the Southern states and to the West Indies, where among the slaves in particular it was regarded as a staple diet. Domestic consumption along the coast was confined in the main to uncured fish and to the miscellaneous sea foods caught near the shore.

The production of iron.—Already the iron industry was coming to be one of first-rate importance. Deposits of ore and long stretches of forests provided the two primary essentials. Some smelting was done with coal. From a report to be had of the period the production of nails and spikes seem to have been adequate to the needs. The same report points out that the "first and most laborious operation in the manufacture" of these articles of merchandise was performed by water mills and that the finishing of them was done by boys. Other factories turned out tools of various kinds, farm implements, and firearms.

"The manufactures of this article [iron] are entitled to preeminent rank. None are more essential in their kinds, nor so extensive in their uses. They constitute, in whole, or in part, the implements or the materials, or both, of almost every useful occupation. Their instrumentality is everywhere conspicuous."

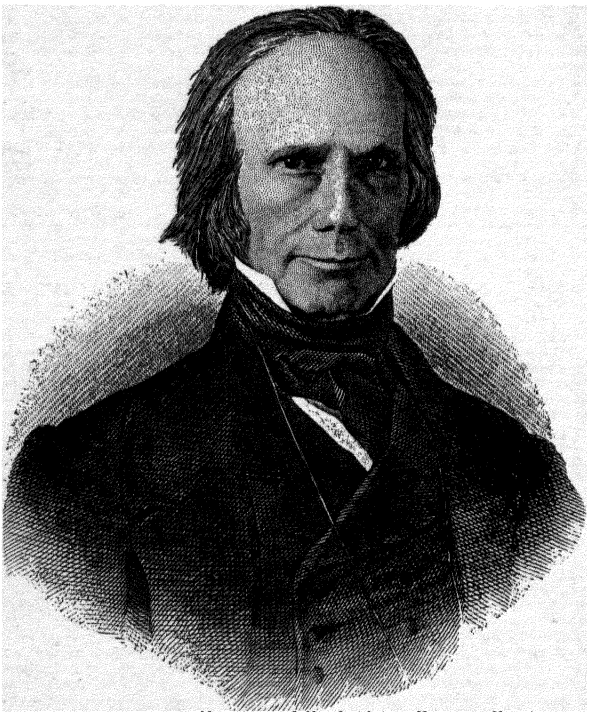
Agriculture.—The agriculture of the period of the Confederation impressed careful observers as being carried on slovenly and inefficiently. One of these observers complained about the general impoverishment of the land caused by poor farming. The only conclusion that one can draw from his account is that the American farmer had little pride in his work, took what he could from the soil without returning anything to it, and was, on the whole, a rather tawdry householder.

In reply to an inquiry, General Washington reported in 1787 on the agricultural situation in Virginia as follows:

"The cultivation of tobacco has been almost the sole object with men of landed property, and consequently a regular course of crops have never been in view. The general custom has been first to raise a crop of Indian corn (maize), which according to the mode of cultivation, is a good preparation for wheat; then a crop of wheat; after which the ground is respited (except from weeds, and every trash that can contribute to its foulness) for about eighteen months; and so on, alternately, without any dressing, till the land is exhausted; when it is turned out, without being sown with grass-seeds, or any method taken to restore it; and another piece is ruined in the same manner."

The general picture is a dismal one. The typical farmer "butchered" his soil, put up with squalid surroundings, neglected his live stock, and gave little or no attention to improving his methods of operation. Fortunately, the supply of fertile soil was large, and the superficial way in which he cultivated it depleted it but slowly.

THE GROWTH OF NATIONALISM
1789–1860



Courtesy of D. Appleton-Century Company

HENRY CLAY

The "American System" was his torch

Chapter IX

A STRONG CENTRAL GOVERNMENT

THE year 1789 brought to a close an attempt by the young nation to operate a Government possessing no power of any consequence. The War itself had held the people together in a common objective. The coming of peace removed the necessity for unity, with the result that the states, each claiming the powers and privileges of an independent nation, instead of cooperating in their dealings with foreign powers, often worked to cross purposes. These years of the Confederation comprise a critical period in American history.

The attempt without definite authority to give direction to the desires and wishes of thirteen independent states failed. Men like Washington sensed the danger that threatened. They could see that in the absence of a strong central power the states, weakened by dissension among themselves, would in time lose what they had won in gaining independence from Great Britain. The general run of the people, those who made no pretension to leadership, must have sensed the same danger and seen the same possibility, for they, when called upon, joined in setting up a new government— a government with power and authority.

In 1789 Washington became the first President of the United States. At that time the nation was relatively weak and its wants simple. Around him the Chief Executive gathered a cabinet of four men, and, with the assistance of a Congress chosen by the people of the thirteen states, he set about to build a governmental foundation that would last through the ages.

Our interest in this connection has to do with the economic problems of the time. These Washington approached in a statesmanlike way, knowing full well that on their correct solution depended the future of the Republic. At his side stood Alexander Hamilton, a man of remarkable talents, who possessed a long-range vision denied to most of his contemporaries. He could see that makeshifts, whatever their reasons for existence, had no place in the policies that must be followed if the nation

was to live and prosper. Accordingly, in the face of opposition on the part of men as honest as he but lacking in imagination, he went about his task of starting the country on the highroad to financial integrity.

Early, as Secretary of the Treasury, Hamilton gave his attention to the public debts. About him on every side men clamored to have them repudiated. This they did on the ground that the holders of such debts were, in the main, not the original holders and hence had bought them at depreciated prices. All this the Secretary accepted as a statement of fact and nothing more. He stood for the Government redeeming its pledges regardless of who might profit or who might lose. To him the promise of a people to pay money was a promise to be kept at any cost, and in holding this position he established the principle in this country that public obligations must be entered into solemnly and kept faithfully.

Hamilton was fully aware of the necessity of receiving information concerning the economic situation of the country. Accordingly he set himself the task of making inquiries among the industries. On the replies to these inquiries he prepared a state paper, known as "Hamilton's Report on Manufactures." In this report he set forth in such detail as he could the conditions of a variety of manufacturing industries, including iron, textile, minerals, wood, glass, paper, and sugar. Since the day of its being made public, students of American history have drawn on this document for information concerning the state of manufactures at the close of the eighteenth century.

Other economic matters pressed for attention during the early years of Washington's first administration. The new Government needed money for every-day operations. Under the recently adopted Constitution it had power to lay certain taxes, and these taxes Congress and the President laid in the nature of tariffs on imported goods. The act authorizing this tax served a double purpose. It raised much needed revenue and at the same time gave protection to certain manufacturing industries.

These early law makers gave attention also to matters having to do with money and banking. They provided for coining money from gold and silver bullion, and authorized the establishment of a Bank of the United States. These acts were in

line with Hamilton's policy of making the Central Government strong and respected.

Many men assisted in a variety of ways in starting off the young Government along the right course. Leading all the rest, in so far as the economics of the situation was concerned, were President Washington and Secretary Hamilton.

31. Expansion Westward

Reaching the Mississippi River.—We have noted how, during the years of the Confederation, hardy spirits seeing new opportunities in the West had crossed the mountains and made homes there. At the time of the adoption of the Constitution the states had already given up all rights to that section, or were in the process of doing so. The feeling that the new Government would be strong, and hence able to protect its citizens from designing neighbors as well as from hostile foreigners, stimulated the movement westward.

The first western state to be admitted in the Union was Kentucky (1792). Settled largely by Virginians, the new state extended in a long line westward from the borders of Virginia. Thus, with the exception of East and West Florida, an unbroken area under established local governments extended from the Atlantic seaboard to the Mississippi River. Four years later (1796) Tennessee, an offshoot of migration westward from North Carolina, became the sixteenth state.

The Louisiana Purchase.—The Administrations of Washington and John Adams saw no material change in the size of the United States. Its area, generally speaking, extended from the Atlantic Ocean to the Mississippi River, and from the Great Lakes to Florida and New Orleans on the South. During the first administration of Thomas Jefferson, however, our minister in Paris proposed to Napoleon that he sell to the United States a portion of such claims, especially the island of New Orleans, as the French held in North America. Eventually the negotiations ended (1803) with France turning over to this country an area approximately as large as the area east of the Mississippi River. Thus, with the signing of a few names and with the payment of $15,000,000, the United States found itself doubled in size, from 892,135 square miles to 1,720,122 square miles.

The acquisition of Louisiana gave to this country control of

both banks of the Mississippi River, and opened the way for unhindered commerce along its course. It did even more than that; it stirred the imagination of the people and gave to them their first inkling of what the United States was in time to become as a member of the family of nations.

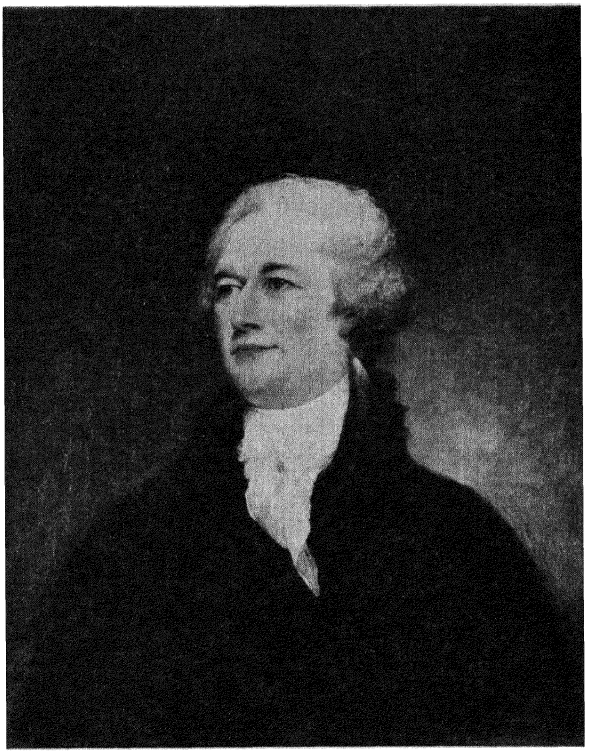
Jefferson had bought this vast territory from France with scattering and unsatisfactory information concerning it. Accordingly, he decided to send out an exploring party, charged with the duty of gathering such information as might be had from observation and from talking with traders and Indians. He chose his private secretary, Meriwether Lewis, and for his companion Captain William Clark, a brother of Colonel George Rogers Clark. In May, 1804, these two men led an expedition westward from St. Louis. Eighteen months later (November, 1805), it reached the mouth of the Columbia River on the Pacific Coast, after having traveled something like four thousand miles. The next year Lieutenant Zebulon Pike, while on his way into Spanish Territory to the southwest, explored the region in and around what is now the State of Colorado.

Such criticisms as were directed against the expansion of territory rested, in the main, on the lack of transportation facilities. To men accustomed to spend a whole day in traveling a few miles, the lands across the Mississippi were farther away from New York or Boston than were France or England. They asked, and properly so, how a government with its seat in Washington could hope to control the actions of people so far away. Even the far-seeing Jefferson had no satisfactory answer.

During his administration, two things of major importance happened. In 1806, Congress, in an attempt to bind more closely together the far flung sections of the country, authorized the building of a highway westward from Cumberland, Maryland, to the Ohio River. The next year, Robert Fulton demonstrated beyond doubt that steam could be successfully applied to river navigation. The importance of these developments can be appreciated when it is recalled that an overland trip from the Atlantic Coast to St. Louis required weeks of hard traveling, and that from New Orleans, Cincinnati was a month away down stream and something like four months away up stream. Four years after Fulton's first success on the Hudson, a steam driven craft made its first run on the Ohio.

32. Handling the Public Debt

The Continental currency.—Closely associated with the organization of the new Government in 1789 was the question of what to do with the Continental currency. This paper money had come into the possession of its owners under greatly varying



Courtesy of the Metropolitan Museum of Art

Alexander Hamilton

"The Secretary of the Treasury . . . has . . . applied himself to the consideration . . . of the public credit . . ."

conditions. Some of it, no doubt, its holders had accepted at face value; most of it, we can readily believe, they had acquired on a depreciated basis. What attitude should the Government take regarding its redemption? Holders clamored for full payment; non-holders very generally took the opposite point of view, some even holding that all such obligations be repudiated.

Hamilton's position was that the Government's obligation was something to be met in the spirit in which it had been

assumed.* In taking this position he had two considerations in mind. The first was that a full and complete redemption of the Continental currency, however much it might at the time be depreciated, would establish once and for all time a feeling in the minds of the people that a public obligation made in good faith must be met, regardless of the consequences. His second consideration was a more practical one. He knew that no human agency could possibly determine the value of each bill at the time it came into the possession of its owner.

Provision was finally made for redeeming this currency. Under the funding act of 1790, the Secretary of the Treasury was authorized to exchange interest bearing government bonds for it on demand at the rate of 1 to 100. That is, a holder of $100 in Continental currency could exchange it at the Treasury for $1. Curiously, only about $6,000,000 of the total, estimated at about $78,000,000, were ever presented for exchange. The probability is that some was kept as souvenirs, some was held by people who felt that the labor necessary in making the exchange was worth more than they would get, while much more had been lost or destroyed.

Refunding state and national debts.—Hamilton supported a move to refund, in some measure, two other classes of debts. One comprised obligations, foreign as well as domestic, which had been entered into by the Continental Congress and by the Congresses of the Confederation; the second, those which the states themselves had contracted in carrying on war against Great Britain. He made such a proposal to Congress, and it was debated with vigor. After delay and compromise it was provided that Government bonds should be exchanged for such evidence of debt.

33. Manufactures and the Tariff

Hamilton's Report on Manufactures.—In preparing this report, Hamilton gathered such information as he could from different sections of the country.** His inquiries went into the number of establishments, value of output, sources of raw materials, and labor supply. From the answers he received, he was able to

* Hamilton's views on the public credit were expressed in his report on the subject in 1790, Selection 25.

** Selection 26 is from this report.

draw a fair industrial picture of what was going on in the states. "The expediency of encouraging manufactures in the United States, [he went on to say in his report] which was not long since deemed very questionable, appears at this time to be pretty generally admitted. The embarrassments which have obstructed the progress of our external trade, have led to serious reflections on the necessity of enlarging the sphere of our domestic commerce." What he realized, more clearly perhaps than any of his contemporaries, was that a combination of circumstances, some natural, some created by adverse foreign legislation, had arisen which made it no longer desirable or expedient for the United States to continue overwhelmingly agricultural.

The report gave attention to the industries carried on in small units and in the homes of the people. Their output, according to Hamilton, met in large measure such local demands as arose, in some instances almost entirely. Among the goods so produced were coarse cloths, coatings, serges, flannels, linsey-woolseys, hosiery, coarse fustians, jeans, muslin, bedticks, coverlets, counterpanes, linen, shirting, sheeting, toweling, and table linen. The list is long, and many of the names used to describe the products of the loom have long been obsolete. The important thing to keep in mind is that a century and a half ago the people very generally met their own wants, not by buying from others, but through their own productive processes.

The first tariff laws.—Hamilton's Report on Manufactures was preliminary to something more important, to his way of thinking. What he wished to do was to get the Government back of a movement that would stimulate the manufacturing industries of the country to renewed efforts. Through his Report he stressed the desirability of a balanced industry in which the agricultural elements of the country would play a prominent part. Farmers need a market for their products, he reasoned, and this market can be had only at home. The expansion of manufactures means an increased demand for raw materials suitable for processing and for food stuffs on the part of those carrying on the processes.

Fortunately for the purposes which the Secretary had in mind, Congress had already gone on record as favoring a duty on certain imports. This first act, passed in 1789, stated clearly that the reasons for its passage were to support the Government, to

discharge the debts of the United States, and to encourage and protect manufactures. The articles thus taxed included liquors, sugar, coffee, cocoa, tea, paints, gold and silver lace, jewelry, and playing cards. Since several of these were luxuries and few of them produced in this country, it seems clear that the principle back of the levy was one having to do with revenue. The protective principle appears, however, in that section of the act laying taxes on the importation of shoes, saddles, gloves, iron, carriages, wagons, and coaches.

In making his recommendation to Congress, Hamilton advanced and supported the theory that "young" industries merited the support of Government until they had reached a size which would permit them to compete on a fair basis. This is known as the "infant industry" argument. Its failure in its practical application has been that few industries so protected are ever willing to agree that they have grown up.

34. Currency and Banking

Early coinage laws.—The first coinage law was passed in 1792. This law provided for the coinage of both gold and silver, the ratio being 15 to 1. The meaning of this is that in coins of equal value and fineness—the dollar for instance—the one made of silver was to be fifteen times as heavy as the one made of gold. The first gold dollar was fixed at 27 grains and the first silver dollar at 416 grains in weight (they differed in ratio of pure content). The reason back of the determination of this ratio was that, as a commodity of commerce, a given quantity of gold was worth fifteen times as much as a like quantity of silver.

The First United States Bank.—Hamilton laid various reports before Congress; one of them dealt with the need for a bank authorized to operate on a nation-wide basis. Specifically, he proposed that the immediate establishment of branch banks be avoided, and that land should not be used as security for note issues. His chief arguments were to the effect that its establishment would provide a sound currency, furnish funds for the business interests of the country, facilitate the transfer of money, both private and public, and help, especially in times of sudden emergencies, the Government in obtaining pecuniary aid.

The reasoning advanced by the Secretary carried conviction

among the members of Congress. Friends there offered a bill authorizing a bank to be established along the lines suggested by Hamilton. There was some opposition which was based on Constitutional grounds and urged by the strict constructionists led by James Madison, who later, as President of the United States, gave his approval to the establishment of such a bank. This opposition was formidable, but not strong enough to prevent the passage of the bank bill.

President Washington gave particular attention to the bill when it came to him for his consideration. After studying it in his usual careful manner, he submitted it to the consideration of two members of his Cabinet, Thomas Jefferson (Secretary of State) and Edmund Randolph (Attorney General). They advised against signing it, on the ground that the act would be clearly unconstitutional, but Hamilton was so persuasive and logical in answering the objections raised that Washington signed the bill despite the fact that the members of Congress from Virginia voted with the opposition.

Pursuant to law the Bank was established in 1791 with a capital of $10,000,000, of which one-fifth was assigned to the Government. The Act fixed the life of the institution at twenty years, and provided that all directors must be citizens of the United States, and that no foreign stockholder might vote except in person. As an aid in giving the notes of the Bank general acceptability, the Act directed all Federal officials handling public funds to accept them in payment of debts to the Government.

From the very beginning the Bank met the most optimistic expectations of its sponsors. Washington, writing to a friend in July, 1791, expressed his satisfaction in no uncertain terms. "Our public credit stands on that ground which three years ago it would have been a species of madness to have foretold. The astonishing rapidity with which the newly instituted bank was filled, gives an unexampled proof of the resources of our countrymen, and their confidence in public measures. On the first day of opening the subscription, the whole number of shares [20,000] were taken up in one hour, and application made for upwards of four thousand shares more than were granted by the institution, besides many others that were coming in from different quarters."

What it did was, first of all, to provide a sound currency of

known value. Merchants and others knew in accepting the notes of the bank that they would be received not only by the Government but by business associates as well. Business men, particularly manufacturers, found the Bank helpful in providing funds for their enterprises and in making funds available in remote sections of the country. The Government found its partnership with the Bank profitable, its returns from its investment in stock amounting to hundreds of thousands of dollars.

In spite of the success with which the Bank was operated, the feeling continued to exist in many quarters that the law under which it operated was clearly unconstitutional. When, therefore, the question of extending the life of its charter came before Congress, those who opposed its continuation combined to defeat any and every attempt to prolong its life beyond its original limits. Thus there came to an end an institution that, whatever its faults, had served its country well.

35. Foreign Commerce

Competing on even terms.—The adoption of the Constitution and the organization of the Government that followed gave to the commercial elements of the country an advantage which they had never enjoyed, either as colonists or as citizens of the Confederation. The new Government could speak with authority; the President had an armed force at his back; foreign nations could no longer discriminate against American shipping without the risk of retaliation.

Our trade with China began soon after the close of the War for Independence. This trade grew rapidly, until in 1789, it was reported that fifteen American vessels had visited Canton to trade. No other nation except Great Britain could boast of such a large number. Much of what these merchants bought of the Chinese they sold in Europe, taking in exchange such goods as were in demand in the United States. Of the commodities, the most important was tea. Others were silks, nankeens, and chinaware. Some idea can be had of the value of this trade when it is known that the portion coming directly from China to American ports amounted to millions of dollars annually.

The Barbary outrage.—The temper of the American people had a chance to show itself in dealing with a situation which

the maritime powers of Europe had tolerated for years. Certain nations along the northern coast of Africa had, for some time, made it a practice to impose tribute on the commerce of that region. This tribute Great Britain, along with other nations, had paid. From the beginning the new American Government protested, but with no great success. American merchantmen were seized and their crews imprisoned. Such was the situation when President Jefferson decided to protect American commerce at all costs.

The war against the Barbary pirates (1801-1805) was of no great importance as a war, but as a demonstration by a free people that they would not tolerate any nation to obstruct free commerce on the sea, it stands as an event of the greatest significance. It warned the older nations of Europe that in the future the United States, now a united nation, was prepared, by force of arms if necessary, to take her place as a power to be reckoned with by other powers. The United States navy won the way in a manner so conclusive as to destroy forever the hazards of piracy.

Chapter X

INTERNATIONAL RELATIONS AND THE WAR OF 1812

THE United States checked the power of the Barbary pirates to levy tribute on ocean going commerce. Much, however, remained to be done, for among the nations of the Old World the idea prevailed that, in maritime matters, might took precedence over justice.

The opening years of the nineteenth century saw in Europe a bitter struggle between France, led by the energy and ambition of Napoleon, and her enemies, led by Great Britain. Each side in the struggle resorted to every device known to soldiers and statesmen, in an effort to subdue the other. One such device consisted in attempting to control the foreign commerce of the enemy. Great Britain, supported by her allies, would declare French ports in a state of blockade, and would threaten with dire punishment any neutral vessel daring to violate the condition. Napoleon on his part would counter with a decree ordering reprisal on any neutral obeying the British order. Back and forth the two nations battled for supremacy, neither of them showing the slightest regard for the rights of nations not involved. Of these nations the United States, now recognized as a large figure in the carrying trade, suffered most.

The declarations of Great Britain came in the form of Orders in Council, orders drawn up and issued by that nation's Privy Council, and they consisted, in the main, of declaring blockaded long stretches of the French Coast. Napoleon's replies took the form of royal decrees, designated usually by the names of the city where he happened to be at the time of issuing them. Such replies were defensive in nature in that they threatened reprisal for complying with British Orders.

The Government of the United States was in no mood to accept without protest any principle that would bar its nationals from trading with countries at war. It did protest, but its protests went unheeded. Finally during the latter part of Jefferson's

second administration, Congress discussed the desirability of prohibiting the exportation of goods to the warring nations, hoping thereby to force one or both of them to a reversal of policy. This bill became a law in December, 1807, and is known as the Embargo Act. A year and a half later (March 1, 1809), a second law on the same subject prohibited commercial intercourse with both Great Britain and France. This is known as the Non-Intercourse Act.

All of these maneuvers were but preliminary to a series of armed conflicts that ended in the defeat of the French Emperor and his exile to a barren island in the Atlantic Ocean. In 1812, (June 18), Congress formally declared war against Great Britain, a war regarded by many as the Second War for Independence. This struggle the country carried on with indifferent success for almost three years, and during that time the isolation of its commerce, beginning with the British Orders and the French Decrees and continuing with the Embargo Act and the Non-Intercourse Act, come to be all but complete. Our interest is in the effects of this isolation on American trade and commerce.

36. Foreign Aggression

The European situation.—Napoleon's ambition to create a huge Empire with France as its center brought him into the conflict with the British. On land he was a match for them; at sea they held the advantage. Such being the situation, the British navy slowly but relentlessly drove the French out of the carrying trade. Some vessels they sunk, others they took as prizes, many more they bottled up in French ports to rot at the wharves.

Attitude of the United States.—From the very beginning of the struggle between Great Britain and France, the United States had pursued an impartial course. It is true that sympathetic factions within the country had by open demonstration shown their preferences for one or the other cause, but through it all the President had refused to permit the country as a nation to be drawn into supporting either side. In other words, the policy of those in authority had been, and continued to be, one of strict neutrality. In 1793, for example, Washington had issued a proclamation declaring that the United States would "pursue a conduct friendly and impartial toward the belligerent powers."

In taking this attitude the Government opened itself to the charges of being selfish. Trade with Western Europe grew until in 1804 the tonnage of American vessels so employed exceeded six hundred fifty thousand; the trade itself amounted to about $160,000,000. Naturally those who supported one side or the other with any degree of enthusiasm deplored the neutral attitude of the Government, and made much of the argument that national honor was being sold for a chance to gain money profits.

British restriction.—Dating from 1783 Great Britain had discriminated against American shipping in the West Indian trade. Later, at the outbreak of the war against France, she invoked the "Rule of War of 1756" which provided that no neutral nation could carry on a trade during a period of war that was illegal for her to carry on during periods of peace. Back of the enforcement of this rule was the desire to destroy American shipping among the French West Indies, where, prior to the War, it had been prohibited by France.

Restrictions or no restrictions, American ship captains were determined to reap the rich rewards to be made in selling to the French people foodstuffs and other supplies. Accordingly, they resorted to various devices for evading the rule as laid down and being enforced by the British navy. Some of them dared engage in the prohibited trade with France, knowing that if caught, they would be punished and their ships taken as prizes. Others resorted to the simple expedient of carrying French West India goods to the United States—a procedure not prohibited by the Rule—and then reconsigning and reshipping them to France.

These evasions could not long escape the attention of British authorities. In 1806, in an effort to put an end to a practice that was giving aid and support to the enemy, the British Privy Council issued an order declaring the French Coast from Brest to the Elbe to be in a state of blockade. All this meant that neutrals were barred from entering or leaving any of the ports along the blockaded coast.

Orders vs. decrees.—This action on the part of the British Government stirred Napoleon to action. Later in the year he declared the British coast to be in a state of blockade. On paper these two restrictions were much alike. In efficiency of application, however, they differed widely. Great Britain enjoyed the

advantage of a strong navy, something the French lacked. The former could, therefore, enforce its regulation to a much higher degree than could the latter. Great Britain's reply was a second Order (1807) which, besides lengthening the coastline to be blockaded, forbade neutral vessels trading with France or her allies, without first entering a British port and there paying export duties and securing a license to trade with the enemy. Napoleon's reply was a second Decree in which he ordered the seizure of all British vessels and of such neutrals as might comply with the regulations already imposed by the British.*

Rights of neutrals.—Neither Orders nor Decrees could prevent the hardy sea captains of the United States from going where large profits were to be had. They ran blockades with impunity and neglected no trickery in their dealings with British officials. Many of them accepted from the hands of the French Emperor commissions as privateers, and as such they preyed on English shipping. American public officials knew what was going on, but they did little or nothing in the way of correcting the situation.

The heart of the difficulty that arose over the attempts of Great Britain to prevent American ship captains from trading with France, was the insistence on the part of the King and Parliament that their representatives were privileged to search neutral vessels for deserters from British vessels. This principle of search and seizure the Americans resented; they resented even more the methods employed. Too often British officers took American citizens from American vessels, citizens who in their whole lives had never set foot on the deck of a British vessel. Also, British naval squadrons cruised along the American coast, and once one of them sailed into Chesapeake Bay and anchored in Hampton Roads.

The Chesapeake Affair.—Of the many and various efforts of the British navy to prevent trade with France, the one best known in American history is known as the Chesapeake Affair. The *Leopard,* a British fighting vessel, attempted to search the American frigate, *Chesapeake.* The reason offered was that deserters from the British navy were suspected of being members of the *Chesapeake's* crew. The reaction of Commodore Barron,

* The various orders and decrees were summarized in a report to the Senate, Selection 27.

American officer in charge, was characteristic of the American seamen. He declared that no foreigner should ever muster his crew. Then the *Leopard* fired on the helpless *Chesapeake,* which at the time was sailing for European waters with her guns unmounted. Forced to surrender to a superior force, the American vessel gave up four of her crew to her captors.

37. American Protective Legislation

Closing American ports.—The *Chesapeake* Affair aroused the nation as nothing else had since the close of the War for Independence. Men of all ranks asked themselves this question: "Are we a free people, or are we yet the subject state of a European power?" The answer was obvious. The nation was of one mind in deciding to protect its interests at all hazards. President Jefferson, a strong advocate of peace, first resorted to the expedient of trying to force the belligerent powers of Europe to soften the severity of their commercial regulations. This he did by proclaiming the ports of the United States closed to British war vessels. This proclamation the foreign world regarded with contempt; officers of the British Navy continued to take their ships in and out of the principal harbors, and on more than one occasion they forced pilots and port officials to serve them contrary to the proclamation.

The Embargo Act.—The situation had now reached the point where forbearance ceased to be a virtue. Jefferson, as much as he hated war, knew that the people were becoming impatient with an administration that permitted its fighting ships to be boarded by foreign naval officers and its citizens to be carried away and imprisoned on the pretext that they were subjects of foreign nations. He knew also that retaliation measures strong enough to be effective might easily lead to an armed conflict. Between these extremes—war and a loss of confidence in his administration—he attempted to sail a middle course.

In December, 1807, the President submitted to Congress an account of what had happened in the way of foreign aggression on the sea, and recommended that immediate consideration be given to the "advantages which may be expected from an inhibition of the departure of our vessels from the ports of the United States." This account Congress received with grave concern, and to the recommendation of the President both

Houses gave immediate and serious consideration. From this consideration came the Embargo Act (December 22, 1807).

This Act provided that no vessels then in American ports except those of foreign registry, might be permitted to leave with a foreign port as a destination unless and until the President should authorize the issuance of clearance papers to such vessels.*

Enforcing the embargo.—Just how this embargo affected American commerce is a matter of debate. There are those who believe that it turned the wharves of the country into weed fields and all but destroyed the industries that depended upon the export market for existence. Others contend differently, citing as proof the volume of foreign trade during the years of the Embargo. One side points to ships rotting at the wharves of Boston and Salem, to grass covered streets in seaport towns, to the lack of activity in cities like New York and Philadelphia, and to the injury done to the agricultural industry of the South.** Opposed is the contention that no self-respecting American ship captain would permit his vessel to rot at an American wharf or anywhere else, and that the collection of approximately $32,000,000 in import duties during this period (1808–1810) indicated considerable activity in the foreign trade of the country.

Some idea can be had of the consequences of the Embargo from an examination of data dealing with the import and export trade. In 1807 the value of all foreign exports was $108,343,150, of imports $138,500,000. The next year, the first year of the operation of the Embargo, exports fell to $22,430,960 and imports to $56,990,000.

One other consideration must be examined. The typical American trader and sea captain of the time was, as we may assume with assurance, reasonably patriotic and law abiding. When, however, restrictive laws threatened his well being, he took steps in many instances to evade it. Thus during the years of the Embargo, illegal commerce with foreign nations flourished. Across the Canadian border goods flowed in a wide stream; coasting vessels found themselves off course; night smuggling, along the coast flourished; in the south goods passed easily across the St. Mary's river into Spanish territory.

* Selection 28 is the complete text of the Act.

** John Lambert's classical description of the effect of the Embargo on business in New York City is Selection 29.

The Non-Intercourse Act.—The Embargo Act operated for approximately fourteen months. During that time it grew in disfavor, particularly in the section of the country where foreign trade had formerly been a major industry. Many felt that the Act did little more than force the country to draw itself into its shell and, in doing so, admit its inability to cope with a situation requiring courageous action. So strong was this feeling among the shipping interests that conservative observers felt free to predict that, unless conditions could be changed, revolution would be the outcome.

Groups of citizens petitioned Congress for relief. The outcome was the repeal of the Embargo Act effective March 1, 1809, three days prior to Jefferson's retirement as President of the United States. Jefferson, his belief in the efficacy of an embargo unshaken, offered in a letter an explanation for Congress reversing itself. "The Federalists, during their short-lived ascendency, have nevertheless, by forcing us from the embargo, inflicted a wound on our interests which can never be cured, and on our affections which will require time to cicatrize. . . . They [the opposition] believed in the alternative of repeal or civil war, and produced the fatal measure of repeal. This is the immediate parent of all our present evils, and has reduced us to a low standing in the eyes of the world."

With the repeal of the Embargo Act of 1807 came a new act to take its place; it is known as the Non-Intercourse Act of 1809. The preamble of one act reads: "An Act laying an Embargo on all ships and vessels in the ports and harbors of the United States;" of the other, "An Act to interdict the commercial intercourse between the United States and Great Britain and France, and their dependencies; and for other purposes." Clearly the difference between the Acts is this: one prohibited American vessels from leaving American ports to engage in foreign trade; the other barred trade with Great Britain and France. The Non-Intercourse Act provided for modifications under certain conditions. The President was authorized, if and when either Great Britain or France should modify their Orders or Decrees, to comply with the principles of neutrality held by the United States, and to suspend the operations of the Act against the nation so complying.

38. A War for Economic Independence

Events leading to the War.—President Madison came into office on March 4, 1809, three days after the passage of the Non-Intercourse Act. Shortly afterwards he heard, from what he considered to be a reliable source, that the British Council had modified its Orders regarding American commerce. Forthwith, he declared by proclamation that the provisions of the Act against trading with Great Britain should be suspended. The immediate result was a revival of industry. Ship owners set about to repair their vessels and to build new ones; manufacturing establishments hastened to step up production; farmers planted larger crops. Hardly were these developments under way when news came to the United States that the Council had not modified its order but that it had set up even more stringent restrictions on trade with America. This news put an end to the feverish haste of increasing production and left the industrial interests of the country in a worse state of mind than formerly.

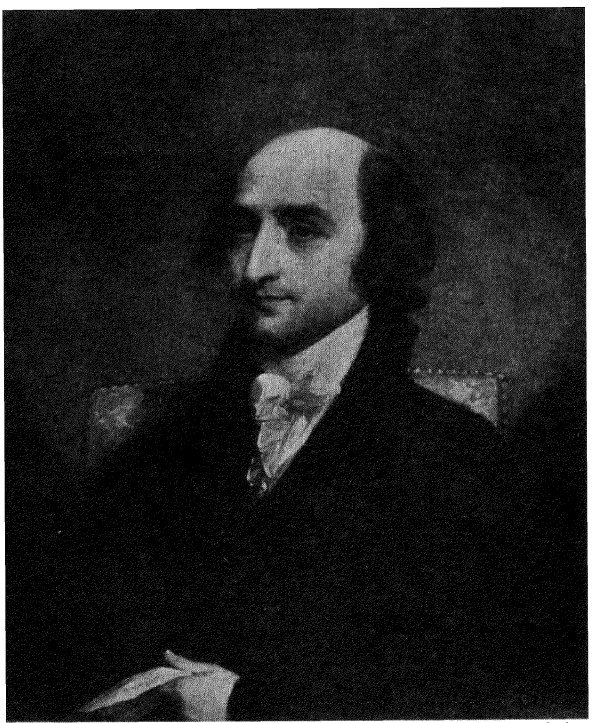
Madison's message to Congress.—The next two years saw the belligerents, Great Britain and France, resort to every possible expedient in order to force the United States to take sides in the European conflict. Of the two, however, France appeared the more reasonable. Napoleon offered to withdraw his Decrees if the British Council would annul its Orders. Nothing came of the proposal, for the British Government had the firm conviction that success in destroying the ambitions of Napoleon to dominate Europe rested squarely on isolating him from American supplies.

The situation finally reached the point where commercial rights gave way to national honor as the issue at stake. The United States Government had taken a definite stand regarding the rights of neutrals, and now it must either retreat and acknowledge itself mistaken or prepare to defend it by force of arms. On June 1, 1812, Madison laid before Congress his views, and advised armed resistance.

> "We behold our seafaring citizens still the daily victims of lawless violence committed on the great and common highway of nations, even within sight of the country which owes them protection. We behold our vessels, freighted with the products of our soil and industry, or returning with the honest proceeds of them, wrested from their lawful destinations, confiscated by prize courts no longer the organs of public law, but the instruments of arbitrary edicts and their unfortunate

crews dispersed and lost, or forced or inveigled in British ports into British fleets, . . ."

War declared.—Reactions to the President's message differed. New England Senators and Representatives, for example, reflecting the opinions of their constituents, feared that a definite break with Great Britain would damage irreparably their profitable



Courtesy of the Metropolitan Museum of Art

ALBERT GALLATIN

American finance was in capable hands

business relations with that nation. Another group friendly to Great Britain regarded the message as being distinctly pro-French. A majority of the lawmakers, however, held the views voiced by the President. It contained a group of comparatively young men known as "War Hawks," two notable leaders being Henry Clay of Kentucky and John C. Calhoun of South Carolina.

Congress did declare war against Great Britain (June 18, 1812), and in doing so authorized the President of the United States to use the armed forces of the nation—land as well as sea

—and to issue commissions or letters of marque and general reprisal to privately armed vessels of the country.

Financing the War.—Declaring a war is a simple matter compared to laying plans for its execution and then giving effect to the plans. That is exactly what the statesmen at Washington discovered when, after the excitement accompanying entry into armed conflict, they faced the necessity of financing it. Fortunately, at the head of the Treasury Department was Albert Gallatin, who had held that position since 1801. He had seen the conflict approaching and had done what he dared to get ready for it.

Soon after the declaration of war, Congress authorized the issuance of treasury notes to the value of $5,000,000; on the next day that body doubled the duties laid on imports. Neither of these actions can be regarded as being significant unless it be that they established important precedents. The proceeds of the notes thus issued would soon be spent; certainly no increases in customs revenue could be expected to arise from an increase in rates, for the very country which over the years had provided a large share of the total foreign trade was now an enemy to be fought on the battlefield. Recourse was had, therefore, for financing the War, to other sources of revenue.

Loans occupied an important place in war financing. The first of these was authorized early in 1813, and the amount was $16,000,000. Many difficulties were met in floating this loan. Some objected to the interest rate authorized, some to the general credit of the Government, some to the War itself. Especially in New England, where the commercial interests dominated, was this opposition overt and strong. There the feeling prevailed that the carrying on of war against Great Britain was a blunder. The situation the country over, is reflected by the attitude of the people toward subscribing to the loan.

SUBSCRIPTIONS TO THE FIRST LOAN

(1813)

New England	$ 486,700
New York	5,720,600
Pennsylvania	6,858,400
Maryland (and D. C.)	2,393,300
Virginia	187,000
South Carolina	354,000
	$16,000,000

Three other loans followed the first, one for $7,500,000 in 1813, and two in 1814, aggregating $28,000,000. Thus for the whole period of the War the Government borrowed a total of $51,500,000, an amount less than the average daily expense of the United States in the World War.

Treasury notes played a part in financing the War, and in their issuance there was raised a principle that threatened for a time to split the friends of the War in Congress. These notes were paper money and nothing else. They were expected to circulate freely from hand to hand in the every-day business transactions of the people. Two issues followed the first of $5,000,000. One of these was in February, 1813, for $5,000,000, and the other March, 1814, for $10,000,000. The total of such issues was $20,000,000, a trifling sum measured by modern standards.

The notes represent the first experiment under the Constitution of issuing paper money based on the credit of the United States. Experiments they were, for in the aggregate they reflected the opinion of many divergent groups. The denominations of these notes varied from $3 to $100; some of them were redeemable at stated periods, some at no fixed time; the larger notes carried an interest rate of 5 2/5 per cent; none of the notes carried a promise of payment in coin, but all were receivable in paying debts to the Government.

A third source of revenue was taxation. We have noticed how, with the declaration of war, Congress doubled import duties. This it could do with little fear of stirring up resentment. Internal taxes, however, needed more careful handling. Congressional leaders knew that to lay such a tax would do more than anything else to make the War unpopular. A citizen might be patient to the point of supporting the Government in its borrowing program and even in enlisting his own son for war service, but his reaction toward the same Government putting its hand into his purse might be entirely to the contrary.

Congress did lay internal taxes, but with great reluctance. In the summer of 1813 the first such was authorized; it consisted of a direct levy on the states, and amounted to $3,000,000. Also, duties were laid on carriages, refined sugar, and auction sales, and license taxes were imposed on distillers and retailers of spiritous liquors. These duties were comparatively low, so low, in fact, that the entire amount of money expected to be collected

under them did not exceed $2,000,000 a year. The next year Congress went a step further by doubling the direct tax of the year before, increasing rates on certain manufactured goods, and laying new taxes on goods then untaxed. From these sources the United States Government realized during the years of the War something like $4,000,000.

By combining the amounts of money paid at various sources, some idea can be had of the money costs of the War.

Loans	$51,500,000
Notes	20,000,000
Taxes	4,130,492
	$75,630,492

Such was the first experience of the young Republic in financing a national emergency. The precedents set here proved to be of major importance when, in later years, even greater emergencies had to be met.

Chapter XI

EARLY INDUSTRIAL PROGRESS

INDUSTRIAL changes have no definite beginning, with a battle for instance, nor a close marked by anything as plain as a treaty of peace. Such changes lose their roots in forgotten economic developments and in turn give stimulus to developments ahead. No period in the history of mankind, whatever the stage of progress in the arts, has ever escaped economic revolution. Some periods, however, have experienced major unheavals freighted with farreaching consequences. Of these periods the one in which the American people have the keenest interest covers roughly the first third of the nineteenth century. It was during these years that the American people discovered the blessings of industrial diversity and, with characteristic efficiency, made use of it.

We have seen already how the long struggle between Great Britain and France influenced the course of American economic life, how with Orders and Decrees they drove from the high seas all forms of legitimate commerce left in the hands of neutrals, and how finally the Government of the United States, no longer willing to tolerate the abuses that had been heaped on the American people, declared war on the chief tormenter. This whole sequence of events hastened an industrial development in this country that might, under different conditions, have been postponed for many years.

These industrial changes were characterized by a shift in economic emphasis rather than by a shift in industrial processes. They found a people engaged, for the most part, in the production of raw materials and in their transportation to foreign countries; they helped bring about a system in which processing provided the missing third leg to the stool on which, from the beginning of the colonial period, New World industrial life had been perched.

These changes went far beyond their industrial aspects. They found a sectionalism based on narrow economic interests, and a

lack of enthusiasm in many quarters for the purpose of the National Government. They brought the industrial life of the people into better balance, and a feeling on the part of the people in general that their welfare and the welfare of their respective states and sections were inseparably united with the general welfare of the nation.

39. Results of Restriction and War

Destruction of foreign shipping.—Restrictive foreign measures supplemented to those passed by Congress, all but destroyed the shipping of the country. Prior to the Embargo Act in 1807, for example, the annual gross tonnage leaving American shipyards exceeded one hundred thousand. Between 1807 and 1816, it was considerably less. Also, the American tonnage in operation dropped, during these years, to a point far below where it had been earlier in the century.

Considering American owned vessels as a group, they were in every imaginable state of repair. Some, at any moment of time, were new or practically so; some a few months old; some, while yet strong and sound, past their prime; some, well along toward the end; some, on their last voyage. In any case the owner, if he were a provident man, had, over the years of its services, accumulated funds for replacing it in time with a new vessel. Some owners, therefore, had practically no such funds in hand, for their vessels were on their maiden voyage. Those at the other extreme, the owners of vessels on their last trip, had in their possession funds sufficient to replace them with new ones.

The risks of engaging in foreign commerce during the years of the trouble with Great Britain induced many American ship owners to abandon the high seas for the coastal trade. This they could do without violating the laws of their own nation and without assuming the risks incident to the restrictive measures imposed by Great Britain and France and to the war that followed them. Those years of isolation stimulated interstate trade, as we shall see later, and it was the shifting of ocean going vessels into this trade that made it possible.

Changes in agriculture.—The United States of the early nineteenth century was primarily agricultural. Some sections, such as New England, gave considerable attention to shipping, and here and there others were stressing manufactures. The prod-

ucts of the nation's farms provided the bulk of our exports. The West Indies, whatever their nationality, looked to this country for their food supply. The warring nations of Europe, too, prior to their actions and that of the United States in cutting them off, did likewise. Thus, over the years foreign markets had absorbed great quantities of the produce of American farmers.

The partial destruction of these markets forced the flow of farm products into new channels. Instead, therefore, of depending on foreign demands, those engaged in the assembling and shipping of such products sought markets closer at home. New York and Pennsylvania wheat now found its way into Baltimore and Charleston rather than, as formerly, into Liverpool and London.

The loss of foreign markets for agricultural products did much to force changes in farm management. Operators who had once devoted their energies to a single crop, depending on others to supply him with many things which he himself could provide, now turned to a more diversified system of farming. To employ a technical term he eased up on the production of staples, freeing thereby land and capital for the growing of crops for home consumption and for the local market. A tobacco planter, for example, finding the foreign demand for his product on the decline, increased his acreage of corn and wheat.

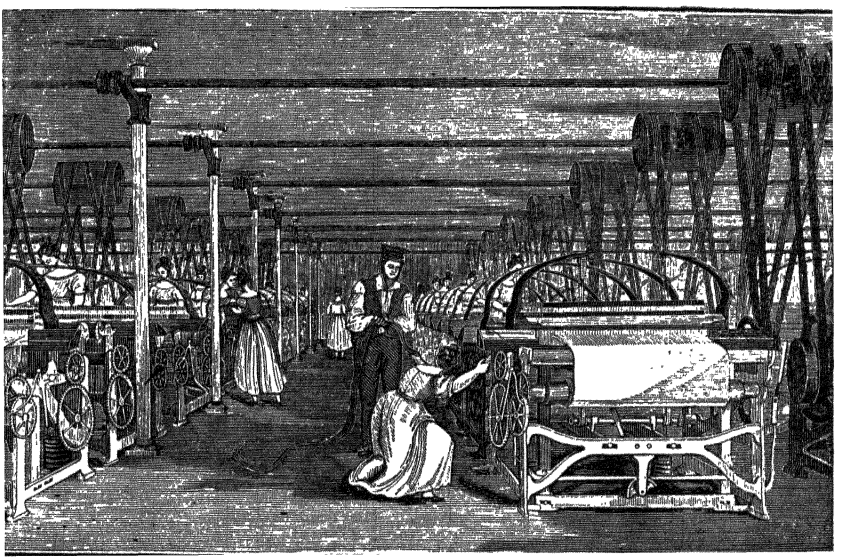
Status of manufactures.—The restrictions imposed on American commerce by Great Britain and France and the adoption of a policy of non-intercourse by Congress led to an unexpected development of manufacturing in this country.* Up to this time manufacturing, while it had shown some activity, and gave promise of growth, took second rank to commerce and agriculture. Just what might have been its progress had not these restrictions been imposed no one can say with any degree of assurance.

The first reactions toward the development of manufacturing as a substitute for commerce were not at all favorable. The people themselves failed to see the situation clearly; the Government at Washington appeared to have no interest in it. An observer expressed the frank opinion that American manufacturers, unlike their British competitors, make "no calculations

* Professor George Tucker of the University of Virginia showed the growth of manufactures, Selection 30.

. . . on the protection of the government, and therefore attempt nothing that they are not morally certain will immediately be so reproductive as to enable them fairly to compete with the old establishments of Europe."

Despite these drawbacks manufacturers, giving way to necessity, got under way and in a short time showed progress. In 1812 the statement was made that the speed with which manufacturing was going forward in the United States had no parallel



When the factory system was young

in the annals of civilization. Somewhere between the extremes lay the truth. Opinion depended on point of view. To some, progress appeared to be slow; to others, it exceeded the most optimistic expectations.

British leaders saw early the effects of their restrictive measures on the manufacturer across the sea. One of these, a man of keen discernment, bemoaned the fact that the United States was in the process of becoming independent of the need for British manufactures.

> "See what has been, only by the short operation of the Embargo and Non-Intercourse Acts, done in America! To such an extent have the cloth and the cotton manufactories grown up there, that I have been credibly informed that, during last year, the cards for carding wool and cotton, shipped for America from the port of Liverpool, have exceeded

in amount the cloths shipped at the same port from the counties of Somerset and Glouster. . . . We have here before us the seeds of a great event,—nothing less than the complete and absolute independence of America upon English manufactures."

Manufactures did make progress during the years of restriction and of the War that followed. In 1810, for example, approximately ten thousand bales of cotton were processed. During the five years that total grew to more than ninety thousand bales.* The same period saw the iron industry grow, so much so that instead of depending on Europe as the country had done since its first settlement down to the declaration of war, the supply produced was sufficient to meet domestic demands. Other industries enjoying the prosperity of the time included woolens, white and red lead, shot, earthen ware, and glass.

An important factor in the development of manufactures during these years was price. Immediately on the passage of the Embargo Act in 1807 merchants with stocks of important merchandise raised their prices in anticipation of a depleted supply. These increased prices stimulated enterprising men at home to cast about to discover means of sharing in the profits thus made. So high were these prices raised by those who, for the moment, enjoyed a seller's market, that men, more interested in the general welfare of the country than in money income, sounded an alarm.

"Your profits at present are exceedingly great. Your works are more productive than the mines of Mexico. . . . Be content with your present business. . . . Get as much as you can for your goods, but let them be of the best quality; then you may command a preference over foreign manufactures."

As in all countries and all ages, capital and labor, when left free or when forced by circumstances beyond control, seek their economic advantage. Restrictions and war combined to create the circumstances; no dictator controlled capital and labor.

40. American and English Progress

British home manufactures.—Prior to the important changes in English industry which began with the introduction of steam as motive power to operate machines, industry in that country

* Nathan Appleton tells of the introduction of the power loom, Selection 31. Note the change in the price of cotton cloth.

was characterized by what is known as the domestic system. Under this system much of the manufacturing of the country was carried on in the home; at best, no large units, such as we are accustomed to see today on every hand, existed. Silas Marner, an Eliot character, was a typical manufacturer of his day and place. He bought the thread which he wove into cloth, and he sold the product of his loom. Moreover, and here is the crux of the whole situation, he owned his loom, worked when he deemed it advisable to do so, and supplemented his income with a garden to the rear of his house. He combined master and man.

With the coming of steam as a motive power, the Silas Marners of England scrapped their looms. Weaving was now done on power looms operated by paid laborers. What really happened was that manufacturing was shifted from the home to the factory. What really did *not* happen was a shift from one major industry like shipping to another major industry like agriculture.

The American situation.—America was not in any sense a manufacturing country prior to the imposition of trade restrictions by Great Britain and France, and the attempts of the Government here to protect itself by refusing to trade with either country and later by declaring war caused no serious interruption in manufacturing. The women of the household wove and spun, and the village blacksmith fashioned tools from iron, but beyond that, with exceptions in New England, the processing of raw materials did not go. The people were busy, but not in manufacturing; they devoted their chief interest to agriculture and commerce.

The American industrial changes were not a change from hand or foot power to steam power, but rather a change from one industrial field to another. Ship owners invested their replacement funds in factory buildings and equipment, had their crews operate machines, and over them as superintendents they placed the men who once had sailed as their captains and mates. Thus, with the funds which they had set aside for replacing old ships with new ones, these men, the capitalists of their day, turned their talents and energies from one channel of industry into another.

In this generally unsettled situation, tens of thousands of men changed their occupations. Farmers as such increased the diversity of their operations; sons of farmers, seeing the export trade

in provisions gone, drifted toward the chief cities; sailors, ship carpenters, and sail makers left their old accustomed tasks and sought new ones. Some went into the factories now springing up in the urban centers, some went on to the land as small farmers, some went West. The important consideration in this connection is that with the partial destruction of our foreign commerce by restrictions, embargoes, and war, and the loss of foreign demand for foodstuffs, those Americans who, for years had depended on these industries for a livelihood, entered new industrial fields.

To summarize, we can say that, unlike the changes in English industry, which were in the main a change in size of operating plant, those in America were changes from one major industry to another.

41. By-Products of Industrial Progress

Creating a spirit of nationalism.—The decade beginning with 1806 marks the beginning of a growth of intense nationalism in the United States. The Constitution had united the states as political units into one central government, but it had not given them a common point of view. New England notions concerning education, religion, industry, and government, for example, differed in more ways than one from those held by the people of the Carolinas. The idea of a united people in the sense we now understand that term had not yet taken hold. Lacking had been, until foreign nations attempted to place American shipping in a straight jacket, any force to bring the people of the different sections to a united effort in behalf of a common cause.

Hostile British measures, as evidenced by the Orders in Council and the *Chesapeake* Affair, supplied this force; they brought the New England merchant and the Virginia planter together in a way previously unknown, and laid the groundwork for a revolution in industry that appears to have no end. They forced the typical American to give less thought to the problems of Europe and more to those of his own country, to come to a full realization that he was industrially as well as politically free.

Development of ingenuity.—An ingenious spirit has characterized the people of the United States since the very beginning.*

* The working of American ingenuity is illustrated by the inventions mentioned in Selection 32.

The earliest settler was a man of imagination; otherwise, he could have seen no future in a forest thousands of miles away across the sea. His contact with nature strengthened him in this respect and gave to him a firm belief in his ability to solve his problems. The New England ship captain sailed the seven seas largely as a matter of habit; his father before him had done likewise. He would have laughed at the idea of his becoming manager of an industrial plant. What he failed to see was that the ingenuity that carried his ship into every port could with equal efficiency be applied along other lines of economic effort. Freed of outside influences, our ship captain, being human, would in due time have given way to his son.

Supporting the Government.—War is a national affair; even those states which clung tenaciously to the theory that the United States was little more than a compact among the states looked to Washington for military protection. In most respects they might regard themselves as able to take care of themselves; war was a different matter. Federal loans, taxes, and paper money reminded the people that for the time being at least the Central Government was playing the leading role. Young men dressed in the uniforms of the Government carried the stars and stripes over their heads and marched away to battle singing "Yankee Doodle." Thousands of them encountered for the first time in their lives a political unit about which they had heard little and knew less.

Protecting home industries.—To carry on a war, any government must have supplies in large quantities. Fighting men must be fed, clothed, and provided with the implements of battle. An army, according to Napoleon, moves on its stomach. Such needs usually require increased production of plants already in operation and the establishment of new ones. The only other choice is to depend on foreign supply. The America of 1812 had no choice. Cut off from the sea, this country faced the necessity of depending largely on domestic production to support itself at home as well as in the field.

Into these industries went labor and capital. Men turned from other pursuits to take up manufacturing. Some joined the plants already operating; others were employed in new plants established because of the stimulus of high prices. In any case they combined a service to the nation as well as to themselves.

The country as a whole owed them a debt which, as events proved, could be discharged only by some sort of protection with the return of peace. They, on their part, had developed a certain economic fixity and would do what they could to preserve it.

The ideas concerning the protection of industry as advanced by Hamilton in his Report on Manufactures came into prominence at the close of the War. They were to the effect that domestic markets were to be preferred over foreign ones, and that the way to secure these markets and to maintain them was to discourage importation through the imposition of custom duties. Back of the revival of this idea were those engaged in the industries affected. They felt, and with some justification, that, in going into manufacturing, they had rendered a signal service to the nation. This feeling united them in a way that made them effective in presenting their claims to the Government. We can say then that regardless of the motives involved, the War of 1812 provided the background for a revival of the protective principle.

Consuming habits.—Prior to the restrictive years, 1806–1815, the American consumer depended in large measure on European manufactures to supply his needs. For them he exchanged his own products and services. The Virginia planter sent his tobacco to a foreign market and took in return the products of the mills and factories abroad. In spite of notions to the contrary, he was a European in the sense that he looked to Europe to supply him with manufactured goods. To his way of thinking, no satisfaction could be found elsewhere. What was true of the Virginia planter was equally true of the wheat farmer of Pennsylvania and of the lobster catcher of Massachusetts.

The stoppage of trade with Great Britain altered the situation. No longer was there a large volume of foreign goods available for American consumption. Then many of those accustomed to rely on imports turned to the home markets. What they found was not, generally speaking, equal either in quality or in price to what they had been accustomed to consume. Fortunately for the future of American industry, there was no other way out. For many it was American products or nothing. Thus, as a matter of necessity rather than one of choice, the American people shifted much of their consumption from foreign made goods to goods produced at home.

New pioneering.—War influences the migratory habits of a people. The typical soldier of 1812–15 had never been far from the home in which he was born, nor did his acquaintance extend beyond the neighborhood in which he lived. His new experiences in what to him were strange lands and his association with young men from other states and sections, widened his point of view and fired his imagination. He marched away to war a mere lad; he came back a man with a man's point of view.

Then, as later, the opportunities to be had along and beyond the Western frontier challenged attention and interest. There, with the aid of a grateful government, the ex-soldier might, from the very beginning, build a home on his own land free from the claims of others. His migration and the migration of his fellows following the close of the War influenced every form of industry. He opened up new lands more fertile than the old ones in the East, thereby competing in time with the agriculture of that region, gave way to the immigrant from foreign shores, and, as events proved, wielded a powerful influence in the formation of the nation's policies toward the production of industry.

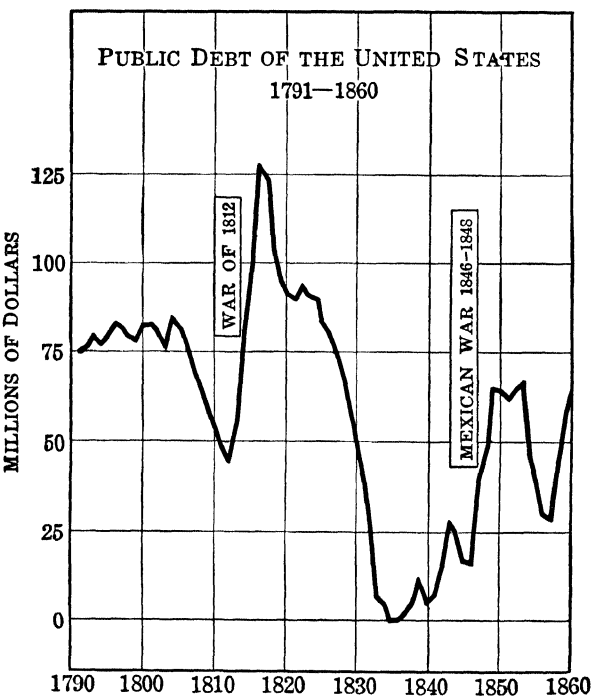
Foreign relations.—The courage shown by the young Republic in declaring War on Great Britain, the first sea power of the whole world, went far to impress foreign nations of both continents. Nothing else could possibly have done as much to focus attention on a new contender for economic power. No nation, so the peoples of other countries must have reasoned, would dare go to war unless prepared to live on its own industrially. Having reasoned thus, the conclusion was easily reached that once freed from conflict that nation would be a good place in which to buy and sell.

42. Post-War Finance and Commerce

Public debt.—The war left a national debt exceeding sixty million dollars. To the modern this sum may appear trifling; to the people of that day it was staggering in size. A portion of this debt was represented by paper money redeemable at the Treasury, a portion by bonds, some of them held in foreign countries, but most of them were in American hands. A debt, implied rather than contracted, concerned the soldiers who had fought the battles of the nation. They received public land set

aside for them especially, and in other ways enjoyed for years the favor of a grateful government.

Banking and finance.—The currency situation in 1815 was deplorable. No longer did the country have the advantage of a central note issuing bank with a sound currency. That advantage had disappeared in 1811 with the failure of Congress to renew the charter of the First United States Bank. Then fol-



lowed an era of private bank notes, in which confusion prevailed. No one could know with assurance just what any note might be worth at any time. This, with the notes issued by the Government during the War, provided, along with such specie as would circulate, the medium of exchange for the country.

Foreign commerce.—A high point in the foreign trade of the United States was reached in 1807 with exports of $108,343,150 and imports of $138,500,000. The next year, suffering under the restrictions imposed by Great Britain and France, it dropped two-thirds in imports and approximately four-fifths in exports. From that point on, with some variation, this trade continued

downward until in 1814, when the combined value of both exports and imports fell short of $20,000,000.

FOREIGN TRADE, 1804–1814

Year	*Imports*	*Exports*
1804	$ 85,000,000	$ 77,699,074
1805	120,600,000	95,566,021
1806	129,410,000	101,536,963
1807	138,500,000	108,343,150
. .	.	
1809	59,400,000	52,203,233
1812	77,030,000	38,527,236
1813	22,005,000	27,856,017
1814	12,965,000	6,927,441

With the close of hostilities in 1815, the foreign trade of the country soon arose to unprecedented heights. During the two years of 1815–16 exports totaled $133,477,805 and imports $260,144,274.

Chapter XII

THE WESTWARD MOVEMENT

SINCE the dawn of the first day in recorded history, mankind has been restlessly marching toward the place of the setting Sun. This urge the peoples of ancient Asiatic monarchies felt when, in rolling waves, they tried without success to gain a foothold along the shores of the Mediterranean Sea. This movement the Greeks and their allies checked. Then they in turn took possession of Italy and the African coast. The history of Imperial Rome is, in large measure, the history of conquest to the westward—a conquest of Spain, France, and Britain—of long struggles to establish and maintain subject states, of provincial influence at the capitol and in the senate chamber.

For a thousand years and more this movement was held in check by the broad expanse of an uncharted sea. Then without warning, an Italian sea captain in the employ of his Christian Majesties of Spain (Castile and Aragon) discovered a new world beyond the western horizon. Once more the peoples of Western Europe, as if rested after long years of inactivity, turned their footsteps in that direction. What they did was to resume where, centuries before, their fathers had left off, and how they did it we already know from our study of the settlement of the colonies.

Strictly speaking, the westward movement in colonial America began when, from the first English settlement, dissenters moved into the forest, and there built new homes for their families. These homes marked the farthest limits of the western frontier, however much we may at the present time regard them as being what is the oldest and most densely populated areas of the country.

Our concern in this connection is the conquest and settlement of the Mississippi Valley, beginning with the close of the Second War with Great Britain and ending with the beginning of the Civil War. During these years, the states as we know them today were authorized by Congress and their constitutions drawn

up and put into operation by the people themselves. Forests gave way to tilled fields, forts and trading posts to cities, and Indian trails to improved highways and steam railroads.

From their old homes in the East, the settlers had brought with them ideas and notions of every day living which they adapted as best they could to a wilderness environment. Having little money at first, they resorted to barter of the most primitive kind, exchanging among themselves for home grown products, and with the village store for what the community itself could not produce. The second generation saw a steady movement forward in the direction of a more comfortable living. These pioneers and their children established a comprehensive public school system, erected churches and colleges, dug canals, built highways and railroads, founded great cities, and, what is not less significant, turned vast areas of prairies and forests into fertile farms.

All in all, the Westward Movement reflects a spirit typically American. It gave scope to the energies of a people accustomed to do for themselves, provided an outlet for ambition and initiative, and made possible the development of a people on a truly national basis. The history of the United States for the half century following the so-called Second War for Independence, is the history of the settlement of the great inland empire stretching from the foothills of the Alleghanies to the Rocky Mountains. A keen observer comments as follows: "We have the land to clear, canals to dig, railroads to lay, water-works to finish; trade, agriculture, and common school education are the great interests of our people. . . . We cannot do everything today. Give us time; and do not expect from our infancy, what only can be found in the mankind of a nation."

An understanding of this westward movement is necessary to an understanding of American progress.

43. National Land Policies

The public domain.—The treaty of peace (1783) that ended the War for Independence gave to the new nation a vast area of uninhabited land reaching westward to the Mississippi, and from the lake region on the North to Florida and Louisiana on the South. Here was the opportunity for an expansion which for a century and more had been denied the late colonists. Prior to

1763 this newly acquired territory had been held by the French; after that time its settlement had been barred by a proclamation of the King.

As might be expected, these interior lands were claimed by various states, such claims, in the main, resting on rights either granted, or assumed to have been granted, set forth in the charters issued to them while they were yet colonies. Of these claims, that of Virginia was by far the most extensive. An early charter had granted to that colony all the land to the westward as far as the South Seas. Stronger even than her claim under her original charter was her claim based on conquest. In 1778, George Rogers Clark, acting under the authority of Governor Patrick Henry and the Virginia Council, had captured the Illinois country (Kaskaskia and the other French villages along the east bank of the Mississippi River down stream from St. Louis), and early the next year had taken possession of Post St. Vincent (Vincennes). From that time to the end of the war Virginia had retained possession of the greater part of the valley east of the Mississippi and north of the Ohio. South of the Ohio River the territory formerly claimed by the English, and given up in the Treaty of 1783 (Paris), owed allegiance in its several parts to Virginia, Georgia, and the Carolinas.

From the very beginning of the operation of the new government, it seemed clear to those in authority that this extensive public domain should belong, not to the individual states, but to the United States. Fortunately for the general welfare, Virginia herself accepted this point of view, and in 1784 ceded her rights to it to the Central Government. Other states with similar claims did likewise. Three years later the Northwest Territory was organized with the seat of government at Marietta on the Ohio River.

Systems of survey.—In describing the location of lands, the practice had grown up along the Atlantic Seaboard to use well known and reasonably permanent land marks. Such descriptions of a New England farm would likely have located it relative to a stream, a tree, or a rock. Beginning at a certain tree, for instance, the boundaries of the piece of land in question might be described as running 120 rods due west, thence 140 rods north by east following a ravine, thence 100 rods due east, and thence on a straight line to point of beginning.

In making land available to settlers in the newly established Northwest Territory, a system was designed, some say by Thomas Jefferson, to provide for rectangular land holdings, regardless, generally speaking, of rocks and rivers and trees.* The first step was to locate four principal meridians, to be known as number one, number two, number three, and number four, their exact locations to be determined by permanent land marks: Ohio-Indiana boundary, mouth of the Little Blue River, mouth of the Ohio River, mouth of the Illinois River. The second step was to locate convenient base lines running due east and west. With these general land marks established, square townships were surveyed six miles on a side, and then each township was divided into thirty-six square sections, bearing the numbers one to thirty-six. This same system was later carried south across the Ohio and across the Mississippi River westward, and today, with more than a dozen other principal meridians, it forms the basis of land surveys in a large number of our states.

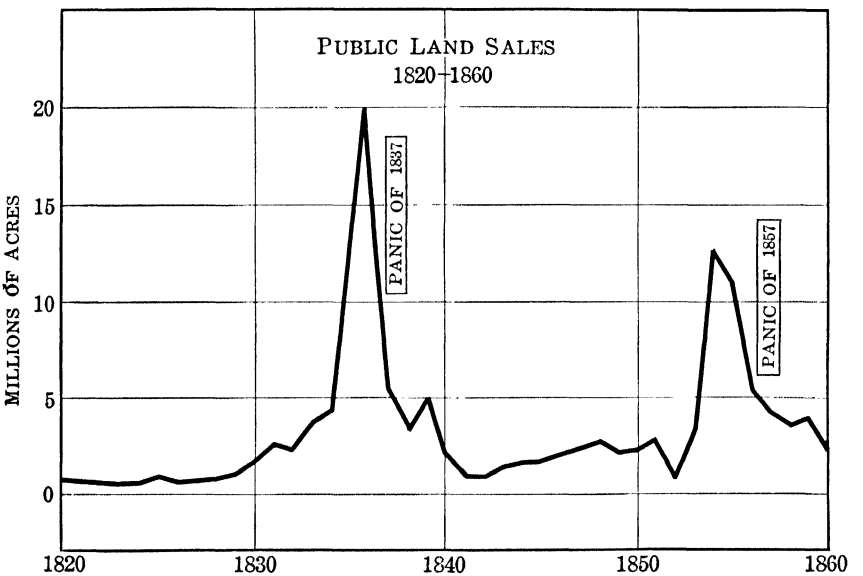
Some idea can be had of the workability of the system by examining a typical land description. The N.E.¼, N.E.¼, S21, T2S, R8E, 3 PM simply means that the piece of land thus described contains forty acres, and that it can be found in Section No. 21, located in the second tier of townships south of the base line and in the eighth tier of ranges east of the Third Principal Meridian. Any local surveyor can relocate it, and nowhere else in the country is there another forty acre lot bearing the same description.

Disposition of the public lands.—Once in possession of the public lands, the Central Government faced the problem of disposing of them in a way that would place them in the hands of settlers and at the same time bring money into the treasury. Some of the leaders of the time advocated the selling of the national domain in large blocks to speculators; others insisted that sounder public policy required that it be sold directly in small amounts to men who would actually settle there and build homes. Both methods Congress at one time or another attempted to follow. Offers were made by moneyed men to buy large tracts of such land, and some of them were accepted. The second method, the one of selling farms to farmers, proved to

* See Selection 23.

be sound, and in a short time it became the one which, even down to the present time, the Government has very generally followed.

In disposing of its lands to actual settlers, the Government first set a price of two dollars an acre, permitting the new owner to pay one-fourth of the purchase price in cash and giving him a period of time to pay the rest. Many such purchasers, having defaulted in their payments, were given a clear title to a portion of their land and their debts cancelled. Anyone, for example, having paid fifty cents an acre on 320 acres of land in addition to his original payment of the same amount, found himself the



owner of 160 acres free of debt. Later the Government adopted a uniform price of one dollar and a quarter an acre, the entire payment to be made at once and in cash.

Many of those who settled in the Mississippi Valley did not take the trouble to buy the land on which they settled; frequently the land had not yet been surveyed and was not, therefore, for sale. These same settlers, squatters they were called, made improvements, and, by doing so, increased the value of their holdings. Unscrupulous men, seeing in this a chance to acquire a few ill-gotten dollars, took advantage of the situation by entering such lands, thereby depriving those who had made the improvements of their benefits. Naturally these settlers had protested,

and in time their protests reached Congress. Then laws were passed—pre-emption laws—to give them first choice of purchase at the minimum price against the rest of the world.

Territorial expansion.—No discussion of the Westward Movement would be complete without some notice of the growth of the area of the United States by purchase, annexation, and conquest. The first notable step in this direction was taken during Jefferson's administration, when the American minister to France purchased from the Emperor Napoleon for the sum of fifteen million dollars the bulk of the land lying between the Mississippi River and the Rocky Mountains. Later came the purchase of Florida, the annexation of Texas, the establishment of the title to the Oregon country, the conquest of Mexican lands, and the Gadsden purchase. Altogether there was added to the territory of the United States something like two million square miles.

This expansion left a deep impression on the lives of the people. It widened markets, increased diversity of production, and destroyed international barriers of trade. Everywhere in the country the idea took root that the new Republic was being specially favored by divine providence; manifest destiny had become a reality. Whatever the explanation and however it may be regarded today, the significant fact remains that, during a period of less than half a century, the United States Government came into possession of a new territory twice as large as western Europe, and in doing so established itself as the sole power over lands reaching from ocean to ocean and from the Canadian border to the Rio Grande River.

44. Occupying the Mississippi Valley

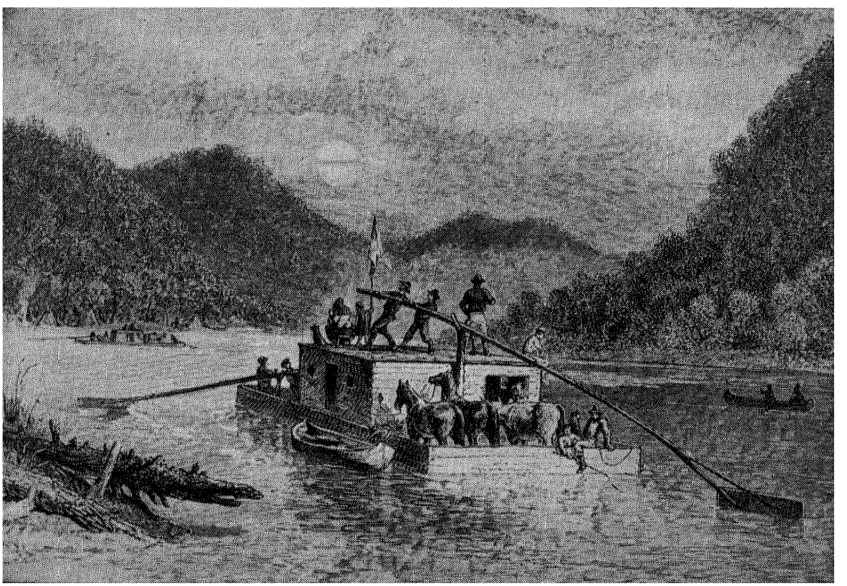
Waves of migration.—The occupation of the western country was not a single movement, nor was it accomplished by a single group of people. Rather, one movement followed another, each to be distinguished with ease from the other two.*

The first settlers were more hunters than farmers. They with their families pushed into the wilderness, and there, amid the most primitive surroundings, they built their rude cabins of logs

* James Flint, a Scottish traveller, observed these waves of migration, Selection 33.

and eked out an existence as best they could. With such simple tools as they possessed they cultivated "patches" of corn in season, and spent much of the rest of their time in hunting and fishing and sometimes trapping. He was the original "squatter." He paid no rent, regulated his life as he saw fit, and, much like Robinson Crusoe, was king of all he surveyed.

Gradually other settlers came, and with them came those needs deemed essential where families live as neighbors. Then our "squatter" began to feel what he regarded as the "closeness of



To the West by the Ohio

things." He was annoyed; what he wanted most was elbow room; and that very thing he was about to lose. Accordingly, he disposed of his rights to ownership under the pre-emption law, tied his cow to the wagon tail, called his hounds, and with his family walking and riding, "broke for the high timbers" to do again just what he had finished.

The purchaser of the land belonged to the second wave of migration that moved over the western country. He built a better house, enlarged his corn fields, improved roads, constructed bridges, and encouraged education and religion. He might even plant fruit orchards and give some attention to live

stock breeding. From his actions, anyone not acquainted with the situation could believe with reasonable assurance that he was settled for life.

Appearances in this instance were deceiving. The settler saw the price of his land and the land of his neighbors soar to unheard of heights. He was intrigued with the possibility of what he regarded as a handsome reward for his labors. Being thus intrigued, he sought a buyer for his farm.

The third wave of migration consisted, in the main, of men of capital and enterprise but lacking the pioneer spirit. They were willing and able to pay for other men's labors and discomforts. In their hands the farming communities flourished. Villages were established, mills were constructed, trade and commerce got under way. They built colleges and libraries, encouraged the laying down of railroads, and brought to their aid the best practices in farming. All in all, these settlers gave to the western country the stability which it needed in order to live up to its possibilities.

These waves of migration included many who were not farmers: lawyers, doctors, storekeepers, blacksmiths, millwrights, hatters, tailors, and many others of different crafts. They too can be classified very much as we have classified the farmers. The earliest doctor, for example, tended to follow his patients into the wilderness. The civilization that irked them, irked him also. He felt as much out of place among those who came with their "high manners" as did the squatter himself.

Thus the settlement of the West was a series of settlements. Daniel Boone felt crowded when he could see the smoke from a neighbor's chimney. Those who followed him had no place in a society that recognized conventionality. Like Boone they gave way in due time, and like him they "cleared out for the New Purchase" to the westward.

Organization of states.—Some idea of the Westward Movement can be had by giving attention to the organization of states in the Mississippi Valley. Kentucky came first (1792); Tennessee followed in 1796. The first state to be carved from the Old Northwest Territory was Ohio (1803). Louisiana became a state in 1812. From that point on for many years the states entered the Union in pairs:

Indiana	1816	Mississippi	1817
Illinois	1818	Alabama	1819
Maine	1820	Missouri	1821
Michigan	1836	Arkansas	1837
Texas	1845	Iowa	1846
Florida	1845	Wisconsin	1848

These newly created states played a prominent part in the history of the nation. For a time, Kentucky and Ohio combined to give strength to the western voice in Congress. Later, Indiana and Illinois and the new states to the south made themselves heard. In relative strength—in wealth, population, and voting—they rapidly outstripped the older commonwealths along the Atlantic seaboard. The population ranks of some of them are shown below.

State	*1800*	*1810*	*1820*	*1830*	*1840*	*1850*	*1860*
Virginia	1	1	2	3	4	4	5
South Carolina	6	6	8	9	11	14	18
Kentucky	9	7	6	6	6	8	9
Georgia	12	11	11	10	9	9	11
Tennessee	15	10	9	7	5	5	10
Ohio	18	13	5	4	3	3	3
Illinois		23	24	20	14	11	4

Between 1800 and 1860, New York moved from third to first place; North Carolina from fourth to twelfth place; Massachusetts from fifth to seventh place.

Population increases and distribution.—The growth of population and its distribution over the western lands varied from time to time and from place to place. The movement was always in the same direction, but at different speeds. Kentucky, for example, increased in population five fold during the period 1800-1860, while the increase in Tennessee was more than ten fold. During the same period, Ohio increased fifty fold, and Indiana increased more than two hundred fold. Notable was the growth of Illinois from 12,282 in 1810 to 1,711,951 in 1860.

The migration waves that washed across the western country had, in the main, their origin in the seaboard states, and in general they moved westward along parallels. Kentucky, for example, was early peopled by Virginians; Tennessee, by inhabitants of North Carolina. In the Northwest Territory the north and south met. Settlers from New England and the Middle Atlantic States moved into the Great Lakes region, while those

from Virginia and the Carolinas made their homes along the Ohio and for many miles back from its northern bank. The population of the West was anything but strictly native; it was made up, in part, of immigrants from Western Europe, principally from England, Ireland, and Germany, some of whom went there directly from their old homes, others stopping for a time in the East and then continuing westward.

As might be expected, the distribution of the population over this area lacked uniformity, varying from large contiguous areas entirely uninhabited to thriving urban centers. The first settlers kept to the forests. This they did because of the lack of timber and water supplies on the prairie, and because of the very generally prevailing notion that since the prairies grew no trees they were not fertile, and hence were undesirable for farming purposes. Central Illinois, a fertile area of large extent, remained largely unsettled long after the territory to the north and to the south had thriving centers of trade and agriculture.

The nature and extent of the Westward Movement is reflected in the shift of the center of population from decade to decade. In 1810 this center was in the northern extremity of Virginia. Twenty years later it was in what is now West Virginia. By 1860 it had crossed the Ohio River and was due east of Cincinnati about half way across the state. During those sixty years this point moved slightly southward and something like three hundred miles westward, showing the effect of the settlement of the western lands in the Mississippi Valley as well as along the Pacific Coast.

Growth of urban centers.—Although the Westward Movement was, in the main, an agrarian movement, it produced, somewhat as a by-product, the beginnings of urban centers of which some disappeared altogether, many remained very much as they were, while a few became in time populous centers. The first typical village, more commonly termed a town, was little more than what some wag has called a "wide place in the road." It sprawled about a store or two and a blacksmith shop, and, along with the country church and the country school, served as a community gathering place. Here and there—Chicago, Cincinnati, and Pittsburgh being notable examples—natural advantages determined the location of such towns. Often, however,

the force back of the establishment of these towns was artificial, and sometimes ran contrary to logic and good sense.

Town building was a major activity in the settlement of the middle west. Every land owner dreamed of his farm becoming the heart of a great city, and, being energetic, he did more than dream. Hundreds if not thousands of them employed a surveyor, had plats made, coined a name, usually commonplace, and announced the beginnings of another Boston or New York. To add variety, these towns, in an effort to grow quickly, made bids to become county seats and, in some instances, to become state capitals. Today wheat and corn grow on grounds once dedicated to the building of mighty cities.

All such efforts were not abortive. Some even outran the most optimistic claims of their builders. In 1810, Cincinnati, with a population of 2,540, was the metropolis of the middle and lower Ohio Valley, and, after New Orleans and Pittsburgh, the largest city west of the Alleghanies. Louisville followed with 1,357. The next thirty years saw the beginnings of the development of urban communities on a large scale.

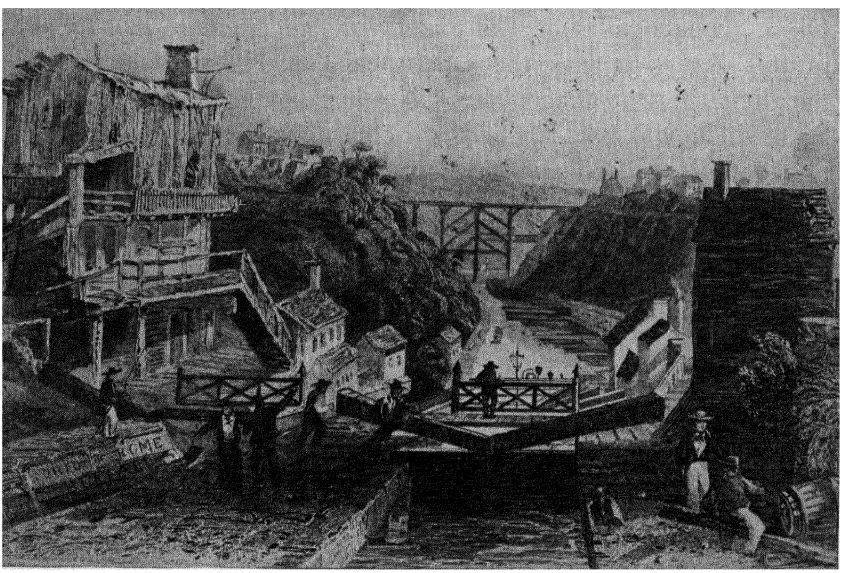
GROWTH OF SELECTED CITIES, 1840–1860

City	*Population*		
	1840	1850	1860
Chicago	4,479	29,963	108,206
Detroit	9,102	21,019	45,619
Cleveland	6,071	17,034	43,417
St. Louis	16,469	77,860	160,773
Milwaukee	1,700	20,061	45,246
New Orleans	102,193	116,375	168,675
Pittsburgh	21,115	46,601	49,217
Nashville	6,929	10,478	16,948
Louisville	21,210	43,194	68,033
Cincinnati	46,338	115,436	161,044

Compared in size with present-day cities of America, these communities may seem to suffer. Considering the youth of the civilization of which they were a part, they merit recognition if not astonishment. Looking back we can see that, however raw they may now appear to have been, they marked a beginning in city building such as the world had never before seen.

45. Struggle for the Western Trade

A problem in transportation.—The opening up of the broad lands west of the Alleghanies stirred the imagination of the people along the Atlantic seaboard and, in due course of time, brought them to the realization that trade with their kinsmen settled there might prove to be profitable. Five coastal cities set out to capture this trade: Boston, New York, Philadelphia, Baltimore, and Charleston. Various methods of procedure were



The Erie Canal connected Western farmers and Eastern markets

employed, but the objective was the same, the tapping of the western markets.

The desire to establish cheaper and quicker means of transportation was no one-sided matter. The westerners themselves were convinced that not until they could find markets for their products would they be able to make appreciable headway in the development of the country. They, too, dreamed dreams and strove to make them real; and in their striving they attempted many things some of which, in the light of present-day knowledge, seem foolish and ill advised.

Canals.—The State of New York led the way in canal building. Choosing a route favored by nature, that state, under the

leadership of De Witt Clinton, built the Erie Canal. Its eastern end was at Albany on the Hudson River; its western end, at Buffalo on Lake Erie. This canal was opened to navigation in 1825, and with its opening, freight rates between the Lake regions to the city of New York fell to only a fraction of what they had been prior to the opening.*

The effects of the Canal on freight rates stimulated Pennsylvania and Maryland to hasten their plans for constructing similar means of transportation. The former, by combining with inclined railroads, was able eventually to reach Pittsburgh on the Ohio. The results of the efforts of the citizens of Maryland in this direction was the Chesapeake and Ohio Canal, which parallels the Potomac River. Neither city succeeded as did the State of New York, for physical conditions over which they had no control blocked the easy progress made by their neighbor on the north.

These eastern states were not alone in digging canals. Ohio, Indiana, Illinois, and other Valley states spent long years and relatively huge sums of money in an effort to reach outside markets. Attempts were made to connect Lake Erie with the Ohio River at several different points. Of these, the most ambitious was the one that projected a canal westward from Toledo along the Maumee River, and then across the divide to the Wabash River, in an effort to reach the Ohio near Evansville. This canal, although finally completed, failed in its purpose, largely for the reason that it was always blocked at some point by slides.

The one northwestern canal that paid for itself, and in so doing rendered a real transportation service, was that connecting the south branch of the Chicago River with the Illinois River. This was the Illinois-Michigan Canal. Begun in 1836, in connection with a mammoth Fourth of July celebration in Chicago, it was finally opened from end to end in 1848. The active years of this improvement brought prosperity to central Illinois and to Chicago. Over it millions of tons of grain passed from the farms of the fertile prairies along its banks to the Eastern and European markets.

Railroads.—The digging of canals was hardly under way before the building of railroads, as a practical method of transport-

* The general effects of the canal are described in a selection from *Hunt's Merchants' Magazine,* Selection 34.

ing passengers and merchandise, was begun. The first in the field was the Baltimore and Ohio line, with its eastern terminus at Baltimore and its objective a point on the south bank of the Ohio. Behind this project was a group of far-sighted business men of Maryland, who could see clearly that nature had conspired against them insofar as reaching the headwaters of the Ohio was concerned.

The line was begun in Baltimore in 1827, and slowly it made its way toward the Potomac River. Just ahead of every step taken in its construction, costly and time-consuming experiments had to be made, for nowhere were to be found reliable and time-tested precedents. Despite the discouragements met at every hand, the men charged with developing what at the time must have appeared to be an over-ambitious project, carried on until they had demonstrated that cars loaded with passengers and freight could be transported with care and at a relatively low cost, and that, because of flexibility, railroads were better adapted to American conditions than were canals. Sensing the success of the Baltimore and Ohio Railroad, progressive citizens in other sections of the country turned their attention to the possibilities of the "iron horse." From Boston and Charleston lines were projected westward in an effort to share in the profits to be had in the inland trade.

The West itself turned to the railroad as a feasible means of transportation. States like Illinois appropriated, through their legislatures, huge sums of money for their contribution. Plans on a grand scale were drawn up, and in some instances work got underway. What bedeviled the whole scheme was the attempt on the part of lawmakers to curry favors of their constituents by projecting lines that began nowhere and went nowhere. As might be expected, nothing of great importance came from these schemes except to leave in their wake bitter disappointments and crushing public debts.

Turnpikes.—The wagon roads of the Westward Movement were notoriously poor. In general, they consisted of dusty ruts during the summer and muddy ruts during the winter. For practical purposes, most of them, except for horseback riders and vehicles of the sturdiest construction, were all but impassable the year-around. The settlers yearned for better roads, but being

few in numbers and relatively poor financially, they did little about getting them.

The states, and even the National Government, gave some attention to the subject. Usually in setting up their grandiose internal improvement schemes, the legislatures provided, along with railroads and canals, for publicly owned and publicly controlled highways. Unfortunately, they went the way of the railroads and canals, with the result that in the end the communities which had been led to believe that they would be provided with year-around means of getting about without cost were no better off than before.

The Federal Government also took a hand in road building. Early in the nineteenth century, Congress provided for an improved highway to lead from the national capitol to the Mississipi River. This was known as the Cumberland Road. It was built rather spasmodically over a period of twenty-five years. Much of its eastern section was really improved; in the west it was little more than a cleared strip through the forest. Finally it reached Vandalia, Illinois, then the capital of the state, where it ended. Later the government abandoned road building, and the road thus begun with so much promise was given to the states through which it ran. The Federal Government projected other highways with like results.

46. Life on the Frontier

Spirit of self-sufficiency.—Those who took a part in the Westward Movement were men and women possessed with an abundance of patience, courage, and vision. They had left their old homes fully aware of the hardships ahead of them, and having once set their faces toward the setting sun there was no turning them back. What they could see across the far-flung horizon was not leisure and wealth, but opportunities otherwise denied to them—opportunities for themselves and for those who came after them. Any other spirit would have perished on the frontier.

The typical western settler of the period must have been naturally ingenious. Otherwise he would never have given up assurance, however humble, for an opportunity to improve himself under conditions of the greatest uncertainty. He must have known that, in a new country devoid of the meanest conven-

iences, he would be compelled to depend on his own ingenuity in supplying his simplest demands. There, of necessity, he must rely less on reasoning and more on instinct, must do for himself what he had been accustomed to have others do for him. In other words, he must retrace his steps, as it were, toward the point where the home was a self-sufficient economic unit.

Local industry.—With the coming of the settlers into the Mississippi Valley came those industries most needed to meet every-day wants. About these industries communities sprang up, and to them the surrounding farmers turned for supplies. The first blacksmith relieved the farming members of the countryside of the necessity of doing many things. So also did the miller, the tanner, the hatter, and the carder. Division of labor and specialization got under way with their arrival.

Occupying a position of importance in this pioneer economy was the general store. It was the community clearing house. Across its counters the neighboring farmers exchanged their produce for coffee and salt, and for such other needs as they themselves could not supply. Here was the pioneer post office, and here men and women gathered to hear the news of the outside world and to exchange gossip concerning local affairs. The storekeeper was the oracle of the community. To him men carried their problems for solution. He advanced money for taxes, made small loans, sold merchandise on favorable credit, dabbled in politics, and made himself generally useful as a community leader.

The stock he carried was one of great diversity. It consisted, on the whole, of what even the pioneers regarded as necessaries. Along with coffee, tea, sugar, and salt, went calico, shirting, boots, shoes, hats, bitters, cordials, plow shares and harness. His customers made no demands on his skill in the matter of display. What they wished, and what they must have in order to survive, was merchandise, not display. Nor was this the day of cleverly designed containers.

Education and recreation.—Generally speaking the American pioneer of the nineteenth century was a man who appreciated the advantages of education. He felt himself hedged about in his new home by influences beyond his control, but he showed from the beginning that he meant to do what he could in the way of providing free public schools for his children. The first

schoolmasters were invariably men, and usually men of no great learning, and for a time the parents paid tuition so that their sons and daughters might be instructed. Gradually, with the growth of settlements, the public school came into its own, until the point was reached when elementary instruction at public expense became universal.

These pioneers, as soon as they were able financially, founded seminaries and colleges and, in some instances, built libraries. Here and there in scores of places in the Mississippi Valley are to be found today flourishing institutions of higher learning that owe their beginnings to the genius of a people determined to plant on the frontier a civilization comparable to that of the older communities along the Atlantic seaboard.

Chapter XIII

DEVELOPMENTS IN BANKING AND FINANCE

THE close of the Second War for Independence (Treaty of peace in 1814; last battle fought in 1815) found prostrate the private, as well as the public, finances of the whole country. Common to all sections and to all classes of society were the problems having to do with the everyday business operations of the people. Banking, as a profession, was comparatively new and its operations little understood; coined money was relatively scarce even in the centers of population and trade; as yet the country had no accumulated reserves of capital seeking opportunities for investment.

So apparent was the need for some directing agency clothed with great powers, that Congress reversed a recently adopted policy and studied plans for creating a central bank authorized to issue paper money and, in certain instances, to represent the government in financial matters. Thus, five years following the demise of the First United States Bank (1811), the lawmakers of the nation bent to necessity and set up a Second Bank.

The states themselves, through their various legislatures, followed the precedent set up by the Federal Government. They too authorized the establishment of banks, and, in some instances, gave to these banks rights and privileges as dangerous as they were unsound economically. In one instance the paper money to be issued had, in the main, raw prairie land as security, and this money was to be loaned in sums of one hundred dollars to citizens of the state with little or no regard for the security offered.

The consequences of these various enactments were that soon the people found themselves with many and various kinds of paper money, supplemented by a scanty stock of coins. In general, these bank notes looked much alike in size, color, and general appearance. In their power over merchandise they differed widely. Some kept at, or near, par; at the other extreme were those entirely worthless as a circulating medium.

So difficult did the situation become that bankers and merchants resorted to the use of Detectors, a small pamphlet showing the comparative value of the various bank notes in circulation.

For twenty years the Second Bank of the United States, considering the handicaps under which it worked, operated as effectively as could be expected. Then, with the expiration of its charter, it closed its doors. This was the signal for renewed activity on the part of state banks already in existence and for the creation of new ones. The result was a hurried expansion of our banking structure with disastrous results. The panic of 1837 swept most of them out of existence. A few years later the National Government set up its own sub-treasury for handling Federal funds.

All the while the National Government, having under the Constitution the exclusive right to coin money, experimented in an attempt to supply the country with a circulating medium consisting, in the main, of gold and silver. Ratios between the two metals were shifted, and, since the mining of precious metals in the United States was at the time of little consequence, the volume of such money did not gain any great size.

47. The Second Bank of the United States

Need for banking facilities.—The young Republic had won the War, sometimes called the Second War for Independence, but in doing so it was strained to the breaking point. Especially demoralized were banking and finance, both public and private. The public debt had mounted during the struggle. Federal expenditures in 1811 had been slightly more than eight million dollars; during 1814, the last year of the war, they had exceeded thirty-four million.

The circulating medium of the country consisted, in the main, of coined money and state bank notes. One was relatively scarce; the other lacked soundness, and as a consequence was not generally acceptable. What the country needed most in order to work its way back to normalcy it lacked. Local trade was handicapped because of the scarcity of reasonably sound money, while buying and selling among different sections of the country, now grown large, was all but prohibited by the inability of merchants to pay debts at a distance. Whatever fine-spun opinions any Senator or Representative might have had concern-

ing money and the functions of money, he was moved by the general financial situation that prevailed in 1815 to set them aside for more practical considerations.

From an examination of the report supporting the proposal to establish a bank, an idea can be had regarding the situation.

> Depreciation in local currency . . . ranges [from] twenty [to] twenty-five per cent. Among the principal Eastern cities, Washington and Baltimore were the points at which depreciation was greatest. The paper of the banks in these places was from twenty to twenty-two per cent below par. At Philadelphia the depreciation was considerably less, though even there it was from seventeen to eighteen per cent. In New York and Charleston, it was from seven to ten per cent. But, in the interior of the country, where banks were established, the depreciation was even greater than at Washington and Baltimore. In the western part of Pennsylvania, and particularly at Pittsburg, it was twenty-five per cent.

General trade throughout the country was borne down by the difficulty of making payments at a distance. A Cincinnati merchant, for instance, was hard put to find a way to buy New York or Philadelphia funds with which to pay for eastern merchandise. Formerly he had dealt through the First Bank of the United States; now no such facilities were available. He had neither funds nor credit along the sea coast, and his local bank had no standing there. The net result was that for a time the situation threatened to strangle inter-sectional trade and commerce, thereby destroying the progress already made and, in the end, standing as a barrier to a united country.

The government itself had a stake in the matter. Its general welfare demanded the establishment at once of some means for assisting it to carry on its financial function. Even then, a period now regarded as one of extensive simplicity, the United States as a political unit was, considering alone the magnitude of its operations, business man number one. Periodic payments in the public debt must be made, supplies purchased, soldiers and sailors paid, public lands sold. All of these and other transactions demanded a central agency controlled in part at least by Washington.

Provisions of the Bank Act.—The Act creating the Second Bank of the United States dates from 1816. In that year Congress, after a prolonged and careful investigation accompanied by a multitude of compromises in order to reconcile conflicting

interests, sent to President Madison a bill providing for the Bank. This bill the president approved with the feeling that, while it was not ideal in every respect, it would go far to give stability to the finances of the country.

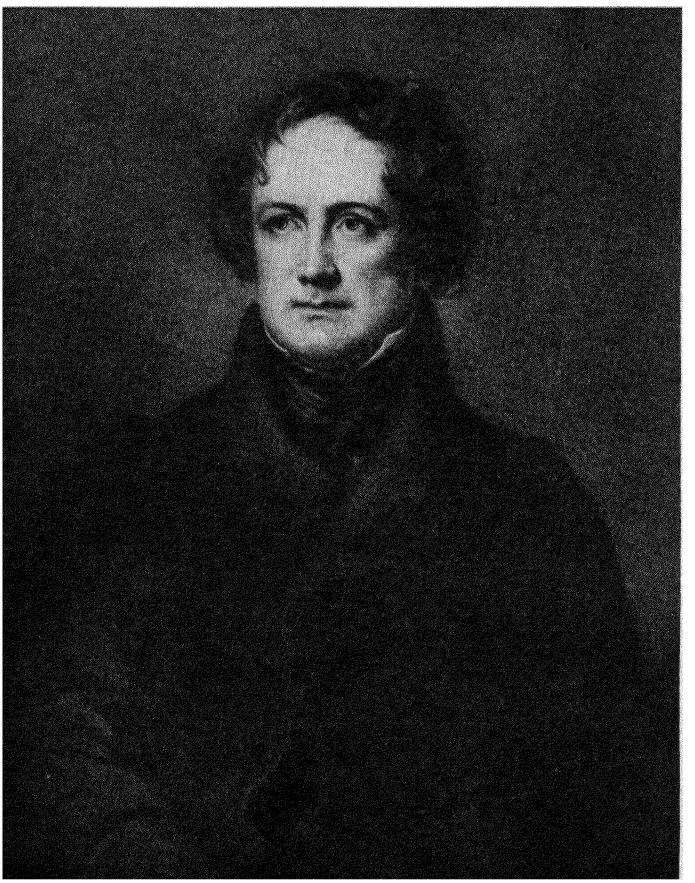
One provision of the Act establishing the bank was that its capital should be $35,000,000 and that of this amount the Government should subscribe for one-fifth, or $7,000,000. In the light of present-day banking the capital structure of a bank to serve the whole country may appear insignificant; viewed in the light of conditions as they then existed—population, wealth, volume of business—it assumes large proportions. Since the new organization was to be nation-wide in its operation, it was further provided that the Directors might, in their discretion, establish branch banks.

In order to give the bank a monopolistic position without at the same time handing over to it means for destroying state banks, the Act stipulated that its notes should be receivable by the United States in payment of imports and other duties, but that no notes under $5 might be issued. Acceptance by the Government insured stability; prohibition against the issuing of notes of small denomination gave state and other banks an opportunity to continue to serve the local communities in which they were located. The Act set the life of the Bank at twenty years, with the additional provision that during that time no other similar institution would be authorized.

The Government took advantage of the situation to require of the Bank that it should at all times, unless otherwise directed by the Secretary of the Treasury, act as custodian of public funds, transmitting them without cost from city to city as directed by properly authorized officials in Washington. An additional provision required the Bank to assist in negotiating loans made to the Government.

Operations of the Bank.—The Second Bank of the United States filled a pressing need. Its establishment went far to stabilize the finances of the Government and to assure an orderly procedure in carrying on the business affairs of the country. Its services the Government could command, and its notes merchants could accept without the fear of having on their hands promises of payment that might be repudiated when presented for redemption.

Considering the entire period of its existence, the Bank met every expectation of those who had given it life. Under Nicholas Biddle, who became president of it in 1823, the Bank shared with the rest of the country the growing prosperity that marked the period. From the point of view of the best interests of the



NICHOLAS BIDDLE

As President of the Second Bank of the United States he struggled with Jackson

country as a whole, it was a success. It maintained a stable paper currency, provided banking facilities for merchants and others, and in a variety of ways assisted the Government in its fiscal operations.

In addition to all these services the Government received a handsome profit from its investment.

Bonus paid by bank to the United States		$ 1,500,000.00
Dividends received from the bank		7,118,416.29
From sale of stock, etc.		9,424,750.78
Total		$18,043,167.07
Stock subscriptions paid in bonds	$7,000,000.00	
Interest on these bonds	4,950,000.00	11,950,000.00
Profit on investment		$ 6,093,167.07

The bank war.—The success of the Bank was, in large measure, its undoing. Competing banks envied its position as fiscal agent of the Central Government, its debtors complained of harshness, sincere and honest citizens feared its strength for evil. In 1819, the matter of repealing the Bank's charter was discussed in Congress, but nothing came of the discussion. Hostile state legislatures passed laws laying taxes on the branches doing business within their borders. In Ohio this tax an official collected by entering the vaults by force and carrying away money to the amount of the tax assessed. Through it all the officers of the Bank had been patient; this seizure, however, was too much. They appealed to the courts for protection. This the courts gave them in the case of *Osborn et al.* v. *United States Bank* (1824). Chief Justice John Marshall delivered the decision and held that the states had no authority for collecting such a tax.

The fight on the Bank gained momentum when President Jackson, in his message to Congress in 1829, recommended a study by the lawmakers of the nation of the constitutionality of granting federal charters to banking institutions. Jackson's hostility sprang from a deep conviction on his part that the Government had no authority to grant monopolistic powers to any person or group of persons. He was willing for the Bank to continue its operation until its charter should expire (1836); beyond that he would not go.

The President's stand gave a political slant to the bank question. Those opposed to him, believing that the country at large favored a continuation of the Bank, took up the challenge thus offered by Jackson and proceeded to capitalize it to what they confidently expected would be their political advantage. In 1832, the year of a presidential election, Congress voted to renew the Bank's charter. The bill Jackson vetoed, on July 10, 1832, tak-

ing the position that the bank to be created would be a monopoly and hence the law creating it unconstitutional.*

Supporting the bill was Henry Clay, who at the time was a candidate for the presidency. He made such capital as he could of the President's action, fully convinced that in doing so he reflected the opinion of the people. Both sides appealed to the voters; everywhere men of all ranks, regarding the bank issue as the paramount one of the campaign, discussed it in all of its parts. The election settled the matter; Jackson emerged victorious by a large majority; the people had spoken.

48. State and Private Banking

Withdrawal of the deposits.—The reelection of President Jackson meant the end of the Bank. Whatever the justification for its existence as an agency for assisting business men, the people appeared to believe that the country needed its services no longer, and proceeded to give reality to that belief by choosing Jackson over Clay. This action the president-elect accepted as a mandate, ordering him to lose no time in settling the issue once and for all.

The President's first decisive move was to have withdrawn from the Bank the moneys which the Government had on deposit there.** In doing this he met violent opposition on the part of the followers of Clay; also, on the part of some of his confidential advisers. He himself could not withdraw these deposits; that could be done only by the Secretary of the Treasury. One secretary refusing to comply with his Chief's orders was superseded by another, with no better results. Then the President appointed to the office Roger B. Taney, who ordered that "after the 1st of October, 1833, public deposits be made in the state banks." It is to be noted that deposits then in the United States Bank were not to be transferred to state banks but withdrawn as needed to carry on the business of the Government.

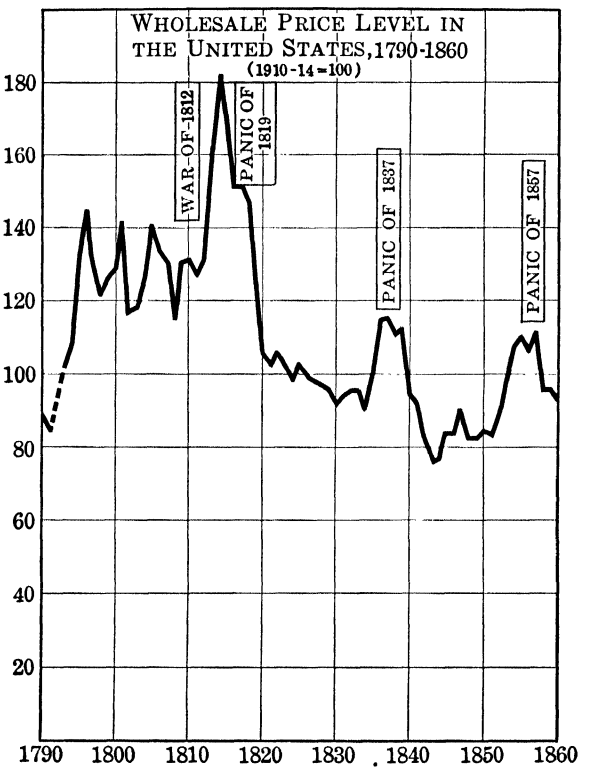
The withdrawal of the deposits stirred the enemies of the President to renew their fight on his policies. In 1834 the United States Senate, following the lead of Clay, went on record in a formal resolution censuring the President for his part in

* Selection 35 is a part of Jackson's veto message.

** Albert Gallatin, Secretary of the Treasury from 1801 to 1813, did not approve Jackson's financial policy, Selection 37.

refusing longer to deposit public moneys in the Bank of the United States. Jackson protested against this action and requested that his protest be spread on the *Senate Journal*. This the Senate refused to do. Thus the issue was squarely joined with the friends of the President on one side, and his enemies on the other.

Panic of 1837.—The Bank of the United States closed its doors in 1836. Already an economic maladjustment was on its



way. On July 11 Jackson issued his famous specie circular. Next year (1837) the explosion occurred. What was back of it? The answer is easy credit accompanied by speculation.

With the withdrawal of the deposits state banks came into their own. Those banks already in operation welcomed the deposit of Federal funds; more were quickly organized with no other purpose in the minds of their owners. Of much significance was the fact that each dollar so deposited served as a basis of several dollars in state bank notes. Credit was thus made

available for enterprises which would not have been undertaken under normal conditions. Speculation followed. Political units, as well as individuals, assumed financial obligations out of all proportion to their ability to meet.

Such was the situation when in May, 1837, the banks of the country found it necessary to suspend specie payments, that is, the payment of gold or silver to holders of bank notes.* Creditors demanded what was due them, but debtors could not pay. Land values declined until they were but a fraction of what they had been when "times were good." Foreign trade shrunk. Even the states were forced to abandon their grandiose schemes for building railroads and canals. Several of them were hopelessly in debt, and not until more than a generation later, were they able to pay what they owed. Viewed from any angle, the panic of 1837 was a major catastrophe in the economic and social life of the people.

The states as bankers.—One factor in the destruction of the Second United States Bank was the desire of state lawmakers to see locally owned and locally managed banks established under the domination of their particular legislature. Their idea of credit—an idea that refuses to die—was that it resembled a coat, in that it might be put on and taken off at pleasure. Apparently it never occurred to them that, in the main, an individual earns credit by showing his ability to maintain it.

Having once decided that the states should embark in banking, the next step was to embark. Some banks the states merely chartered; others had the states as part owners. In one middle-western commonwealth the legislature authorized two such banks and became a share holder in both, exchanging its bonds for certificates. As might be expected under the circumstances, it was required of these two banks that they deal gently with their debtors and that in the matter of management they should listen attentively to the voice of the politician. This period is known as the "era of wildcat banking," and the banks favored by the Federal Government in the way of making deposits of public funds, as "pet banks."

During the days of these institutions, the country suffered from a circulating medium that all but wrecked business and

* Gallatin sets forth some of the financial developments which led to the panic of 1837, Selection 36.

bankrupted the nation. Banks issued notes inadequately secured, and at best they served their purpose poorly. They lacked the general acceptability which a good money must possess, for few outside the community in which the bank was located had any notion concerning either its stability as an institution or the standing of the men who managed it. With notable exceptions, the banks of the period were local in character and operated in an unbusinesslike manner.

Some relief of a bad situation was to be had by merchants and others through the use of what went under the name Detector. This was a small book, issued from time to time, which carried the names of issuing banks, together with the estimated value of their respective notes. This information served its purpose rather well. Obviously, it could not give value to the notes which it listed; what it did was to *express* such values in terms understood by those who used it.

No business establishment was complete without the latest copy of a Detector. To it merchants, manufacturers, and bankers referred constantly. The presentation of a bank note in making a purchase or paying a debt was not the simple procedure with which we are acquainted. Now, we are concerned only with the genuineness of the money offered; then, the receiver had to guard against a loss in value as well as against spuriousness. It is no exaggeration to say that the American business man of the period following the closing of the Second United States Bank regarded the Detector much as his successor today regards Dun and Bradstreet or Moody's Manual.

49. The Independent Sub-Treasury

Distributing surplus revenue.—In 1835 the last of the public debts arising from the Second War with Great Britain were paid, and for the first time since its organization in 1789 the Government had no need for revenue beyond what was necessary for current operation. Two normal courses of procedure presented themselves to Congress and the President: they could reduce public revenues, or increase public expenditures. Strangely enough, they followed neither course; they kept revenue up, expenditures down, and gave what was left to the states. Back of this division stood the manufacturing interests of the country,

eager to have continued the revenue-producing tariff laws that gave them protection.

As early as 1829, President Jackson, anticipating what was about to happen, had endorsed the plan, then being discussed, of giving to the states such surplus funds as the treasury might have. He even went to the point of suggesting that, if necessary, the Constitution be amended. Such pronouncements met instant favor at the hands of state officials, who saw in it an opportunity to do some of the things which the states themselves could not afford. When the idea of the Government paying money to the states reached the rank and file of the people, joy generally prevailed, for here, it was reasoned, something was to be had for the asking.

During the last year of Jackson's administration, 1836, Congress approved and sent to the President a bill providing for the distribution of the surplus in the United States Treasury among the states, payments to be made in four equal installments. Three of these installments, aggregating to $28,000,000 were paid according to schedule. The fourth was never made because of the inability of the "pet banks," eighty-eight in number, to repay the Government what it had on deposit with them. The states used the money thus granted to them in a variety of ways. Massachusetts distributed it among the towns; Maine made a per capita distribution; several states spent it on internal improvements; some set it aside for educational purposes.

Establishing the sub-treasury.—The failure of the banks to meet the fourth installment payable to the states was evidence, if indeed any evidence were needed, that the Government could no longer depend on banks, as they were then organized, to accept public moneys on deposit with any assurance that such deposits would be met in full and on demand. Accordingly, the President (Van Buren) recommended to Congress that the Government deposit its money in its own vaults. This recommendation was for a time ignored. Three years later, however (in 1840), Congress reversed itself, adopting the system as originally proposed. Under the law thus enacted the Treasury at Washington built vaults and established branches at New York, Boston, Charleston, and St. Louis. The act further provided that after June 30, 1843, "all payments to or by the United States should be in gold and silver exclusively." The meaning

of this provision was that the Government intended, after due warning, to go on a hard money basis.

Led by the state banks, the opposition to the measure organized to repeal the law. During the presidential campaign of 1840 the Democrats favored the system; the Whigs opposed it. The latter party won, electing William Henry Harrison over Martin Van Buren. The next year the law was repealed in line with the promise of the victors. In 1846, however, a new Congress re-established the Sub-Treasury, and it continued to 1920 as the chief custodian of public funds.

Freed of politics the Sub-Treasury proved its worth as a device for providing security and for giving facility to the financial operations of the Government. So effective was it that the modern student of banking wonders why it was not established earlier.

50. Gold and Silver Money

Early coinage.—The year 1792, as has already been pointed out, saw the first authorization of coined money under the Constitution. It provided for the minting of the two metals—gold and silver—and between the two it established a ratio of 15 to 1. This meant that the silver dollar should be fifteen times as heavy as the gold dollar—of the same fineness. The weight of the gold dollar was fixed at 27 grains; that of the silver dollar at 416 grains, each to be *about* nine-tenths fine. The first important modification of the coinage laws of the nation came in 1834, when the ratio between gold and silver dollars was changed to 16 to 1. It reduced the weight of gold dollars to 25.8 grains, and provided that they should thereafter be coined from metal having an increased alloy content. Three years later another legislative act reduced the weight of the silver dollar to 412.5 grains and defined the exact fineness (nine-tenths) of the metals to be used.

Coined money in circulation.—The establishment of a mint in 1792 did not in itself exert any significant influence on the amount of coined money in circulation. The mining of precious metals within the borders of the country being insignificant, no one had any supply of either metal to carry to the mint for coinage. Moreover, merchants and others accepted Spanish dollars as readily as they accepted their own. The result was that during

the first twelve years of the life of the mint it issued but 1,500,000 silver dollars. In 1805, President Jefferson ordered a discontinuance of their coinage, and not until 1836 was it resumed.

UNITED STATES COINAGE

1800–1830

Year	*Silver Dollars*	*Fractional Silver Coins*	*Gold Coins*
1800	$220,920.00	$3,376.00	$317,769.00
1805	321.00	149,067.50	170,367.50
1810	....	638,773.50	501,435.00
1820	..	504,680.70	1,319,030.00
1830	.. .	2,495,400.00	643,105.00

Little more need be said concerning the activities of the mint after 1834. In 1840 there were coined 61,005 silver dollars, and $1,605,698.00 in fractional silver currency. From that time until 1860 silver coinage continued at about the same rate. Discovery of gold in California, however, accelerated the coinage of that metal. In 1850, for instance, gold coins valued at $31,981,738.00 came from the mints.

Chapter XIV

THE PROGRESS OF AGRICULTURE

THE America of the first half of the nineteenth century was in large measure an agricultural America. Despite the fact that the country was already giving signs of becoming an industrial nation of first rank, that urban community life which was destined to grow into strength and power was taking root, and that the ingenuity which was to stamp itself on the economic life of the people was making itself felt, these same people regarded themselves as primarily agricultural. Practically all of them had been born on the land, a majority still lived there, while industry itself, removed at the farthest but a few steps from crude operations on the rawest of materials, depended in large measure on agriculture's product. It is but natural, therefore, that supreme efforts should be made during the period to improve farming and that such efforts should attract major attention.

An account of the development of agriculture after 1800 is in large measure an account of the settlement of the Mississippi Valley. Farming continued to be carried on in the older states along the Atlantic seaboard, but with each succeeding year it declined in relative importance until by 1860 the fertile lands across the mountains had become the center of American agriculture. This shift to more fertile lands tended, by bringing down prices, to destroy the profits to be made from farming in the older sections of the country. In many instances it drove the returns from less fertile lands so low that large areas were operated at a loss and in time abandoned. What for many years had been profitable farms sank below the no-rent margin.

During the years in question agriculture developed along a variety of lines. First, and most important, was the exploitation of new lands. The earliest explorers of the Mississippi Valley wrote and spoke with enthusiasm of the fertile lands of that region. Especially did the long stretches of level prairie catch their attention and hold it. They told how, with a minimum of labor and expense, a pioneer might win a livelihood from the

very beginning. To them it was a land of milk and honey. These lands the settlers found exactly as described, and in their exploitation of them they gave agriculture a distinctly American impress.

Closely associated with the settlement of the Mississippi Valley was the introduction and use of machinery. New conditions demanded new methods. The New England wheat cradle, for example, while it might serve the farmers of that section in harvesting their grains from hill-side fields, did not meet the needs of the western pioneers. So it was with the plows and harrows and seeders and cultivators.

Systematic efforts to spread information concerning the best methods of farming characterized the agriculture of the time. Fairs, stock shows, agricultural societies, magazines devoted to farming, and the beginning of the agitation for state supported schools devoted to farming, were the outward evidence of an inner feeling that the cultivation of land merited the best thought that could be devoted to it.

As might be expected, crops of every description increased with the opening of new lands, with the result that there were large surpluses for export. In 1800, for example, the cotton crop of the country approximated seventy-three thousand bales; by 1860 production exceeded three and three-quarters million bales, an increase of more than fifty fold. What happened to cotton happened in varying degrees to wheat, corn, tobacco, hay, live stock, and potatoes. In the light of these developments, we can say that intelligence, initiative, and ingenuity combined with lavish gifts of nature to place agriculture in its rightful place.

51. Exploitation of New Lands

Nature and extent.—The Mississippi Valley has, with reason, been called the bread basket of the world. What is meant is that nowhere else can there be found a region equal to it in size and fertility. This valley comprises the lands drained by the great river, lands stretching, roughly, from the Alleghanies to the Rockies and from the Great Lakes to the Gulf of Mexico. Most of its soil is fertile; much of it exceedingly so. Equally favorable is the climate.

Northern expansion.—The farmer who crossed the mountains north of the Ohio River sought for himself and his family

a modest acreage which he could call his own and on which he could build a home. We have seen already how one wave of migration followed another until some semblance of permanency was accomplished. This farmer secured a comparatively small holding—one hundred sixty acres was about the average-sized farm—and beyond this he seemed to have no ambitions to go.

The agriculture of the northern portion of the valley was, in essence, a family matter. Our typical farmer had no control over labor beyond that of himself and those dependent on him. With the simple tools to be had at the hands of the local blacksmith, or later at the general store, he found himself hard pressed to cultivate with any degree of satisfaction more than small fields devoted to such crops as corn, wheat, oats, potatoes, and hay. In short, small holdings operated by their owners characterized the agriculture of the northern sections of the valley.

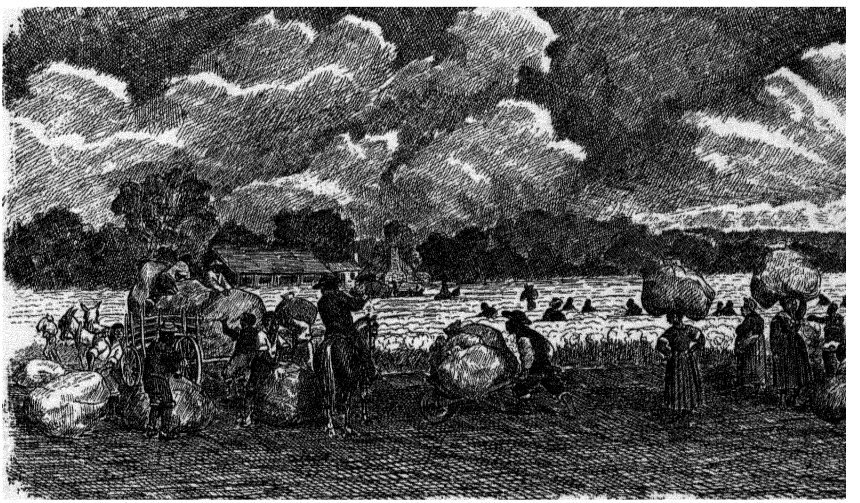
Plantation economy.—Thousands of families in the south operated their farms much as did their northern neighbors, devoting themselves to raising live stock and growing food crops on small farms. These families predominated in states like Kentucky, and in the main they operated on the uplands and in the Piedmont region. A type of farming requiring large holdings grew up in the more fertile areas. Especially did the growing of cotton become a business on a large scale.

The typical cotton planter owned broad acres on which he worked negro slaves. He was something more than a farmer in the ordinarily accepted sense of that term. He farmed, to be sure, but equally important to him was his ability to manage men, to keep abreast of market conditions, and to understand foreign commerce. His first requirement laid on those who managed his farm was that the plantation should be as self-sufficient as possible in the matter of food stuffs.* From that point on his interest lay in growing as much cotton as he could with the land and labor available.

Since the cultivation of cotton, sugar, or tobacco was not a complex operation, it was an easy matter to teach slaves the use of the few simple tools required. Moreover, most members of the slave family could be employed throughout the year at one kind or another of plantation work. But in spite of the fact

* That the South produced its food supply is shown in Selection 38.

that the entire product of a slave belonged to his master, the value of this product was not all clear gain.* In the first place was the original investment, which varied from four hundred to fifteen hundred dollars for prime field hands. With this investment the master assumed the risks of loss by death, running away, and failure to have returned his expenses of supporting the slave because of the all too often unwillingness of the slave to give his best efforts. To insure that his plantation would be worked effectively the owner in many cases found it necessary to incur the expenses of an overseer.



So the world might be clothed

In addition to the cost of the original investment was the cost of food, shelter, medical care, and clothing. Within limits these costs were fixed, regardless of the price of cotton, and regardless of whether the slave was a non-productive infant, an aged adult, or a valuable field hand. The planter was required to meet these expenses, whether there was a crop failure with high prices or a bumper crop with low prices.

New lands and the expansion of slavery.—Staple farming hastened the use of new lands. Faced with the necessity of keeping their slaves profitably employed, planters were inclined

* J. E. Cairnes presented an English view of the economics of slavery, Selection 39.

to abandon lands on the verge of becoming exhausted and to take over the cultivation of fresh fields. As new land to the west was settled, bills for the admission of states were brought before Congress, and the question as to whether or not slavery was to prevail in the new states was raised and debated. The ultimate result was war.

The application of Missouri for statehood raised the first important debate in Congress concerning the extension of slavery. The South claimed that any state could introduce or abolish slavery if it should so desire, and that the Constitution recognized slavery when it provided for three-fifths representation. The North claimed that Congress had prohibited slavery in the Northwest Territory and it had such right everywhere outside the borders of the original thirteen states. The result was the Missouri Compromise (1820), by which it was agreed that slavery should be prohibited in the territory ceded by France (the Louisiana Purchase) north of the parallel 36° 30′, with the exception of Missouri.

The continued occupation of new lands to the westward eventually resulted in war with Mexico and the annexation of Texas. An attempt was made to apply the Wilmot proviso to Texas, that is, slavery was to be prohibited in the territory acquired from Mexico; but the attempt failed. In 1849 California, with a constitution forbidding slavery, applied for admission as a state. The next year Henry Clay succeeded in getting his famous compromise measures passed, which provided that California, and any new states to be formed from Texas, were to be admitted with or without slavery, as the people of each state might decide, and that Utah and New Mexico were to be formed into territories without the Wilmot proviso. Southern members of Congress then took the position that these compromise measures voided and superseded the Missouri Compromise. This position was recognized by the Kansas-Nebraska Act of 1854 which expressly declared that the Missouri Compromise was no longer operative.

The struggle over the extension of slavery continued. Agitators and the decision in the Dred Scott case intensified the struggle. Families were divided over the issue. In the war which followed, both sides paid an exorbitant price.

52. Spread of Agricultural Education

Early agricultural societies.—The last fifteen years of the eighteenth century saw in this country a genuine effort on the part of far-seeing friends of agriculture to organize for the purpose of educating farmers everywhere to improve their productive processes. These men were far in advance of their time, and in most instances their efforts were met with stubborn resistance on the part of those who ridiculed the idea that a tiller of the soil might benefit from methods not already tried and proved by practical experience. Several of the states boasted that even before the turn of the century they had active agricultural associations. Among them were South Carolina (1784), Pennsylvania (1785), New York (1791), and Massachusetts (1792).

Awards and prizes.—A practical measure adopted in order to secure results was to make awards and offer prizes for demonstrated progress in farming. In 1810, for instance, an organization bearing the high-sounding name, Columbian Agricultural Society for the Promotion of Rural and Domestic Economy, sponsored a nation-wide exhibition of live stock. Later in the same year a certain Elkanah Watson, a stock breeder of some fame, exhibited in Pittsfield, Massachusetts, three Merino rams. From this small beginning sprang the Berkshire County Agricultural Society, an organization that fostered for the first time in the history of the nation, county exhibits of the products of the farm. Such efforts to improve agriculture grew with the years. All over the country groups organized for that purpose. Some gave attention to grain, some to fruit, some to food animals, some to horses. Whatever the immediate interest, these organizations had a common objective in view—the improvement of American agriculture.

53. Use of Machinery on the Farm

Early methods.—The year 1800 saw farming carried on in this country very much as it had been carried on in Western Europe for centuries. The farmer himself, with usually no help aside from what his family might furnish, employed draft animals to a limited extent for power. His tools were crudely constructed and, in the main, made of wood. He labored in his

fields very much as did the servants of Boaz in the days of Ruth and Naomi. His corn he cultivated by hand, his wheat he cut with a cradle, his cattle he left to make their own way in the neighboring forest. Such methods, as crude as they were laborious, absorbed the time and attention of the great majority of the people of the country; even then no great surpluses, as characterize modern agriculture, were carried over from one year to another. To put the matter in another way, the bulk of the people, because of the low production of food per capita, had to farm in order to live.

The plow.—The primitive plow was a crude affair constructed of wood, or, at best, of wood covered with iron strips. In 1797 a patent was granted to Charles Newbold of New Jersey for a cast-iron plow in which the mold-board, share, and land-side were cast in one piece. Ten years later another inventor bought the right to combine this improvement with one of his own. In the meantime, Thomas Jefferson devoted his talents to improving the plow. From his efforts came a paper in which he set forth in detail exact measurements to be followed in plow construction. A notable step forward was taken in 1816, when, at Brighton, the Massachusetts Agricultural Society conducted a plowing match open to all competitors. Apparently the prime purpose of the match was to test the efficiency of different kinds of draft animals. In fact, however, the plow makers took advantage of the situation to show their wares. Many similar matches followed in other states, the emphasis gradually changing from motive power to machinery.

The objection to the old-style wooden plow was many-sided. It was, first of all, a heavy affair and difficult to handle. It taxed the strength of the animals that pulled it and of the man who kept it in place. Its mold-board was not self-scouring, and, as a consequence, it accumulated in its progress through the ground great quantities of moist soil. This added to the weight of the plow and lessened its efficiency. Finally, its general shape appears to have been wrong in design; it was too blunt, and only with the greatest difficulty was the plowman able to keep it in the ground.

Viewed through modern eyes these early improvements, however crude they may appear to have been compared with present-day tools and machinery, should have been accepted with enthu-

siasm by the farmers of the time. The farmers themselves very generally took the opposite point of view. They objected to the additional cost and demanded, as a price for their patronage, that such contraptions be perfected to the point of being fool proof. The final argument against accepting the iron plow as an accomplished fact was to the effect that it poisoned the ground and, as a result, spoiled the crops.

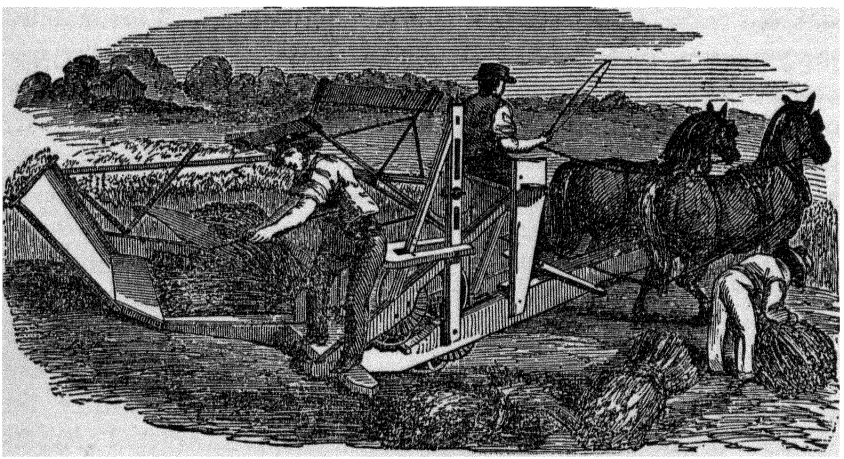
In 1837 a young mechanic, John Deere by name, made in his shop at Grand Detour, Illinois, a metal plow that combined a variety of advantages. It was comparatively light, was self-scouring, and it was strong enough to tear the heaviest prairie sod and to hold its own among trees and stumps. Fortunately, the young inventor had as neighbors men accustomed to trying new ways of carrying out old processes. These men, cultivators of soil on a scale scarcely known in the older sections of the east, gladly welcomed any help that might open the way to the exploitation of more acreage without a corresponding increase in capital and man-power required.

The grain reaper.—Of all the improvements in farm machinery made during the first half of the nineteenth century, that of the grain reaper stands out preeminently. Our farmers of 1800, even as late as 1835, harvested their wheat crops very much as their fathers had done for many years. This they did with what was called a wheat cradle, a simple farm tool consisting of a mowing scythe equipped with fingers parallel to the cutting blade. With these cradles the farmer and his neighbors cut down the ripened grain and laid it in long straight swathes. Progress was necessarily slow, the most skilled cradler being able to harvest less than two acres during a long day of ten or twelve hours.

The first attempts to harvest grain with machinery were made in England and Scotland. It remained for American inventors, however, to demonstrate beyond question that such machines were workable and that they could be built at a price which farmers could afford to pay. The first patent on a successful harvester was issued to Obed Hussey of Cincinnati in 1833; the second, the next year to Cyrus H. McCormick of Virginia. Both men were practical mechanics; McCormick, in particular, turned out to be a far-sighted business executive.

Behind these efforts to produce machinery designed to replace

man-power in the harvesting of wheat and other grains, there lay a dogged determination seldom met in industry. The neighbors of young McCormick, for example, gathered to see him demonstrate the practicability of his crude machine. They jeered when it failed to meet the claims of its builder; a less determined man would have given up in despair. McCormick tried again, this time with better success. In 1834, the world for the first time recognized his ability. What he did, others did also. As a group these early builders of harvesting machines, and there were many of them, combined perseverance with vision. Against



McCormick's reaper advances American agriculture

inertia and prejudice they worked slowly at first, and later with satisfactory progress.

The first nation-wide trials of the harvester were held in Ohio in 1852, under the auspices of the Ohio State Board of Agriculture. All machines did well in the trials. During the same year the New York State Agricultural Society held similar trials, with nine reapers and seven mowers. Only one or two of the reapers showed any marked superiority over the cradle, while the mowers did not do so well. The difficulty seems to have been that the machines were heavy and lacked flexibility. None of them, for instance, could "turn about readily without a reasonable space, and all were liable to tear up the sward in the operation."

Interest in mechanical methods for harvesting grain was not

confined to the United States. European states, always hard pressed for bread, viewed the attempts of American inventors with keen interest. In 1855, in connection with the International Exposition held in Paris, three machines from as many countries competed for supremacy. On equal sized fields of oats the American machine cut and raked the grain in twenty-two minutes; the English machine in sixty-six minutes; the Algerian machine in seventy-two minutes. Later, under conditions prolonged as well as severe, the machine of American make demonstrated without question its superiority over its competitors. The results electrified those who watched. Even the judges are said to have cried out as they watched the American machine operate, "Good, good!" A reporter, representing a French agricultural journal, wrote "All the laurels, we are free to confess, have been gloriously won by Americans, and their achievement cannot be looked upon with indifference, as it plainly foreshadows the ultimate destiny of the New World."

Other improvements.—Despite the fact that the attention of the time was given to the harvester, other improvements made their way with great effectiveness. The horse rake, for example, lightened the labor of making hay, its capacity for work equalling six men with hand rakes. The hay tedder, a device for turning hay being cured, had a place in the agricultural economy of the country. These two devices supplemented the mower, and without them its contribution to farming would have been slight. Associated with the harvester was the threshing machine. The old method of separating the grain from the straw was satisfactory as long as men harvested with cradles; harvesting grain by machine demanded newer and more efficient methods of threshing. Here, too, the American inventor showed his genius. At the International Exposition in Paris a competitive test was conducted. The standard selected was the amount of wheat *one* man could thresh with a flail in *one* hour. This was six liters. Then machines of different makes were put to the test. One built in the United States threshed 740 liters (the combined production of more than 120 men with flails). This display of efficiency left no doubt in the minds of men everywhere that machinery could be adapted to farming operations. A French newspaper gave a colorful account of this test. "This American

machine literally devoured the sheaves of wheat." Other improved equipment included the hay cutter and the corn sheller.

Social and economic effects.—The application of machinery to farming processes was something more than a demonstration of the ingenuity of American inventors; it robbed agriculture of much of its drudgery, opened the way for increased production, and set free for industry millions of men who otherwise would have been engaged in raising food crops. The men thus freed found their way into urban communities, carrying with them social and economic problems of importance. These problems had to do with sanitation, law and order, employer-employee relations, and with transportation.

54. Improvements in Live Stock Breeds

General methods employed.—The influences back of the invention of farm machinery and of its adaptation to farm operations, worked in the direction of improved breeds in food and work animals. Men thus interested visited Europe in order to observe first hand what was being done there. They and others imported the best breeds obtainable. The fairs, too, played a part. Under their auspices prizes were awarded to the owners of the best stock exhibited. In time the lawmakers added their influence and support. They encouraged importation of fine breeding stock, and in a number of the states measures were passed to restrict the running at large of live stock. Such a measure in a middle western state was referred to by its objectors as the "little bull law." Securing better breeds does not tell the whole story. Farmers gave increased attention to the care of their stock. They provided better shelter against extremes of temperature, and learned something about the relative value of different feeds.

Cattle and their uses.—The American farmer of the early nineteenth century employed cattle in a variety of ways. Some he fattened for meat, some he kept for their milk and milk products, and some he used as power for drawing heavy loads. Such cattle were common in all sections of the country, for all sections were yet rural. It can be said, however, that beef cattle and oxen predominated throughout the Mississippi Valley. In 1860, for example, Missouri could boast of four times as many oxen and seven times as many beef cattle as could Massachusetts.

An important consideration in this connection is the development of the butter and cheese industry prior to the Civil War. During 1859-60 the production of one was slightly less than a half billion pounds; of the other, more than a hundred million pounds.

Horse breeding.—The early American horse breeder made a contribution in two directions. This he did because he had need of two distinctive types of horses. One he bred for hard service on the road; an example is the Conestoga horse, a strong, stocky animal, used for drawing dray wagons in the cities and the freighters that moved overland. The other type of breeding ran to speer rather than to strength. Such horses filled an important place; they furnished the fastest land transportation known at the time, and gave pleasure to those interested in racing. They drew the carriages of rich city dwellers and the buggies of their more humble country cousins; they provided transportation for the itinerant preacher of the gospel, and contributed in no small measure to making life on the farm bearable for young people.

Other animals.—The American stockman gave attention to improving sheep breeds. To that end he imported the best stock available in Europe, provided his animals with ample protection against the elements, and saw to it that they were properly and adequately fed. The same attention he gave to poultry, to mules, and to hogs. The results justified the interest shown and the efforts expended. Gradually sleek, well-fed animals displaced an earlier stock characterized by its small size, shaggy appearance, and uncertain disposition.

Live stock exhibitions.—An important factor in the improvement of live stock during the period under consideration was the competitive spirit raised by public exhibition. Agricultural societies and others offered prizes for the best display of live stock, these prizes taking the form of money and ribbon awards. Then, as now, stock fanciers strove for recognition of their skill as breeders, their greatest ambition being to win the blue ribbons in their various classes. It seems within reason to say, therefore, that the live stock exhibition wielded a marked influence on the development of live stock in America.

Meat products.—The slaughtering of animals for food was a major industry in the South as well as in the North. Pork

entered into the diets of practically all of the people. At first, and for many years, pork packing was in a large measure local. In due time, as might be expected, some communities outgrew others in this respect, until they became well known centers. Notable in an early day were Cincinnati and Alton (Illinois). By 1860 Pittsburgh, Cincinnati, St. Louis, and Chicago led all others. Thus the local slaughter house, an institution as general as was the flour mill and the tanner's yard, served as a foundation for an industry that later became world wide in its operation as a processing function. Preserving beef carcasses was a more difficult matter. For that reason the slaughtering of cattle continued longer as a local industry. Later, however, refrigeration facilities pushed forward the beef industry, until it took its place alongside that of pork as one to be conducted profitably on a large scale.

55. Farm Products

Diversity of American agriculture.—The United States of the first half of the nineteenth century was primarily agricultural, with the emphasis on diversity in operation and self-sufficiency in its maintenance. At one extreme were the staples areas, in which the emphasis lay on producing a money crop for a world market; at the other, small farms devoted to a variety of crops, most of which could be and were consumed where grown. A different diversity merits attention. The far south produced semi-tropical fruits, the far north, wheat. Between these extremes, practically every crop known to the temperate zone could be cultivated at a profit. Nowhere else in all the world could be found such a difference in soil and climate; nowhere else did agriculture offer equal opportunities for profits in farming.

The staple crops.—Included in these crops were cotton, tobacco, rice, and sugar-cane. None of them caused the producer to be self-sufficient; all of them were produced to be sold for cash in the markets of the world. Generally speaking, these crops were grown in the main on large holdings with slave labor.

"Cotton is king," so it was said in the United States during the first half of the nineteenth century. In the use of this expression it was not meant that the value of the cotton grown exceeded the value of all other crops, or even of any single crop.

AMOUNT OF COTTON GINNED IN EIGHT LEADING COTTON STATES

(Number of bales of 400 pounds each)

State	*1860*	*Rank*	*Increase over 1850 Percentage*
Mississippi	1,195,699	1	147
Alabama	997,978	2	76
Louisiana	722,218	3	310
Georgia	701,840	4	42
Texas	405,100	5	600
Arkansas	367,485	6	465
South Carolina	353,413	7	17
Tennessee	227,450	8	17

It meant that cotton was the one money crop which found a ready sale in foreign markets, usually at a profitable price.

Of the other staple crops, tobacco was grown principally in Virginia, Kentucky, Tennessee, Maryland, and Missouri; rice, in South Carolina, Louisiana, and Georgia; sugar cane, in Louisiana. Much of the rice, sugar, and molasses found home markets; tobacco shared with cotton a predominance in export trade.

Food crops.—The chief food crops, two of the staples excepted, comprised wheat, corn, potatoes (white and sweet), beans, peas, and fruits.

Corn and wheat bulked large in northern agriculture. On one the people depended for feed; on the other, for food. Wheat production centered in Illinois, Wisconsin, Indiana, Ohio, Virginia, and Pennsylvania. In 1850, Pennsylvania led, followed by Ohio; ten years later the ranking states were Illinois and Wisconsin. The heavy corn producing area reached across the Ohio River southward. In 1860 Kentucky and Tennessee were outranked only by Illinois, Missouri, Ohio, and Indiana in the order named.

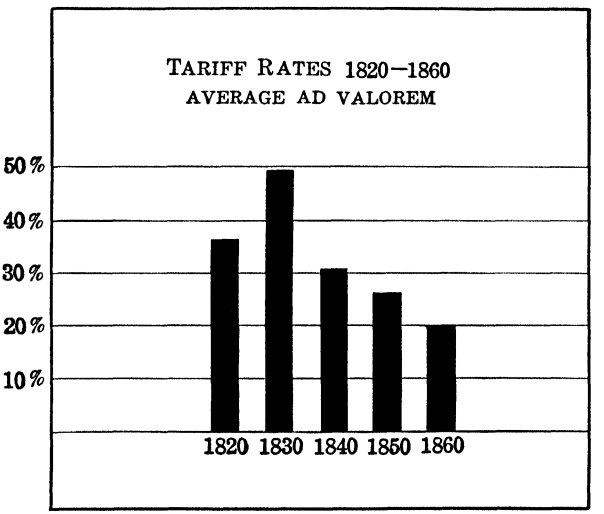
In the North, white (Irish) potatoes were grown in abundance; the South grew sweet potatoes (yams). The South led the North in growing beans and peas. Orchards could be found in all the states, but more particularly in New York, Pennsylvania, Ohio, Indiana, and Illinois. The quality of the fruits grown in these orchards foreign travelers praised as being equal to the best to be had in Europe.

Significance of the development.—No other event, or series of events, relating to the United States of the first half of the nineteenth century can compare in importance to what happened

in agriculture. An area as large as Western Europe was occupied and held, not by armed soldiers, but by pioneer families bent on building homes. These families established themselves, gave stability to what otherwise would have been a lawless frontier, and laid the foundation for a civilization that today dominates the United States and shares on equal terms with the best the whole world has to offer in the way of agricultural wealth and welfare. Whatever else the country was able to do, it did largely because behind it were raw materials in abundance, to be had with a minimum of labor and effort.

Kentucky. Leading the opposition were Daniel Webster of Massachusetts and George McDuffie of South Carolina. One represented the commercial interest of New England, the other the farming interest of the South. The measure thus brought before Congress was ably and fully debated; the final vote showed the friends of protection in control.

Political aspects of the tariff.—It was inevitable that in time the principle of stimulating home industries by protecting them from outside competition should be involved in politics. That is exactly what happened. Those debating the bill that became a law in 1824 recognized this possibility and did what they could



to take advantage of it. Four men aspired to become President of the United States. All of them belonged to the same political party, and for that reason their friends and supporters welcomed issues that might divide them. Of these four men Andrew Jackson, John Quincy Adams, and Henry Clay supported the principle of protection. William H. Crawford, while not a rabid partisan, stood with the agricultural interest of the South. No candidate receiving a majority of electoral votes, the contest went to the House of Representatives, where Adams was elected.

The Tariff of Abominations.—The tariff question continued to be a live issue. Those opposed to protection were not satisfied with the situation, and being not satisfied they did everything possible to secure laws lowering the rates on imports,

Finally, in 1828, Congress once more gave its attention to tariff making. Following a series of bitter debates the two Houses concurred in what is known in American history as the Tariff of Abominations. In enacting this law sectionalism made itself felt. In the House of Representatives, for example, 105 members supported the act and 94 opposed it. Of these 105 supporters, 16 came from New England, 57 from the middle states, 29 from the western states, including Ohio and Kentucky, and 3 from Virginia. Viewed from another angle the bill had no support whatever from North Carolina, South Carolina, Georgia, Tennessee, Louisiana, Alabama, Missouri, and Mississippi. In the Senate the vote was 26 to 21.

Nullification.—The southern people, by this time, were definitely opposed to the principle of taxing imports in order to give aid to home manufacturers. They took the position that their section of the country, being predominantly agricultural, was being taxed to support the industrial centers of the middle and northern states. So strong did this feeling become that in 1832, South Carolina declared void the tariff laws of the United States, in so far as they affected that state, and set about to make the declaration effective through force of arms. President Andrew Jackson had watched with the keenest interest the rise and growth of this spirit of resistance. He was convinced that to admit the principle of nullification meant the end of the Republic; convinced also was he that a majority of the people shared his feeling. Accordingly, he asked Congress for such additional authority as might be needed to enforce the collection of customs duties in South Carolina.

The compromise Tariff Act of 1833.—Sensing a bad situation, Henry Clay came forward with a compromise. He proposed a gradual reduction in rates over a period of nine years. The essential feature of this proposal was that all rates in excess of twenty per cent should be reduced until a point was reached where no rate would exceed twenty per cent. Under the proposal, one-tenth of the rate above twenty per cent should be removed on January 1, 1834; one-tenth, January 1, 1836; one-tenth, January 1, 1838; one-tenth, January 1, 1840; three-tenths, January 1, 1842; and three-tenths, July 1, 1842. These reductions would affect a thirty per cent tariff rate as follows:

Original rate (Act of 1832)	30 per cent
After January 1, 1834	29 per cent
After January 1, 1836	28 per cent
After January 1, 1838	27 per cent
After January 1, 1840	26 per cent
After January 1, 1842	23 per cent
After July 1, 1842	20 per cent

Congress looked with favor on Clay's proposal, so much so that with slight modifications it was made a law in 1833.

Varying tariff rates.—Clay's compromise had won, but the tariff issue was far from being settled. In 1840, two years before the compromise could become fully operative, the Whigs went before the people on a platform demanding increases in customs taxes. That party, being successful in the presidential election of that year, set about to make its campaign promises good. Clay now led the fight for higher rates, and within three months after the last reduction under the compromise became effective a new law with high rates was passed and put into operation. Those opposed argued that the spirit of the compromise had been violated; but they argued in vain, for they were in the minority.

Two years later Congress decided to move in the opposite direction. That body enacted a tariff law carrying comparatively low rates. This law is known as the Walker Tariff Act of 1846, so named because of the activity in its behalf of the Secretary of the Treasury, Robert J. Walker. It grouped the commodities to be taxed in schedules. The schedule marked "A," for example, included liquors and bore a rate of 100 per cent. Schedule "B" comprised spices, meats, and tobacco, and bore a rate of 40 per cent. The law provided for an extended list of commodities to be admitted into the country free of duty.

Back of this law were the following principles stated by the Secretary of the Treasury in his report for 1845.

> 1st. That no more money shall be collected than is necessary for the wants of the government, economically administered.
>
> 2d. That no duty be imposed on any article above the lowest rate that will yield the largest amount of revenue.
>
> 3d. That below such rate discrimination may be made, descending in the scale of duties; or, for imperative reasons, the article may be placed on the list of those free from all duty.
>
> 4th. That the maximum revenue duty should be imposed on luxuries.

5th. That all minimum, and all specific duties, should be abolished, and ad valorem duties substituted in their place. . . .

6th. That the duty should be so imposed as to operate as equally as possible throughout the Union, discriminating neither for nor against any class or section.

The fifteen years that followed the passage of the Walker Tariff Act saw few changes in the rates laid on imports.

Chapter XVI

THE EXPANSION OF TRADE

PARALLELING the growth of industry and agriculture during the first half of the nineteenth century was that of commerce and trade. The opening of new lands and the application of machine methods to industry influenced in a significant manner the volume of trade carried on among the people of the country and with the peoples of other countries.

The daring that made the early American ship master a familiar figure in all ports of the world, carried those who came after him to the point where they could compete on equal terms with their foreign rivals. The stars and stripes came to mean to the merchants and traders of other nations a symbol of hard fighting aggressiveness wherever shipping was concerned. The American ship captain pioneered in the Orient—in China and Japan. He did much in carrying western civilization into the Far East, and by so doing won the respect of the peoples there for the nation which he represented.

American ships carried American goods as well as the goods of other countries. From our ports they carried valuable cargoes of raw materials and finished products consigned to every quarter of the globe—wheat, corn, iron and steel products, textiles, cotton, tobacco, sugar, cured fish, sugar, and rice. These goods they exchanged for others of foreign origin to be brought back to America. Thus our shipping kept pace with our growth in population and our development of manufactures.

More important even than the trade which we carried on with foreign countries, was our domestic trade. Among ourselves we exchanged our surpluses on a grand scale, the volume of such exchanges mounting with the years. Important, too, was the intersectional trade of the country. New England textiles met a widespread need in the Mississippi Valley, where, in exchange for food supplies and raw materials, they found a profitable market.

Two factors contributed materially to the development of the

inland trade. One concerned the finding of markets; the other, the getting of goods into the hands of consumers. To put the matter more concretely, one concerned itself with the steps necessary to be taken to make economic commodities available at the right time at the right place, and at a price sufficiently low to turn desires into demand; the other, with the mechanical means for transporting these commodities at a reasonable cost to points demanded. Thus hand in hand went improved marketing methods with improved means of transporting freight and passengers among the different sections of the country. Getting goods from one center to another involved a variety of economic activities—banking, credit, transportation, merchandising. The activities moved forward company front, as it were, each contributing to the advancement of the others.

59. The Carrying Trade

American ships and their crews.—The American ship builder of the early nineteenth century was an individual of initiative and daring. He met the best in his line abroad and outdid them. The product of his yard led in beauty of construction and in speed. He had at his very doorway an abundance of the finest raw materials for carrying on his work. From American forests came his timbers and naval stores, from American farms his sails, from American foundries the iron he needed. His neighbors provided him with every requirement, and in so doing they made him independent of foreign supplies.

Well built, speedy ships were not in themselves enough. Courageous and hard muscled crews must be found. Fortunately for the carrying trade of the United States, such crews were to be had. One generation of sea-faring men followed another along the north Atlantic coast. Fathers by the hundreds sailed away never to return; in their places stepped their sons, leaving behind other sons to follow them. The American sailor of the time was a match for the best Europe had to offer. He might swear loud and long and boast of his native land, but underneath it all was a doggedness that carried him to the highest success as a seaman.

The pride of American shipping was the Baltimore clipper. It outran all other types of sailing vessels afloat. So superior was it at one time that far-sighted men regarded it as the last word in ocean going commerce. In this they were mistaken, and this

mistake, as events proved, led to a sharp decline in American shipping, with the substitution by shipbuilders abroad of steam for sails.* Then and only then did the Clipper ship give up its supremacy in the carrying trade.

American ships in American trade.—During the four decades ending with 1859, the foreign trade of the United States amounted to many billions of dollars. It consisted of a great variety of commodities, reaching all the way from the crudest raw materials produced on American farms to the most delicate manufactured articles of French origin. Of this trade American vessels carried the great portion. In 1821, for example, almost nine-tenths of it moved in American bottoms. A little later this portion became larger and then began to decline.

DISTRIBUTION OF THE CARRYING TRADE

1821–1860

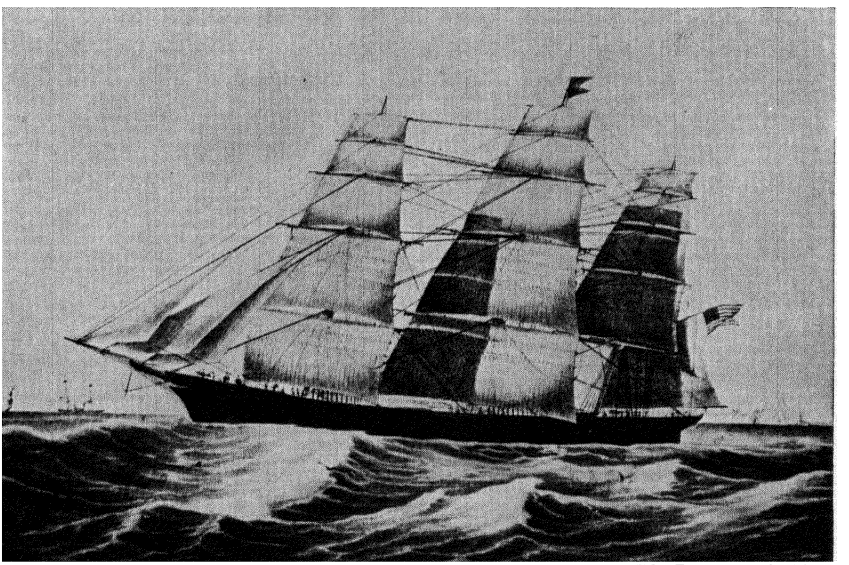
Year	*Volume in Dollars*	*Per Cent Carried in American Vessels*
1821	$127,559,667	88.7
1825	195,875,463	92.3
1830	144,366,428	89.9
1835	271,585,319	84.5
1840	239,227,465	82.9
1845	231,901,170	81.7
1850	330,037,038	72.5
1855	536,625,366	75.6
1860	762,288,550	66.5

A variety of influences contributed to this decline. Something has already been said concerning the unwillingness of ship owners to substitute steam for sail. A second influence was the profitableness of investment in American manufactures. Capital tends to flow to the point where it can earn the largest net returns consistent with safety. Earlier in the century one of these points was the shipping industry. Later, with the rapid opening up of new lands by people ready and able to buy manufactured goods, this point moved from the building and operation of sailing vessels to the production of textiles, tools, iron, boots, clothing, and similar commodities of trade and commerce. A third influence had to do with the materials entering into the building

* The establishment of steam packet lines between America and Europe is discussed in Selection 43.

of the vessels themselves. Suitable timbers became scarce with the passing of the years, so scarce, in fact, that the American shipyard had no advantage in that respect over its foreign competitors. That in itself might not have been ruinous, if the American ship builder had, like his competitors abroad, turned from the use of timber to the use of iron.

The same decline is to be observed from a different point of view. In 1821 American tonnage engaged in American com-



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The American Clipper; known on every sea

merce aggregated a million and a half, over against a little more than a hundred-sixty thousand of foreign registry. During the next forty years both classes of tonnage grew, but at different rates. In 1850 it was 5,205,804 American and 3,503,837 foreign. Ten years later the figures were 12,087,209 and 4,977,916. Thus from a commanding position when they carried ninety per cent of the American foreign trade, American ships dropped to sixty per cent in 1850 and rose to seventy-one per cent in 1860.

American shipping was not confined to the carrying of American goods. Hundreds of vessels built in this country were manned by American seamen and seldom put in at a home port.

Instead, they spent their time in foreign trade. Thus, the *Mary Ann,* for example, a New England owned sloop, was engaged for the better part of twenty years in carrying Chinese goods to Europe and European goods to China. Here, as in the home trade, these vessels gave a good account of themselves. They sailed every sea in a spirit of adventure.

60. Foreign Commerce

Export trade.—The early part of the nineteenth century saw American commerce begin to take its place alongside that of Western Europe. The opening up of vast areas of fertile land gave this country a surplus of foodstuffs such as the world had never known. This food other peoples desired, and as far as it was within their ability to do so, they eagerly exchanged what they could spare for something to eat. Food stuffs entered into our exports in a large way, but they were not alone in this respect. Cotton, tobacco, iron, steel, textiles, and leather products bulked large.

The chief items entering into our export trade in foods were corn and corn products, wheat and wheat products, pork, beef, sugar, and rice. In 1847, for example, we sent out of the country to Great Britain alone 73,940 barrels of pork, 14,367,605 pounds of hams and bacon, 17,798,770 pounds of lard, 15,526,525 bushels of corn, 4,309,951 bushels of wheat, and 2,457,076 barrels of flour. Also during the five year period 1852-56, the annual average exportation of rice exceeded fifty-six million pounds.

COTTON EXPORTS, 1821–1860

Year	*Pounds*	*Value*	*Avg. Price Per Pound*
1821	124,893,405	$20,157,484	16.2¢
1825	176,449,907	36,846,649	20.9
1835	387,358,992	64,961,302	16.8
1840	743,941,061	63,870,307	8.5
1850	635,381,604	71,984,616	11.3
1855	1,008,424,601	88,143,844	8.7
1860	1,767,686,338	191,806,555	10.8

The king of exports was cotton. High prices in Europe meant southern prosperity; low prices, hard times. In 1830 we sent abroad more than eighty per cent of the crop of that year, a crop

valued at approximately thirty-six million dollars. Twenty years later almost ninety per cent of a crop valued at more than eighty million dollars was shipped to foreign countries.

The import trade.—Equally as important as the export trade was the trade carried on in foreign goods brought to the United States; expressing values in dollars and confining our consideration to merchandise, our imports during the earlier years of the nineteenth century outran our exports by many millions of dollars. Much of this difference—usually called an unfavorable balance of trade—consisted of loans contracted abroad and made in the form of commodities rather than in money. Such commodities consisted in the main of materials like railroad rails, and they were used in providing capital goods for a country busily engaged in exploiting new lands.

UNITED STATES IMPORTS—EXPORTS—BALANCE OF TRADE
TEN-YEAR AVERAGES

1821–1860

Period	*Value of Imports*	*Value of Exports*	*Balances +Exports Lead −Imports Lead*
1821–1830	$72,949,000	$69,421,000	−$3,528,000
1831–1840	119,520,000	103,550,000	−15,970,000
1841–1850	118,095,000	119,555,000	+ 1,460,000
1851–1860	284,475,000	248,887,000	−35,588,000

Money, too, played an important part in our foreign trade. Prior to the discovery of gold in California in 1848, much of the metal for coining United States money came from abroad. During the decade 1831-1840 our average annual imports of gold exceeded our exports by $1,240,000 and of silver by $2,823,000. Twenty years later the flow of gold was decidely in the opposite direction. At that time we shipped out each year a great deal more of that metal than we received; silver imports exceeded silver exports by less than a million dollars. The movement of precious metals accounts for much of what is known as the invisible items in commerce. So also do the lending and borrowing of money, the payment of interest, the drawing of drafts, and the collection of freight charges and insurance premiums.

The nature of our import trade between 1821 and 1860 merits attention. In 1840, for example, the bulk of the goods

shipped into this country consisted of manufactured products in a variety of forms. Textiles led, followed by iron and steel products, coffee, sugar, and raw wool. During that year approximately a hundred million dollars worth of foreign goods entered the ports of the United States. Of this amount, 16.94 per cent came from countries of North America, 8.76 per cent from South America, 62.24 per cent from Europe, 9.84 per cent from Asia, .61 per cent from Australia and neighboring islands, and .61 per cent from Africa. The significance of these data is that five-eighths of our imports came from Europe.

Foreign trade ports.—The greater portion of the foreign trade of the United States was carried on through a relatively small number of ports. In 1821 a little less than forty cent of all our imports were brought to New York. In 1831 this figure has risen to fifty-five per cent, in 1841 to almost sixty per cent, in 1851 to sixty-five per cent, and in 1860 to more than seventy per cent. During the four years 1856–1859 almost two-thirds (65.9 per cent) of our imports were received at the New York port. Ranking positions held by the other ports of the country fluctuated with shifts in population and with advancements in inland transportation. In 1860 Boston and the neighboring ports came next to New York, followed by New Orleans, Philadelphia, Maryland, San Francisco, Buffalo, Michigan, Georgia, Galveston, and Chicago. In value of exports New Orleans occupied first place in 1860. The Georgia customs district was in third place after New York; Galveston was sixth. Altogether the three southern districts handled exports valued at $132,289,000, which was in excess of one-half of the combined exports of the New England and the Middle States. This preponderance on the part of southern ports in the outgoing trade is explained by the heavy cotton shipments sent abroad. The principal cotton areas were in the lower Mississippi Valley, and as a consequence the logical port from which to ship it abroad was on the Mississippi River within the reach of ocean going vessels.

Foreign trade and internal development.—The ability of this country to produce goods in large quantities for foreign markets was a factor of first rate importance in our own internal development. As nations go, the United States was young and her resources relatively unknown. The people here needed many commodities which they themselves could not produce. They

needed iron, especially for railroad building; chemicals, coffee and condiments, sugar, textiles and the precious metals. Much of the capital spent over the years by the states to improve transportation came from abroad, either as loans or in exchange for American goods. Without this trade the country would have been retarded in its industrial advancement; with it, the people in all sections went rapidly forward.

61. Domestic Commerce

America contrasted with Europe.—The United States of the first half of the nineteenth century comprised an area equal to that of all Western Europe. Here no artificial barrier such as language and boundary lines existed. A manufacturer in Massachusetts felt free to sell his product in Georgia. He and his down south customers spoke the same language, used the same kind of money, lived under the same laws, and owed a common allegiance to the National Government. No customs barriers stopped the free flow of goods from New England into the Mississippi Valley.* Generally speaking, therefore, he had free access to more than a million square miles of territory.

Nature played a part in our domestic commerce. One section produced corn, another cotton, a third iron and steel. It was a far cry from semi-tropical climate of the lower south to the frozen lakes of the Canadian border. Fertile lands produced food stuffs in abundance, from the long stretches of forests came lumber, New England water power turned the wheels of industry, the cotton fields of the Mississippi Valley provided a treasure to be exchanged abroad for foreign goods, Virginia and Kentucky led the world in the growing of tobacco. Combined, the natives of Western Europe enjoyed similar advantages; standing apart and alone, they had little more to offer in this respect than had the different sections of the United States.

Industrial sectionalism.—The diversity of soil and climate plus other factors such as markets, labor supply, natural power, and humidity, gave to the industrial development of the United States characteristics typically American. In New England, for example, where fertile soil was scarce and where, as a consequence, factory labor was available, manufacturing industries of

* For internal commerce see Selection 42. Commerce and industry received a shock in 1857, Selection 44.

a wide variety sprung up and thrived beyond all reasonable expectations. The result was that with the passage of the years the New England factory improved its processes to a high point of efficiency. Young men and women grew up with the idea in mind of becoming operatives, skill in tool making increased, the supplying of raw materials became a business in itself, no longer were by-products considered as waste. What happened in New England happened in many other sections of the country.

Geographical division of labor stimulated domestic commerce; with specialization in industry went economic dependence. Instead, therefore, of the sections of the country maintaining a high degree of self-sufficiency, as had been done in large measure during colonial days and during the early years of independence, each gave an increasing attention to the things it could do best, exchanging its products for those of the other section.

62. Buying and Selling

New problems in marketing.—Geographical division of labor raised many new problems in the field of marketing. Such methods as had been practiced in an earlier day for bringing the producer and the consumer together, were now found inadequate in meeting a new situation. Under the new order, the producer could no longer meet face to face the consumer of his goods. What was really getting under way was that the producer produced for a market, instead of for any particular individual, or group of individuals. The consumer, on his part, resorted to the same market to satisfy his wants. The problem then was to discover markets, to sense their changes, and to develop proper approaches to them.

Shifts in the marketing process.—The sixty years following 1800 saw radical changes in the marketing processes of the country. Some groups disappeared, others emerged and grew strong. With the close of the War of 1812, for example, British manufacturers eager for a market that had been closed to them for a decade, shipped great quantities of finished goods to the United States, and there auctioned them off to the best and highest bidders. Naturally retailers, who for many years had depended on importers and jobbers for supplies, attended these auctions and made purchases. This they did, hoping that by doing so they might eliminate the middleman's profit, and thereby increase

their own. Those affected adversely (jobbers and importers) protested against British manufacturers selling direct to American retailers and demanded legislation designed to protect their interests. Fortunately for them, the auction as a method for selling merchandise began to decline after 1830, and in time it all but disappeared.

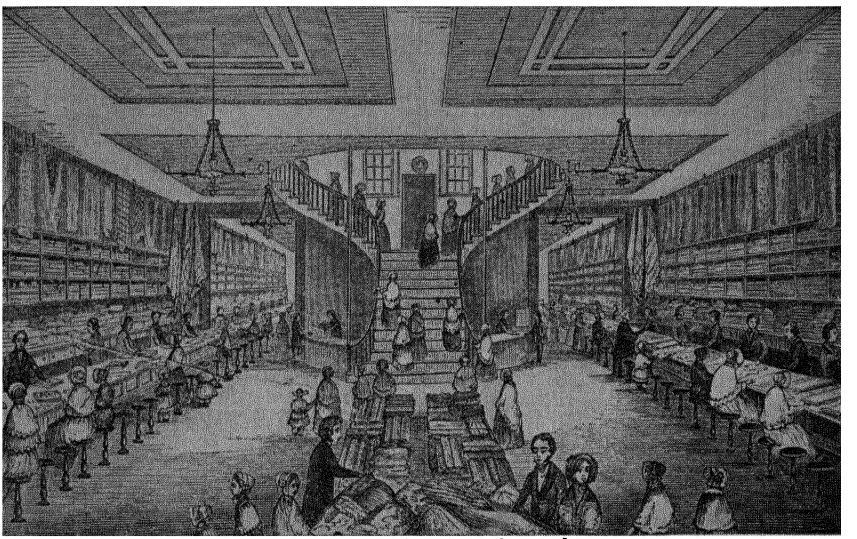
Wholesale centers.—As might be expected, the marketing of goods on a large scale was confined at first to the large cities along the Atlantic Seaboard. New York, Boston, Philadelphia, and Baltimore stood out in this respect. In time, however, the growing centers of the Mississippi Valley came to occupy strategic positions as wholesale centers. By 1840 Cincinnati, St. Louis, and Louisville were making progress in that direction. Later, Chicago joined them and in time assumed the lead.

In these centers of wholesalers began the practice of sending out traveling men (known later as drummers) in search of trade, and in doing so they played an important part in developing new methods of marketing. They must, first of all, know a great deal about the merchandise which they were expected to sell. This was necessary for the simple reason that on their description, and on that alone, the prospective customer must depend for an understanding of what in many cases he was buying. The movement, however, was not always from the wholesale center. Many merchants journeyed to these centers at stated intervals for the purpose of viewing merchandise and making purchases. Our traveling man gave much time and attention to the matter of credit; on his judgments in such matters his employer must rely. Some appreciation can be had of the importance of this function when it is known that not until 1841 was the first agency for giving expert information on credit standings established in this country.

Retail trade.—Then, as now, the retailer of merchandise was indispensable in the marketing chain. He studied the needs of his customers and met these needs as they arose. To them he extended credit for long periods of time. Auctioneers, jobbers, importers, wholesalers of every kind and description might rise and fall as important factors in marketing, but the retailer held his place secure. In numbers, too, the retailer exceeded any other one group concerned with the selling of merchandise. No frontier town, however small and insignificant it might have been,

was without its general store. In seeking for those frontiersmen who did so much for America, the retail merchant must not be overlooked.

In older settled communities the retail merchant of the early and middle nineteenth century relied on the newspaper to give information concerning his stock in trade. There was nothing elaborate in such messages intended for prospective customers. They carried facts and little else, facts dealing with quality and price. Sometimes the message consisted of little more than lists of merchandise received, usually closing with the assertion that



As great-grandmother shopped

the merchandise in question was from the stocks of prominent and well known wholesalers, and that it was the best of its kind to be had in the market.

No account of the retail trade of the period would be complete without a mention of public markets and peddlers. Both methods of marketing goods were almost as old as the country itself. Western towns, following the example of the older communities along the Atlantic Seaboard, provided in many cases for markets where producers, especially farmers, might be available to those desiring to purchase their wares. No special inducement was offered the peddler; none was needed. With his stock of merchandise he traveled far and endured much in search of cus-

tomers. He might have lacked many of the virtues business men are supposed to possess, but he did have courage and tenacity of purpose in large measure.

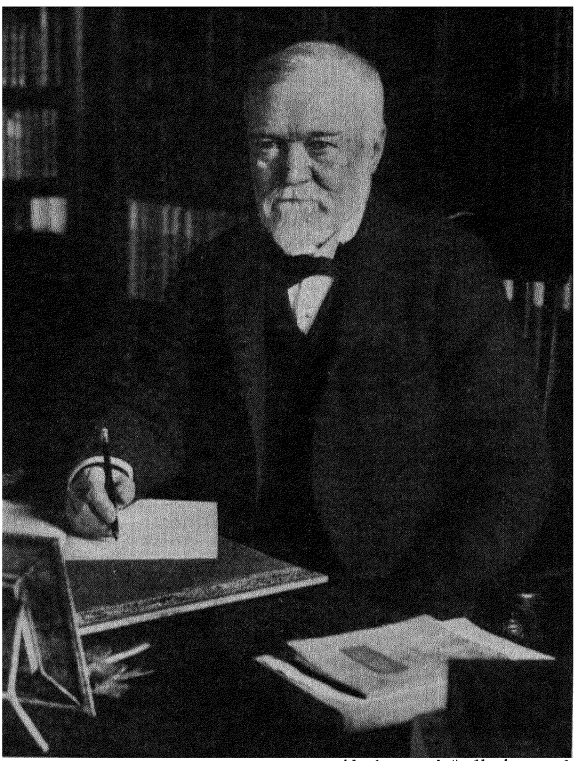
63. Transporting Merchandise

Marketing and transportation.—Marketing on any scale depends in large measure on the transportation facilities available. During colonial days and for years following the Revolution, commerce, except along water routes, was largely local in nature and narrow in scope. It consisted in the main of barter, or, at most, of buying and selling local products. With improvements in transportation, however, went ever widening markets. We have given some attention to the effect of the opening and use of the Erie Canal on freight rates from the Great Lakes region to New York City. Rates did fall with a corresponding enlargement of the markets served by the Canal. The first westbound barge brought to the Buffalo housewife goods at a price which she could now afford to pay. Likewise her brother, whose farm was near, found that his surplus wheat had a market in New York and might even be shipped from there to Europe.

Importance of transportation.—Every improvement in the matter of transportation affected the marketing of goods. The digging of canals, the paving of turnpikes, and the building of railroads, increased the availability of merchandise and reduced its cost to the consumer. In other words, prices became increasingly uniform with improvements in facilities for getting about the country. Chicago is a striking example of what happened. Its location on Lake Michigan gave it an outlet by water to the eastward. The completion of the Illinois-Michigan Canal in 1848 opened up the Middle West for Eastern trade and commerce. A little later, railroads to the Ohio and the Mississippi rivers and to the East combined with transportation lines already in operation to bring the world into the Chicago markets.

The important consideration in this connection is that no proper understanding can be had of the growth and development of marketing methods and procedure during the first half of the nineteenth century, without having at the same time some notion of what was taking place in the field of transportation. The two are bound up inseparably.

INDUSTRIAL EXPANSION
1860–1917



Underwood & Underwood

ANDREW CARNEGIE

His brains and brawn built steel and libraries

Chapter XVII

THE UNITED STATES IN 1860

THE year 1860 marks roughly the completion of one era in American history and the beginning of another. The settlement in 1846, of the northwestern boundary dispute with Great Britain followed two years later by the Mexican Cession, carried the United States to the Pacific Ocean with a seacoast stretching northward from Lower California on the south to the Canadian border. Thus within the space of two generations what had once been thirteen sparsely settled colonies, with little in common except the desire to be free from the mother country, was now a nation of thirty million occupying the heart of the North American continent. These people had demonstrated their fitness to possess this vast area, and there remained only the burning issue of sectionalism, coupled with the institution of negro slavery, to be met and settled once and for all. A long and bloody war was required to settle this issue, but with its settlement, a new era began in the history of the nation.

The United States of 1860 differed materially from the United States of 1783. During the intervening years the people had increased ten fold in numbers and had occupied a territory many times larger than that of the original states. Wealth, too, had grown beyond anything the most optimistic of the colonial period might have predicted, and with this wealth had come a well being such as the world had never known.

Cities had grown, but as yet the bulk of the people resided on farms. That is, despite the developments in industry and shipping, the United States was yet an agricultural nation. Every variety of farm crop known to the temperate zone flourished. Food the farmers grew in sufficient abundance to supply the needs of the nation and to provide a surplus for export, while the staple crops, cotton and tobacco, gave employment to millions.

Unlike agriculture, industry in 1860 was concentrated in favored localities. New England and the Middle States led in this respect; the West was beginning to give it attention; in the South

manufacturing for very good reasons was relatively undeveloped. Thus, within a century after its beginning as a member of the family of nations, the United States found its economic life coming to be differentiated along artificial, as well as natural, lines.

An outstanding accomplishment was the network of railroads binding the various sections of the country together. Thousands of miles were in operation, bringing the markets once isolated and far apart into close proximity. Over these, goods flowed in every direction at a speed undreamed of a few years previously, and at rates but a fraction of what they had once been. Truly the country was well on its way to becoming united economically as well as politically.

64. Population

Elements of population.—Broadly speaking the population of the United States consisted in 1860 of whites, slaves, and free negroes. Of these the first named predominated in numbers and influence. Slaves had no political rights and possessed no economic value which they could claim as their own. The number of free negroes was too small, except in the New England and Middle Atlantic States, to be of any consequence.

POPULATION OF THE UNITED STATES BY DIVISIONS

1860

Division	*White*	*Negro Slaves*	*Free Negroes*	*All Others*	*Density per Sq. Mi.*
New England	3,110,480	....	24,711	92	50.6
Middle Atlantic	7,327,548	18	131,272	147	74.6
East North Central	6,855,644	.	63,699	7,541	28.2
West North Central	2,044,325	114,948	5,592	4,967	3.0
South Atlantic	3,305,107	1,840,445	217,753	1,398	19.9
East South Central	2,626,376	1,372,913	21,447	255	22.4
West South Central	1,102,490	625,407	19,146	624	4.9
Mountain	164,092	29	206	10,596	0.3
Pacific	386,475	....	4,244	53,334	1.0

Of the white population in 1860, totalling a little less than twenty-seven million, about five-sixths were native born, either of native parentage, of mixed (native and foreign) parentage, or of foreign parentage. The remaining one-sixth were immigrants ranging in age from infants in arms to old men and women well along in their dotage. Most of those of foreign extraction,

hether native or foreign born, rooted back into the peoples of Western Europe. Especially numerous were the Irish and the erman—the former coming over in large numbers following ıe potato famine in 1846, the latter after the collapse of the evolution of 1848. During the decade 1841–1850, for exnple, 1,597,500 persons of all ages and both sexes came to ıis country from Europe. Of this number 434,625 came from ermany and 780,719 from Ireland. In other words, more ıan three-fourths of all the immigrants arriving in this country ıring the decade were of Irish or German origin.

The spread of foreign-born population over the country was rikingly uneven; practically seven-eighths of them resided in ıe non-slave holding states. New York, Pennsylvania, Ohio, linois, Wisconsin, and Massachusetts led in this respect. At ıe other extreme were North Carolina, Florida, Arkansas, Mississippi, and Delaware. Much has been written concerning the ıwillingness of immigrants to take up residence where slavery ıisted; it seems much more likely, however, that the climate of ıe northern states was a more important factor in determining here they should take up their new homes.

The migration of those native born is significant. We have ready noted how, in settling the Mississippi Valley, the gen-·al tendency was for the people to move along parallels and own rivers. There remains the need for examining this move-ıent more in detail. The State of New York, to cite but a single ell settled and long established section of the country, had, in 860, three times as many of its own natives living in other ates as it had natives of other states within its borders. That , for every native immigrant residing in New York State in 860, three native New Yorkers resided in other states.

INTERNAL MIGRATION

1860

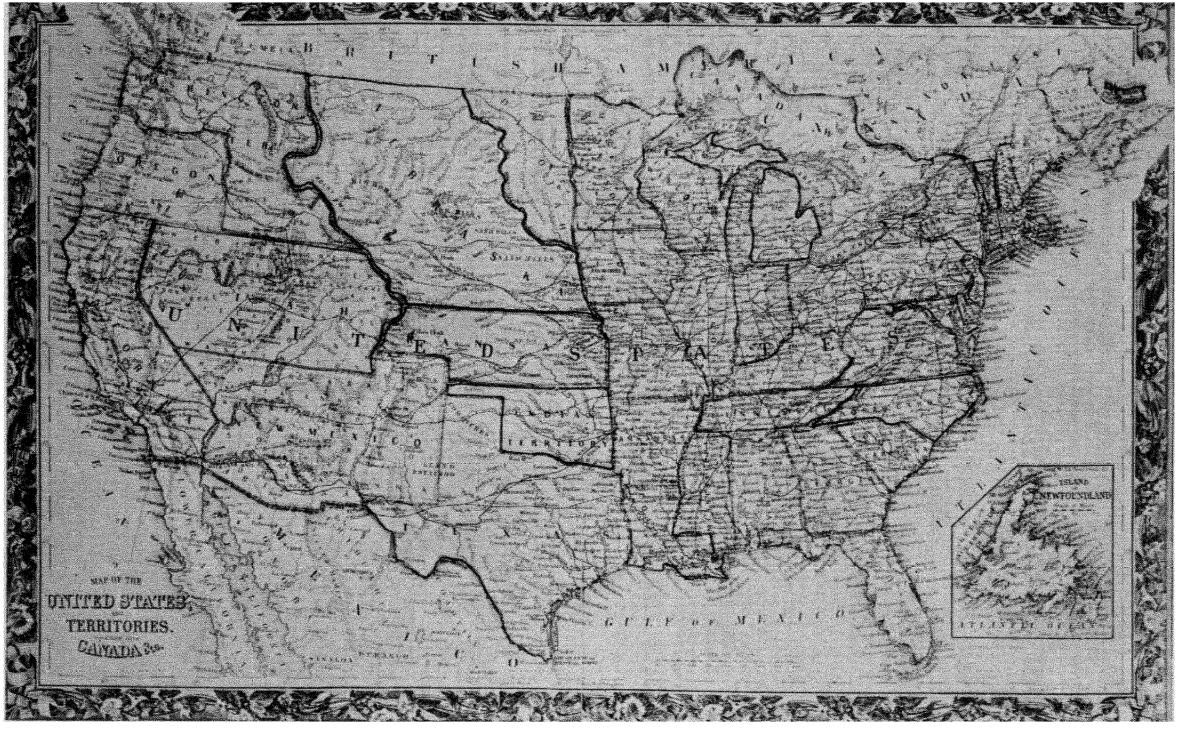
State	*From Other States*	*To Other States*
·w York	275,164	867,032
nnsylvania	193,022	582,512
rginia	68,341	399,700
iio	476,966	593,043
diana	455,719	215,541
inois	676,250	134,736

Distribution of population.—The distribution of the entire population of the country as a whole was somewhat as follows: about one-third in the New England and Middle Atlantic States, one-third in the North Central States, and one-third in the Southern States. Between whites and negroes, however, the relations were about nine to one, the bulk of the latter group being in those states in which the institution of slavery was recognized by law.

The United States was essentially an agricultural nation in 1860, only about one-eighth residing in cities of 8,000 and over. A large majority of the people lived and worked on the land, and any disturbance to farming was immediately reflected among all groups and in all sections of the country. The largest city at the time was New York with a population of 805,651. Next in size came Philadelphia with 565,529, followed by Brooklyn, Baltimore, Boston, New Orleans, St. Louis and Chicago. Combined, these eight cities had a population of a little more than two and one-half million, or one-twelfth of the total population of the country. At that time many cities destined to assume leadership in numbers and wealth were little more than villages. Los Angeles could boast of but 4,385 inhabitants, Minneapolis of 2,564. Not even settled were Duluth, Oklahoma City, Fort Worth, Tacoma, Seattle, Tulsa, Miami, San Antonio, and Gary.

No statement concerning total population of any one state or region, or the density per square mile, conveys a complete picture. Pennsylvania, for example, had a population of approximately three million persons, yet, millions of acres of that state were uninhabited. The fact is that this density varied all the way from no population at all to highly congested areas in Philadelphia. Nor does a knowledge of the location of the center of population give an adequate notion of distribution. It might be located at any time in the heart of a desert with nine-tenths, or even more, of the population on one side of it.

Some notion can be had of the situation in 1860 by examining a map showing the American frontier line of that year, a line marking the western limits of a density of two persons or more to the square mile. This line began in the Great Lakes region, moved generally westward into Minnesota, and then southward through Iowa, eastern Nebraska and eastern Kansas, along the western boundary of Arkansas, and across eastern Texas to the



The United States in 1860

Gulf of Mexico. West of this line by far the greater portion of the land remained unoccupied.

Associated with geographical distribution of population is occupational distribution. Those in charge of gathering material for the Eighth Federal Census (1860) classified such occupations under 587 heads. First in number engaged were laborers, with a total of 969,301. Next came farm laborers with 795,679. Following were servants, farmers, carpenters, clerks, shoemakers, miners, merchants, blacksmiths, teachers, and tailors.*

65. Wealth

Nature and kind.—Already by 1860 the people were beginning to appreciate the value of the natural resources to be had on every hand—soil fertility, water power, mineral deposits, and forest products—and already they were setting out on a program of exploitation that has had no parallel in the history of civilization. These resources, and the promises they raised, fired the imaginations of far-seeing men and made of them modern Jasons in search of golden fleeces of natural wealth. From what has happened since we can be sure of one thing, and that is in 1860, just as the war between the North and the South was about to get under way, the people of the United States stood on the threshold of an industrial development such as the world had never known.

Not all the wealth of the country consisted of natural resources. Much of it had been earned and saved; it consisted of such material things as horses and barns, hogs and cattle, tools and machinery, wares and merchandise. Altogether it amounted to something like sixteen billion dollars in value and, had it been equally distributed among the people, each person would have had as his share approximately five hundred dollars. It was not equally distributed. Some had a great deal of it; some had none at all. Between these extremes could be found the great majority enjoying a certain kind of crude prosperity characterized by plenty of food, clothing, and shelter, but little else.

One form of wealth, not now permitted, consisted of negro slaves. This institution had its beginnings during the early days of the first colonies, and for years it had a place in all of them. In time, owing to a combination of causes, natural and other-

* Wages and hours varied, Selection 46.

wise, it came to be confined to the Southern States, particularly to sections devoted to the growing of staple crops. In 1860 the estimated value of these slaves was somewhere in the neighborhood of three billion dollars. Considering the stage of the economic progress of the country, this value compared favorably with the total of all other forms of wealth in the states where it existed. In Georgia, for example, the value of personal property in 1860 was two and one-half times as great as the value of real estate. A similar situation held in Mississippi, Alabama, and South Carolina. In New York, on the other hand, personal property represented but one-fourth of the total wealth of the state.

Back of the production and accumulation of wealth are certain factors, which, while they themselves are not wealth, make a contribution of great value, and in doing so play a leading role in the economic life of the people who possess them. Natural resources alone are not enough. Other peoples have been blessed with such advantages without being able to profit from them; they lacked something. The typical American of 1860 was imaginative and inventive; he refused to follow precedents, however well established they might be; his measure of success was success. The nature he knew was a nature of vast expanses; what he undertook he tried to do on the same general scale. Thus to the world at large, the United States became symbolic of national success in carrying on enterprise in a large way.

66. Agriculture

Northern and Southern agriculture contrasted.—Agricultural production of the United States in 1860 covered a wide range. It consisted of food crops of various kinds, tobacco, cotton, hay, live stock, and milk products. Neither section had any particular advantage in this respect. The northern states led in wheat and white potatoes, while those of the South (including Missouri and Kentucky) led in corn, sweet potatoes, swine, cattle, sugar cane, rice, and tobacco.

Especially productive of food crops were the sections given over to the growing of cotton. In Mississippi, the leading cotton state of the time, the per capita production of many foods exceeded the per capita production of the nation. Apparently the owners of cotton plantations gave first consideration to feeding

their slaves, a consideration that came ahead of producing a crop for a cash market. An examination of the situation that prevailed in that state in 1860 shows that the heavy food producing counties were counties characterized by large farms, by large slave holdings, and by large cotton production. Viewed from the opposite direction, those counties of Mississippi in which the farms were small and where few slaves were held were the very

PER CAPITA PRODUCTION COMPARED

1860

	Corn	*Sweet Potatoes*	*Swine*	*Cattle*	*Peas and Beans*
Mississippi	36.7 bu.	5.7 bu.	1.9	0.7	2.4 bu.
United States	26.1 bu.	1.3 bu.	1.1	0.7	.5 bu.

counties that suffered from a deficiency of food crops. What was true in Mississippi was true in other sections of the South.

When we approach the problem from the standpoint of specialization, we can say, generally speaking, that the North specialized in grains of various kinds and the South in staple crops. A closer examination shows that the corn and wheat crops centered in the upper Mississippi Valley, tobacco in Virginia, Kentucky, and North Carolina, cotton in the lower South,

LEADING STATES IN AGRICULTURAL PRODUCTS

1860

Corn	*Wheat*	*Cotton*	*Tobacco*	*Peas and Beans*	*Swine*	*Slaughter Animals*
Illinois	Illinois	Mississippi	Virginia	North Carolina	Tennessee	New York

sugar cane in Louisiana, and rice in South Carolina. As yet cattle were raised, in the main, on farms and not, as later, on the range, and hogs processed in the neighborhood where fattened. Production of foodstuffs for a centralized market for the most part was yet in the future; agricultural self-sufficiency characterized farming in all of its aspects. Even the growers of staple crops realized the value of feeding themselves.

Size and value of farms.—The size of the American farm varied, in 1860, from a few acres to vast plantation estates. The

average sized farm in Massachusetts was 94 acres; in California, 4,466 acres; in Texas, 942 acres; in South Carolina, 541 acres; in Indiana, 136 acres. The typical farm of the North and Northwest comprised roughly a quarter section of land, and in its cultivation the owner, or his tenant, found himself and his family fully occupied. The typical staples farm was much larger in area. Its cultivation employed slaves, usually under the management of an overseer. In Michigan, six-sevenths of the farms had acreages of less than one hundred, while in South Carolina almost one-half of the farms exceeded one hundred acres in size.

The value of farm lands varied widely among the states. New York led with a combined value of $803,343,593. Next in order came Ohio, Pennsylvania, and Illinois. New York led, also, in number of improved acres, followed by Illinois, Ohio, and Virginia. Considering the whole country and paying no attention to differences in soil fertility and location of farms, we can say that agricultural land in 1860 was valued at fifteen dollars an acre. In New Jersey the figure was set at $60 an acre, in New York and Pennsylvania $39 an acre; and in Ohio $33 an acre. At the other extreme were California, Texas, and Kansas.

Prices of farm products.—The price that any particular farmer, except those growing staples, might receive for any crop was, in large measure, a local matter.* He had little or no ideas concerning the state of other markets, and had he possessed such ideas, he was not in a position to profit from them. He had comparatively few pounds or bushels to sell, and the cost of transportation would have been greater than any excess he might have received over and above what he could get at home. Such was the general situation in 1860, although it must be said that improved methods in transportation during the decade, coupled with developments in organized markets, had done much to level out prices.

Prices of staples were another matter. They went into world markets. Considering transportation costs, the price of cotton, for example, was very much the same the country over, regardless of location. The Delta planter of Mississippi had some advantage in the New Orleans market over the cotton grower of inland Georgia, but that advantage consisted largely in differences in getting cotton to New Orleans. What was true of cot-

* Wages paid by farmers in the North are given in Selection 47.

ton was true in large measure of tobacco, sugar, and rice, and of any crop produced for a market available to all alike.

67. Banking and Finance

Reorganization of the banking structure.—Following the Panic of 1837, the banking of the country underwent radical reorganization. That panic had awakened the people to the realization that stability was something to be preferred above easy credit. On this realization bankers had built a structure suited to the demands made on them and adequate to peace time needs. The one important lesson learned from bitter experience was that banking, like every other business enterprise, was based on honor and integrity, and not on the whims of public officials. Scarcely less important was the lesson that credit was something to be earned by borrowers and not something to be granted to them in exchange for promises unsupported by past performance.

The banking situation.—The number of banks in operation in 1860 totaled 1,642, with combined capital stocks of $421,890,095, deposits of $253,802,129, and with loans of $691,495,580. An important function of these banks was to issue bank notes payable in specie on demand. In 1860 such notes aggregated $207,102,477, and they were secured by specie valued at $83,564,580 held in the vaults of the banks. New York led all the states in banking operations. In fact, its banks did from one-fourth to one-half of all the banking business carried on in the United States. Other important states in this respect were Massachusetts, Pennsylvania, Louisiana, Connecticut, and Rhode Island.

Currency.—The amount of United States currency in 1860 totaled $442,102,000. Of this amount all but $6,695,000 was in circulation. A variety of moneys made up this stock: gold coin and silver bullion—$214,000,000; subsidiary silver—$21,000,000; state bank notes—$207,102,000. No silver dollars, it will be noted, were either in circulation or in the possession of the government.

Public finance.—On July 1, 1860, the public debt of the United States was $64,769,703.08. Against this the Treasury held funds aggregating $3,629,206.71. The net public debt, therefore, was in the neighborhood of two dollars for each inhabitant, a trifling matter compared with what was about to

happen. Public expenditures voted for the year were in the neighborhood of seventy-five million dollars, the chief items of expense being Army and Navy, Indian department, foreign affairs, pensions, and internal improvements. Estimated receipts were of about the same amount.

68. Manufactures and Mining

Industries and their distribution.—Manufactures in the United States in 1860 constituted a major economic activity. This activity numbered 140,433 establishments, employing 1,040,349 men and 270,987 women, who received in wages an average of about $300 a year. Of the industries of the time, those devoted to the grinding of wheat and corn led with a value of almost a quarter of a billion dollars. Far to the rear came the processing of cotton, lumbering, the making of men's clothing, and the weaving of woolen cloth.

In manufacturing the North predominated to such an extent that, measured in the value of output, that section of the United States produced about nine-tenths of all such goods. As might be expected, the Middle and New England States surpassed all others. It is interesting to note, however, that Ohio ranked fourth after New York, Pennsylvania, and Massachusetts. In the state of Rhode Island the value of manufactured goods per capita was in excess of two hundred thirty dollars. In Connecticut it was one hundred seventy-five dollars, in South Carolina about twelve dollars, and in Mississippi about eight dollars.

Coal mining industry.—In 1860 coal mining was carried on in 622 establishments located in sixteen states, the tonnage being rather equally divided between anthracite and bituminous. Of the sixteen states, Pennsylvania produced all but one thousand tons of anthracite and about one-half of the bituminous coal. Other important coal states were Ohio, Illinois, and Virginia. The industry gave employment to more than thirty thousand men, who received, on the average, $264 a year as wages. Measured in present day tonnage, the production of coal was yet in its infancy; measured by the new uses to which coal was being put as a fuel, it bulked large.

Spread of manufactures.—The development of coal mining and manufacturing went hand in hand. Steam was rapidly taking the place of water power as a means of operating machines,

and the speed with which it could advance depended on available fuel at a reasonable price. Coal was such a fuel, and with the creation of facilities for moving it from where it was mined to where it could be converted into power, machinery acquired a mobility such as it had never had up to that time.

As manufactures grew in variety and value of output, and as facilities for moving raw materials and finished products increased, the need for local self sufficiency declined. No longer did the middle western community have to depend on itself to supply its own wants. Now its members could devote themselves to doing those things which they could do best, depending on factories located many miles away to supply their wants. Likewise, the New Englander could give up farming and devote his attention to weaving cloth or making boots. He in turn depended on the farmers of Indiana or Iowa to provide him with food. Not less significant was the stern fact that with a supply of power made available many miles from the point of its production, manufacturers were no longer tied down to localities that happened to be favored by nature.

69. Transportation and Communication

Economics of transportation.—The matter of moving about and of getting goods from one place to another has been, since the beginning of time, a consideration of major importance. For centuries speed had made no material progress; improvements in ease and comfort had been slight. The stage coach of the early nineteenth century moved as slowly as did the carts on the Appian Way in the heyday of the Roman Empire. With the exception of what the canals of the country had to offer to a few select communities in the way of reduced freight rates, the America of 1830 resembled in the matter of transportation England of the Middle Ages. Communities remained isolated, industries local, and methods of thought provincial.

Railroad building.—The laying down of railroad lines gave to transportation an impetus such as it had never before experienced. These lines opened every section to far away trade and served, as it were, to make the country smaller and more compact. Thirty years after the first line, the Baltimore and Ohio, had proved the feasibility of the "iron horse," the United States could boast of more than thirty thousand miles built at a cost of

a little less than eleven hundred million dollars. This accomplishment appears the more startling when viewed in the light of the fact that ten years earlier (1850) the mileage was less than ten thousand, most of which was east of the Alleghany Mountains. At that time the only all rail route from tidewater to the Great Lakes region was by seven or eight separate lines reaching from Albany to Buffalo. During the decade ending with 1860, seven additional lines were built from strategic points in the East into the interior of the country.

The railroad situation.—The American railroad of 1860 was a crude affair contrasted with modern railroads. Its tracks, rolling stock, and general equipment left much to be desired. It was, however, in spite of its crudeness, accomplishing a definite purpose—uniting widely separated sections of diverse interests into a single nation. The road having the greatest mileage of the time was the Illinois Central, with a main line from the mouth of the Ohio River to the southern end of the Illinois-Michigan Canal. This line, together with two branches, the best known of which ran southward from Chicago, made up the system. Next in mileage came the New York Central, followed by the Pennsylvania.

STATES RANKED ACCORDING TO RAILROAD MILEAGE
1850–1860

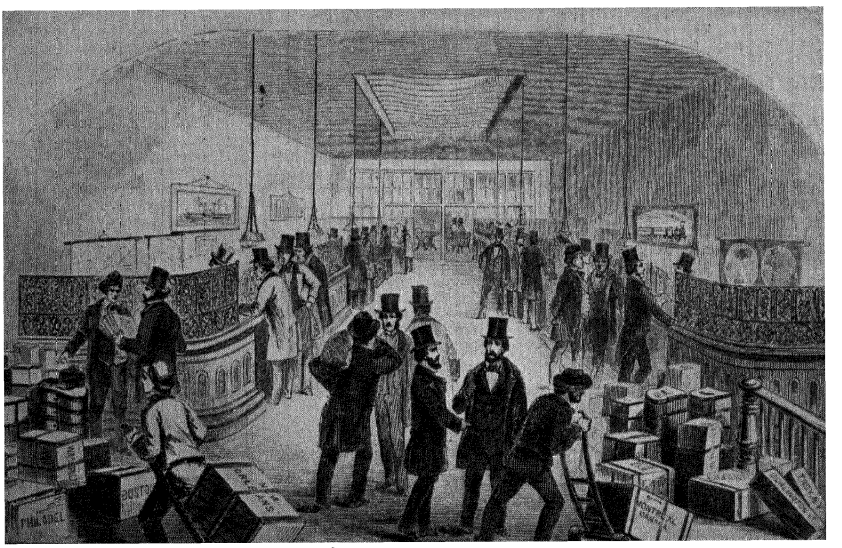
1850	*1852*	*1854*	*1856*	*1858*	*1860*
N. Y.	N. Y.	N. Y.	N. Y.	Ill.	Ohio
Mass.	Ohio	Ohio	Ohio	N. Y.	Ill.
Ohio	Penn.	Penn.	Ill.	Ohio	N. Y.
Penn.	Mass.	Mass.	Penn.	Penn.	Penn.

By 1860 it was apparent that the flexibility of railroads gave them a decided advantage over canals. They could be built practically anywhere and they did not, therefore, depend either on a plentiful supply of water or on height of land. The country had, to put the matter in another way, definitely embarked on a program of railroad building that was to continue unabated for many years.

The express business.—This business was dominated in 1860 by five companies, the Adams Express Company, the American, National, United States, and Wells-Fargo & Company. The

Adams Company was entrenched along the Atlantic and Gulf Coasts while Wells-Fargo had a firm grip on the business in the Pacific area. Much of the business of this company was carrying gold to the East. Four of the five companies were related not by corporate or partnership bonds but through personal ties. As a matter of fact the companies were not organized either as partnerships or corporations but as joint stock companies.

A dramatic incident was the establishment in April, 1860 of the Pony Express. The route was from St. Joseph, Missouri to



By express, 1860

Sacramento, California, but the completion of the lines of the Overland Telegraph Company in 1862 brought this service to an end. Financially the venture was a failure.

The magnetic telegraph.—A discovery of far reaching influence on American life was the magnetic telegraph. With it communities previously separated by days were brought into instant contact. The man most responsible for this startling innovation was Samuel F. B. Morse. The sending of the first message in 1844 revolutionized all ideas of space and time. No longer would it be necessary to wait, often for days, to know what was going on in far away markets. The electric telegraph changed the whole course of business by making available in-

stantly the country over information necessary for the orderly conduct of business.

The postal service.—The postal service had been making progress since colonial days. Those charged with the responsibility of managing it had made such improvements as they could. Prior to the coming of the railroad, however, these improvements were few and of minor consequence. The Government did, in an effort to encourage communication, create postoffices, aid in improving wagon roads, and make favorable contracts with carriers. Between 1800 and 1860 the number of postoffices increased from less than one thousand to more than twenty-eight thousand, while, during the same period, the mileage of postal routes increased from slightly over twenty thousand to almost a quarter of a million. In 1860 the gross postal revenue amounted to $8,518,000, while, for the same year, expenditures rose to $19,171,000. The important consideration was that the Government undertook to transmit mail at a reasonable cost to and from every settled area in the country.

Newspapers and periodicals.—To use the words of the census commentator, the people of the United States in 1860 were a "newspaper-reading nation." The political agitation of the preceding decade had caused the number of political newspapers and periodicals to increase from 1,630 in 1850 to 3,242 in 1860. The total number of all kinds of newspapers and periodicals, political, religious, literary, and miscellaneous was 4,051. Of these only 387 were daily newspapers and they had an average circulation per issue of 3,820.

70. Foreign Commerce and the Fisheries

Nature and extent of our foreign commerce.—Already attention has been directed to the development of our foreign commerce during the half century ending with 1860. Something remains to be said of the situation as it existed on the outbreak of the war between the North and South.*

The United States was, at the time, a power in foreign commerce. Our citizens carried on trade on a large scale with the citizens of other civilized nations. We had enormous amounts of surplus products, especially food stuffs and raw materials for manufactures, and our markets demanded, in return, the sur-

* A review of the commerce and finance in 1860 is found in Selection 45.

pluses of other nations. Despite the isolation imposed on us by tradition and by wide expanses of water, we were a world people in trade and commerce.

The fisheries.—This industry dealt with a wide variety of products, and in its operation it involved numerous processes. It engaged the services of thousands of men and furnished a valuable source of food supply. The industry was centered in New England, more particularly in the State of Massachusetts, where for two centuries and more it had been carried on with vigor and profit. The total product of the fisheries in 1860 was $13,664,805, which was an increase of more than thirty per cent over its value in 1850. Considerably more than one-half this amount was the proceeds of whale fishing, and nearly one-third represented the value of cod, mackerel, and herring.

Chapter XVIII

THE WAR AND SOME OF ITS ECONOMIC EFFECTS

THE War between the States, was a contest between two groups of people closely related by blood but far apart in their thinking along social and economic lines. Each side stood on conviction; each side was willing, and, as events proved, did pay the price of a long drawn out struggle that materially retarded the growth of one section and all but destroyed the economic life of the other. The general explanation of the War is that it was over slavery. The difference went deeper than that. It rested on a firm belief generally held in the South that the Federal Government in its economic legislation favored the North.

Like all wars, this one warped the normal economic life of the people, both North and South. It called for a stepping up of industry in the face of a depleted man power. The paramount issue on both sides was the winning of the war at any cost. Accordingly, machines were substituted for man power wherever possible, those already working urged to greater efforts, and women and girls were enticed by a fervor of patriotism to enter industry. Both governments recognized that battles were more than hand to hand conflicts between armed soldiers.

In providing their fighting men with weapons, the two sections differed radically. The North, already well advanced in the arts of manufacturing, held the advantage over a section that had for many years stressed agriculture over other forms of industry. On one side were people enjoying a high diversity of productive enterprise; on the other, a people who had preferred to exchange the products of their fields for what they needed in the way of manufactured goods. The South faced the same situation in the matter of shipping. It had, over the years, provided millions of tons of cargo in the form of cotton and other exports without seeing to it that such tonnage was carried in its vessels. These two deficiencies, plus a third—lack of railroad transportation—put the South to an economic disadvantage.

The War as an economic phenomenon did not close with the

agreement on both sides to cease fighting; it continued for many years to exert its influence on the whole country.

Many, if not most, of the men engaged in the conflict were from the farms and small urban communities. Their lives had been confined to the neighborhoods where they grew up. The War changed everything. It widened their horizons and stimulated their imagination. Life was becoming an adventure. Gathered about the camp fire they exchanged ideas and made plans for the future. In its lazy smoke they could see themselves as men of action, outstripping those who had pioneered America and made her strong and prosperous.

The close of the War freed these men to make such readjustments as they could. Northern boys found with difficulty places in the mill and at the bench; those of the South returned to an agriculture that was, for the time being, prostrate, if not paralyzed. Fortunately, the great open spaces of the West called for men of initiative and courage, men who dared to plan and to do. There was opportunity for a new start. Across Texas, Kansas, and the Dakotas these men marched, not as soldiers of the North or the South, but as pioneers of a united nation bent on doing exactly as their fathers before them had done—pushing the American frontier ever westward.

71. Meeting War Demands in the North

Man power and consumption.—The first call by the North for young men to join the colors was made in April, 1861. Other calls followed, until hundreds of thousands of men were in uniform and under arms. By far the greater portion of those who responded to the repeated calls of President Lincoln were young, vigorous men, thousands of them yet in their teens. From factory and farm, from school and shop, from office and home, from every walk of life they had come and their coming worked mightily in opposite directions. There was, on the one hand, a depleted labor supply; on the other hand, an increased demand for economic goods.

The calling of these men from industry reduced the volume of production as it was then being carried on in the shops and factories and on the farms.) Obviously, they could not for the time being continue to make their contribution to the nation's economic income. Scarcely less significant was the fact that as

soldiers they would demand and get from the Government more in the way of food, clothing, and equipment, than they had been accustomed to consume while at home. One tendency aggravated the other. Fewer hands must now produce more. The problem was a simple one to state, but difficult of solution.

Stepping up normal industry.—Faced with the necessity of making good the loss of so many of its productive workers, industry readjusted itself surprisingly well to the situation. It adopted new and better methods, made places for those which it ordinarily would not have employed, and substituted machinery wherever possible for hand labor. All of this it did through the stimulus brought on by a patriotic desire to help, aided by the prospects of increased profits arising from higher prices.

Devious were the ways adopted by industry to increase the efficiency of those left at work. Farmers arose earlier, and remained in the fields longer, factories and mills and shops lengthened the working day, fewer clerks waited on customers, lawyers drew their own papers. This most of them could do without imposing on themselves undue hardship, for, being only human, they had fallen into easy ways. To this labor supply those in charge of industry added new elements. Women took up unaccustomed tasks, children went to work a little earlier, old men postponed the day of retirement. Thus, some of the loss was made up through more work on the part of those already employed, and through the employment of those who otherwise would have been idle.

This temporary decline in industrial man power stimulated the use of machinery. Factory owners and others, eager to take advantage of rising markets and equally eager to escape paying higher wages, turned to the use of machines as a way out of what for a time threatened to be a serious difficulty. To do this they standardized operations and increased output, thereby combining the advantages of large scale production and the advantages of mechanical methods. More and better machines were installed in factories, and improved farm equipment was adopted. The object in every instance was the same—the production of economic goods at a profit.

In meeting this situation a factor of first importance introduced itself. As an example, the Government wanted clothing for its soldiers with more emphasis on the quality of cloth used

and the workmanship employed than on fit or style. Such being true, those charged with the responsibility of making contracts with the manufacturers of men's clothing specified a relatively few standard sizes. These sizes the manufacturer could turn out much faster than would have been possible had each blouse and each pair of trousers been fashioned for some particular soldier. The same standardization was carried into the production of practically everything necessary to equip a fighting man—guns, belts, boots, wagons, harness, tents, cooking utensils, and tools.

From the very first day of the War, the Government was by far the largest buyer in the market of an endless variety of merchandise. It bought food, clothing, and equipment with a lavish hand, and in doing so it gave employment, directly and indirectly, to millions of workers. This buying on such a grand scale required public funds in hand and in large amounts. To provide these funds the Government borrowed money in exchange for bonds, and issued a paper currency commonly known as Greenbacks. From these two sources the War was financed, with the help of such taxes as could be collected on imports and on the manufacture of goods carrying excise duties. During the four years of the War, the Government collected from the first of these two sources approximately one-quarter of a billion dollars, and from the second something like twice as much. In 1860, as has already been noted, the public debt of the United States was $64,844,000; at the close of the War it exceeded two and one-half billion dollars.

The Government spent freely also in acquiring armament and other materials used directly in carrying on war. In some instances it operated its own plants; in others, it entered into contract with private producers. Whatever the method followed, the results were the same: men and materials were employed in producing necessary war supplies on a scale unsuited for times of peace. These industries engaged the attention of thousands of workers who, under ordinary conditions, would have continued to devote themselves to producing goods for the channels of trade, and they, like those who had marched away to battle, were lost for the time being to normal industry.

Here then, to summarize, was the problem facing the industrial life of the North. With a depleted man power, arising

from enlistments in the army and from the need of draining off labor and materials for the production of war supplies, went an increase in demand for every single good needed to gain victory. It presented a problem common to modern warfare, a problem involving the doing of two highly important things at the same moment of time.

72. Northern Finances

Borrowing money.—The North of 1861 was wholly unprepared for a war of any size or duration. When, therefore, Lincoln called for troops to defend the capital, he found it necessary to turn at once to the important task of raising money with which to pay soldiers and to buy supplies.* Ordinary receipts were inadequate for such a purpose; emergency measures must be adopted. Accordingly, a law was enacted during the Summer of 1861 authorizing the Secretary of the Treasury to borrow up to a quarter of a billion dollars on the credit of the United States, such credit to be evidenced by government obligations in the form of long-time bonds bearing an interest rate of 7 per cent, or short-time certificates bearing a rate of 7.3 per cent. Under these acts the Secretary might, if he chose, have issued and paid out non-interest-bearing notes up to the amount of $50,000,000 in discharging obligations owed by the Government, such notes to be issued in denominations of $5 to $50 and accepted at face value by the Government in the payment of all duties and taxes.

These two provisions for borrowing paved the way to further borrowing as the War progressed. By the middle of the year the public debt had risen to a point above a half billion dollars. A year later it exceeded a billion dollars; in 1864, it was $1,815,831,000, and in 1865 $2,677,929,000.

Issuing Greenbacks.—The breaking out of war between the two sections imperiled the positions of most of the state banks, for many of them, particularly those in the West, held large amounts of bonds issued by southern states. The result was a loss of confidence on the part of note holders, followed by many of the financial institutions of the country closing their doors. At this point the Government at Washington provided for the issuing of the Greenbacks. These notes performed a double

* For a Northern view of Northern finance see Selection 49.

function. They added materially to the country's circulative medium, and provided the Government with much needed funds. The first emission was in the sum of $150,000,000. Later, authorizations, brought the total amount of Greenbacks up to $450,000,000. These notes were issued in various denominations, ranging from one dollar upward. They bore no interest, and in the payment of debts they were declared to be legal tender.

Since these notes were not redeemable in gold, it was inevitable that, measured in gold, they should fluctuate in value.

DEPRECIATION OF GREENBACKS

1862–1865

Gold value of $100 in Greenbacks

Month	*1862*	*1863*	*1864*	*1865*
January	$98	$69	$64	$46
February	97	62	63	49
March	98	65	61	57
April	98	66	58	67
May	97	67	57	74
June	94	69	47	71
July	87	77	39	70
August	87	79	39	70
September	84	74	45	69
October	78	68	48	69
November	76	68	43	68
December	76	66	44	68

Many factors entered into this movement up and down. Of these factors the most important one was the success, or lack of success, of the armies. Thus, in July, 1863, Lee's defeat at Gettysburg and Grant's success at Vicksburg caused an upward movement in value; Lee's success and Grant's defeats in the Wilderness Campaign during the Summer of 1864 brought about a downward movement.

Other methods of financing the War.—Congress and the President resorted to two other methods for raising war funds. One of these was taxation. Extra import duties were laid, excise taxes raised, and an income tax imposed on the people. Altogether these three sources of revenue produced something like seven hundred million dollars. A second method was resorted to in 1863. In that year a law authorized the organization of National banks and required such banks to issue notes based on

Government Bonds. Such authorization served three purposes: it strengthened the banking structure of the country, put a substantial amount of currency in the channels of trade, and created an additional market for bonds.

73. The Situation in the South

Material deficiencies.—The Southern people entered the War and carried it on for four years with commendable enthusiasm. What they lacked in man power they made up in spirit. Theirs was the will to win, but without a plentiful supply of what army men call the sinews of war, they were doomed to failure.

The South was essentially an agricultural section. It grew bounteous crops of raw materials for manufactures, but these crops it had exported, over the years, to the Northern states and to Europe in exchange for manufactured goods. Viewed from the standpoint of efficiency in production it had followed a natural course. Its people had done what they could do best, leaving to others the production of such commodities as they could have produced only at a greater cost. Thus, for the staples they could grow and ship to other sections of the country or to foreign lands, they received in return textiles, fabrication of iron, and a wide variety of other manufactures.

Like the North, the South needed arms and ammunition, clothing, boots and shoes, wagons, tents, cooking utensils, horse shoes, saddles, harness, railroad rails, engines, cars, coffee, spices, tea. Commodities such as these and many others were essential in waging a war and in preserving the well being of those who remained at home. These the North had in abundance, or could, with comparative ease, secure them from abroad; in the South, on the other hand, dependence must be placed, in large part, on supplies from the outside.

The economic readjustments which the North found it necessary to make in shifting from a peace time to a war time basis, forced themselves on the South in exactly the same manner but on a less pretentious scale. Men by the hundreds of thousands left their accustomed tasks to take up arms in a cause dear to them, or to go into plants devoted to the production of war materials. Some of these places the industries of the South filled, noncombatants taking up where those going to war had laid down; agriculture solved its problem in its own way. The

plantation overseer improved his organization in the interest of efficiency; the women folk and the children took up where the small farmer had left off when he marched away to war.

A seeming advantage.—Potentially, the South held an advantage over the North in so far as getting war materials was concerned. That section could rely on an annual production of a crop of cotton valued at many millions of dollars. With the proceeds of this crop in the form of foreign exchange, the Southern Government would be in a position to purchase armament and equipment equal in quality and amount to that in the hands of the North.

This advantage was not real for after a time the Northern forces first secured control of the Mississippi River, and later of the open sea. Once in control they prevented the shipment of Southern goods abroad. Gone, then, was what must have appeared at the beginning to be a source of war supplies as large as the South might need. From this point on the results of the conflict were inevitable. The North had a superior man power, but that in itself might not have sufficed, because much of the fighting was being carried on in the South. The deciding factor was the ability on the part of one side, and the inability on the part of the other, to supply itself with a wide variety of commodities.

Lack of transportation.—The extent and location of railroad lines played an important role, as well in the conduct of the War as in its cause. Over the years, the North had outstripped the South in railroad building. Moreover the roads in the North were, on the whole, better located relative to industry and trade, When the War began in 1861, there was practically no all-rail communication between Virginia, for example, and the Lower South along the Mississippi. Such lines as there were quickly deteriorated under a strain of traffic much too large for the strength of the road bed and equipment. In a comparatively short time, therefore, the South, for all practical military purposes, comprised not one closely knit section, but several sections.

Some notion can be had of how hard the South was hit in the matter of building and maintaining railroads during the War when it is pointed out that during the entire period of conflict the best efforts of the South were required to build something like fifty miles of line from Greensboro, North Carolina, to Danville,

Virginia. This short road the Richmond Government did build, but at tremendous cost. It stripped other roads of rails and equipment, and even resorted to the capture from the Baltimore and Ohio of engines and cars which they hauled across the country on wagons.

The railroad situation was a deciding factor in the conflict. Had the South possessed northeast and southwest lines comparable to the New York Central or the Pennsylvania in length, standard gauge, and equipment, the War might have dragged itself out much longer with far different results. As it was, General Lee's soldiers in Virginia subsisted at times on acorns and parched corn, while crops in lower Mississippi, Louisiana, and Texas rotted in the fields. Well equipped and well located railroads would have changed all this and given the South much more of a fighting chance against a foe well equipped to win battles.

Southern finances.—The efforts of the South to finance the War paralleled closely those made by the North for the same purpose.* Paper money was issued, bonds were sold, and the people were taxed. In this respect the South, compared with the North, worked to a disadvantage, for there banking facilities had always been inadequate, and at the time the War opened the total stock of specie in that section was less than thirty million dollars.

In February, 1861, the Congress of the Confederacy voted to authorize the issue of $15,000,000 in bonds bearing 8 per cent interest and redeemable in ten years. Other issues followed, the Government sometimes exchanging its bonds for export staples, which it in turn exchanged abroad for war materials. This method of securing supplies was cut short by the blockade, on the part of the North, of Southern ports; otherwise the history of the War might flow in different channels.

The Confederate Government issued paper money in large amounts. In May, 1861, the printing press turned out $20,000,000. By the end of the year the volume of circulation was $150,000,000. A year later it was $500,000,000; at the close of the War the outstanding obligations of the Confederate Government in the form of notes exceeded a billion dollars.

* The problems of Confederate finance are related by J. D. B. De Bow, Selection 48. De Bow was editor of *De Bow's Commercial Review*, a Southern journal.

These notes, like the Northern Greenbacks, varied in value with the fortunes of war. Success moved their value up; failure moved it down. There was one difference, however, in that, while the value of Greenbacks dropped as low as forty cents on the dollar as measured in gold, the value of Confederate notes disappeared altogether with the close of the War in 1865.

The Southern Government raised comparatively little money through taxation. It did lay some import duties, and it did impose a tax on the exportation of cotton. In imposing this tax the South did something never before tried in the United States, something prohibited by the Federal Constitution. Other funds came from the states in the form of contributions.

Isolation of the South.—The failure of the armed forces of the South to keep open the lanes of travel between the ports of that section and those of foreign nations was a heavy handicap in the prosecution of the War. A main objective of Northern strategy was to isolate its adversary from the rest of the world. This was done, but only after a year's time and much trouble. With the funds made available on the part of foreign merchants in exchange for cotton during the early months of the War, the Richmond Government purchased iron-clad vessels of British shipbuilders and set them loose to prey on American shipping. For a while the North was helpless. Then, adapting expediency to necessity, Northern naval officers cooperated with a Scandinavian inventor, Captain John Ericsson, to find ways and means of matching the enemy's force with a similar force. The outcome was decisive. In Hampton Roads, Virginia, the *Monitor* met the *Merrimac* in one of the historic battles of all times. Henceforth the North was able to keep the Southern ports closed and Southern vessels off the sea. No longer could the Confederacy depend on exchanging its cotton for war materials.

74. Post-War Developments

Facing economic maladjustments.—When, in his famous interview with General Lee, General Grant suggested that the soldiers of the South might, if they wished, keep possession of their horses, he gave a hint of the seriousness of the problem of economic readjustment that would face the veterans of both armies on their return home. He knew that after the warmth of the first welcome had passed, these men would be faced with

the necessity of finding places for themselves in the industrial life of the nation.

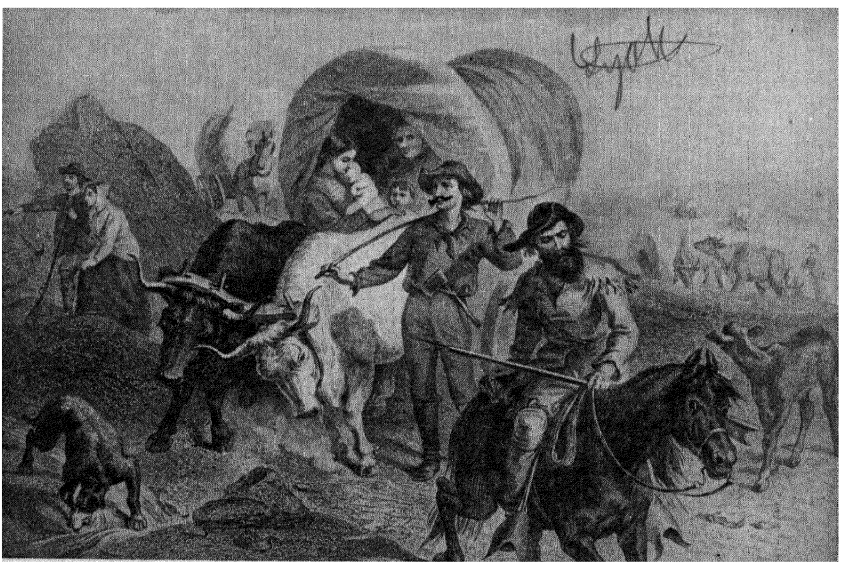
That is exactly what happened. Literally hundreds of thousands of former soldiers returned to find either their old places filled or, as with the younger men, no places to fill. During their long absence, necessity, aided by high prices, had reformed methods of production in the interest of efficiency. Men had been speeded up, standardization improved, and machinery substituted for hand labor. Working in the same direction was the lessening of demand with the close of hostilities. This situation the discharged soldiers faced, wholly unaware of the significant fact that a shift from war times to peace times is always painful economically and attended by grave dangers.

The lure of free land.—The situation which these men faced would have been dismal indeed, had they been forced to sit and wait for the return of normal conditions. Fortunately there remained west of the Mississippi River vast areas of raw lands ready to be exploited at a minimum expenditure of effort and money. These lands the Government owned and controlled—the Government of a people once more united after a four years' struggle in which the social and economic life of the people was thrown out of adjustment.

The typical soldier of the Civil War, North and South, knew something of the technique of farming. He had lived on a farm —at least near one—and from experience and observation he knew that with free land he could afford to risk the hazards of frontier life and could, by industry, succeed as his father before him had done. A new land, and with it opportunities equal to all, directed his attention westward and helped him to decide to strike out for himself. He and his kind could gather their belongings and, with the sign "Kansas or Bust" across the sides of their covered wagon, they could be on their way.

The attitude of the National Government aided in this trek toward the setting sun. Congress saw the advantage to be gained nationally and otherwise from a settlement of the prairies and plains of the Far West. It would provide a reward for the former soldiers of the Northern armies, increase the amount of taxable property, and tend to keep alive and strengthen a new nationalism born of war and bloodshed.

New ways for old.—The opening of new lands in the West would not in itself have solved the problem of maladjustment. Agriculture in the older settled sections had for several years been conducted on the basis of maximum production. The wheat, to cite but one instance, which the New York farmers had once grown would no longer enter into the soldier's ration, for now the soldier was producing for himself in Eastern Kansas. A similar situation ran throughout the productive processes, that



They crossed the plains

alone of transportation excepted. Manufacturing plants, feeling the loss of government orders, curtailed output. The curtailment ran back to the production of the rawest of materials. Everywhere men lost their places in industry, buying slowed up, and under ordinary circumstances the country would have felt the severity that usually follows war.

Settling the West.—The former soldiers of both armies could and did "go West." They and their families settled farms, built villages, and laid the foundation of a culture characteristically trans-Mississippian. Into their homes they carried well established demands for a wide variety of merchandise, a demand that went far to restore in manufacturing lines the markets destroyed by cessation of hostilities. Thus, during the three

decades following the close of the War, our people pushed the frontier across the western plain until, about 1880, it disappeared altogether. Thus, into the mountainous regions they went, and on across to the Pacific Ocean. A physical evidence of this

GROWTH OF FAR WESTERN POPULATION

1860-1890

State	*Population*			
	1860	1870	1880	1890
Minnesota	172,023	439,706	780,773	1,310,283
Iowa	674,913	1,194,020	1,624,615	1,912,297
North and South Dakota	4,837	14,181	135,177	539,583
Nebraska	28,841	122,993	452,402	1,062,656
Kansas	107,206	364,399	996,196	1,428,108
Colorado	34,277	39,864	194,327	413,249

march was the admission of states into the Union. Colorado was admitted in 1876, North and South Dakota, Montana, and Washington in 1889, Idaho and Wyoming in 1890. With the admission of Utah in 1896, Oklahoma in 1907, and New Mexico and Arizona in 1912, continental United States became a union of states in fact as well as in name.

Chapter XIX

THE PEOPLE AND THEIR WEALTH

THE four decades, 1860–1900, saw the population of the country grow from a little more than thirty-one million to almost seventy-six million. During the same forty years the wealth of the country increased four fold, from sixteen billion to more than eighty billion dollars. As might be expected, the development in these two respects varied from section to section, the greatest absolute increases being in the states already wealthy and heavily populated. It was a case of those having much getting more. The march westward that began early in the nineteenth century gathered momentum after the close of the War. Farm lands were opened to cultivation, communities sprung up, and new states were admitted into the Union. The center of population moved ever westward.

These years saw notable trends in foreign immigration. During that time the number of foreign born persons coming to the United States exceeded fourteen million. The racial origin, too, underwent radical changes, so much in fact that the arrivals from the countries once important sources of immigration fell to a point where they were but a fraction of what they once had been. To add to the general problem of assimilation were those dealing with immigrant peoples unfamiliar with American ways, and with their congestion in urban centers.

The earlier movement of the people away from agriculture toward industry continued after the War with an ever-increasing volume. Slowly but surely the United States was becoming industrially minded. No longer was it to be a predominantly agricultural nation. Viewed from a different angle the United States was reaching the point where, in addition to feeding itself and providing the raw materials of manufactures, it could undertake on a large scale the processes necessary in turning these raw materials into finished products.

The tremendous increase in man-power, foreign as well as native, gave to the United States a high place among the nations

of the earth. What had once been a union of thirty-two states, sparsely settled and dependent in a large measure on foreign manufactures, a union threatened by disruption, was now (1890) a united nation of forty-four states presenting an economic self-sufficiency never before seen on such a large scale. The United States of the late nineteenth century was coming to be a world power in its own right.

75. Growth and Distribution of Population

Growth by decades.—At the outbreak of the Civil War in 1861 the estimated population of the United States was 32,214,118, the division between the warring sections being about two to one in favor of the North. During the next four years the combined growth was in the neighborhood of three million, despite the loss of life on the battlefield and from diseases incident to military service. Considering the factors involved in tending to decrease population, this increase of approximately ten per cent in five years gave promise of even greater increases under normal conditions of peace.

POPULATION OF THE UNITED STATES
1850–1900

Year	*Ten-Year Growth*	*Percentage Growth*	*Total Population*
1850	.	. . .	23,191,876
1860	8,251,445	35.5	31,443,321
1870	7,115,050	22.6	38,558,371
1880	11,597,412	30.1	50,155,783
1890	12,791,931	25.5	62,947,714
1900	13,046,861	20.7	75,994,575

Sectional growth in population.—In this growth in population every section of the country shared, but not in the same degree. Considering numbers alone, the East North Central Division, comprising the States of Ohio, Indiana, Illinois, Michigan, and Wisconsin, led with an increase of 9,058,777. Next in this respect came the West North Central States, followed by the Middle Atlantic States. Last came the Mountain States Division with a million and a half increase. On the basis of relative growth, the Mountain States held first place, with an increase over the forty years of about eight hundred fifty per

cent. The least relative gain was in the New England States and in the East South Central States of Kentucky, Tennessee, Alabama, and Mississippi. An important consideration in this connection was the predominant position which the Mississippi Valley occupied at the end of the forty year period, with a population in excess of forty million or approximately fifty-three per cent of the total. Moreover, of the nine states leading in population, eight of them—Missouri, Illinois, Indiana, Ohio, Pennsylvania, New York, and Massachusetts—formed a belt extending from Kansas to Maine.

Considering the states themselves as population units, those showing the largest increases were Pennsylvania, New York, and Illinois. The combined population of these three states in 1900 was 18,392,559, which was almost ten million greater than it had been in 1860. Viewed from another angle these three states had more people within their borders in 1900 than could have been found in the entire nation in 1840. In man power they compared favorably with some of the nations of Western Europe.

Urban vs. rural.—A significant population movement during the years under consideration was away from the farms and toward the cities. At the time of the War the United States was predominantly agricultural. By 1880, however, those residing in towns and cities having twenty-five hundred inhabitants or more made up more than a fourth of the entire population (28.6 per cent). Twenty years later the percentage stood at forty. What this means is that in 1900 two out of every five of the people of the United States were classified as urban inhabitants.

This movement reflected the change in emphasis on industry. When the late revolting colonies organized the Federal Government in 1789, practically everyone lived on the land or was closely associated with it. Gradually there developed small urban centers devoted to trade and manufacturing. As time went on these centers grew with an increasing demand for their commodities and services. Then came the War with its stimulus to the making of all sorts of goods. After the War the movement continued; relatively less and less workers were needed to produce foodstuffs and raw materials, and more and more needed in the urban centers to fabricate an endless variety of products for a people whose wants kept pace with their growth in number.

Growth of American cities.—Between 1860 and 1900 the ies of this country grew beyond all expectations. In the former ır the nine largest had a combined population of 2,624,823; enty years later this total was 4,778,952; another twenty years sed it to 8,942,878. The significance of this trend runs far ead of mere numbers. What was back of a movement that d brought into a half dozen urban centers more people than ıided in the entire country at the beginning of the century?

GROWTH OF SELECTED CITIES
1860–1900

City	*Population*		
	1860	1880	1900
on, Ohio	3,477	16,512	42,728
ghamton, New York	8,325	17,317	39,647
ver, Colorado	4,749	35,629	133,859
Joseph, Missouri	8,932	32,431	102,979
on, Georgia	8,247	12,749	23,272
land, Oregon	2,874	17,577	90,426
h Bend, Indiana	3,832	13,280	35,999
cester, Massachusetts	24,960	58,291	118,421

Urban centers of small dimension merit consideration. What d once been cross roads settlements were now becoming towns some importance, while the small city of the War period was eady a large one and growing larger. Of these the one show- ; the most spectacular growth was Chicago. Its population 1860 was 109,260 divided almost equally between native born ıericans and foreign born immigrants from practically every ıntry of Western Europe. By 1870 this figure had risen to 3,977. The next thirty years saw this population increase re than five fold to 1,698,575.

The center of population.—Some idea can be had concerning distribution of population after 1860 from an examination the movement of the center of population as it was determined l located every ten years by the Bureau of the Census. As been noted already, this center was, in 1860, east of Cin- ıati near the Ohio River. Ten years later it was northeast Cincinnati. In 1900 it was not far south of Columbus, Indi- ı. The significance of this movement was that the center of ɔulation was tending to approach the center of area, a point

near the northern boundary of Kansas about midway between its eastern and western limits. Lagging behind was the median of population, which was, in 1900, on the line separating Ohio and Indiana about fifty miles east and sixty miles north of the center of population.

Inter-state migration.—A notable characteristic of American life has been the tendency of the native born inhabitant to migrate from the state of his birth. This movement has been generally westward; it was Horace Greeley who advised the young men of his day to go west and, in the language of a boy of the time, to grow up with the country. A glance at the situation in Kansas in 1900 gives some idea of the volume and extent of this migration. In that year the number of native Americans residing in the State of Kansas totalled 1,343,810. Of the number less than one half (630,321) were native Kansans; the rest (713,489) had moved in from other states. Leading sources of population in this instance were Illinois, Missouri, Ohio, and Iowa. At the far end were Florida, Arizona, Oregon, and Wyoming.

76. Foreign Elements in the Population

The older immigration.—Our study of the colonial and early national periods of American history revealed first of all the highly important fact that this country was peopled entirely by immigrants, and second, that these immigrants, and those who followed them for two and a half centuries, came in the main from the nations of northwestern Europe. Viewed from the opposite direction, the New World north of the Gulf of Mexico was, for centuries, practically unknown to Spain, Italy, Greece, Austria, Russia, Turkey, Armenia, and the Balkan States. The French, and later the British, held the territory along the St. Lawrence and down the Mississippi River; the British, the strip of seacoast from Canada to Florida; the Spanish, what is now Mexico and portions of the western and southwestern United States.

The successful revolt of the American colonies appears to have had little effect on the sources of the immigration streams that continued to flow into this country. For many years British subjects, particularly those of Irish stock, led all others, followed by Germans. So wide and deep was this combined stream of

humanity that for the half century, 1831–1880, the immigrants from these two countries made up more than three-quarters of all those coming to the United States. The total number for this period exceeded ten million. The high point in this phase of our immigration was reached about 1880–1890, when during the decade approximately three million people entered our ports from the two nations—Germany and the United Kingdom.

FOREIGN IMMIGRATION INTO THE UNITED STATES
1861–1870

Continental Distribution	*Numbers*	*Country of Origin*	*Numbers*
Europe	2,064,407	Austria-Hungary	7,800
Asia	64,609	France	35,984
America (outside U. S.)	166,597	Germany	787,468
Africa	312	United Kingdom	1,042,674
Australia	221	Russia	4,536

These millions came from countries that spoke different languages, held widely divergent views on questions involving international relationships, and sometimes warred among themselves. They did, however, possess in common certain fundamental notions concerning society and government. The Irish immigrant might differ radically on many questions with his fellows from Germany or France or from one of the Scandinavian countries, but in matters having to do with the relation of the individual to the state, he could see eye to eye with every one of them. They had, to restate the matter, the same general notions regarding individual responsibility in the conduct of organized society.

The newer immigration.—The decade that saw the older immigration reach its peak and then begin to decline saw also a rapid growth of what for lack of a better term may be called the newer immigration.* Whereas the bulk of arrivals at American ports had formerly come from the countries of northwestern Europe, that section now barely held its own with southern and eastern Europe, and within another decade it had fallen far behind. During the twenty years from 1861 to 1880, the number of persons immigrating to this country from Italy, to cite

* The difference in purpose of the newer and older immigration is explained in Selection 50.

but a single example, totaled 67,490. During the next twenty years this figure reached 959,203. Contrasting this movement with the movement for Ireland, we find that in the one instance the *increase* for the decade 1891–1900 over the decade 1871–1880 was ten fold, while in the second instance there was a *decrease* instead of an increase.

IMMIGRATION, 1871–1900

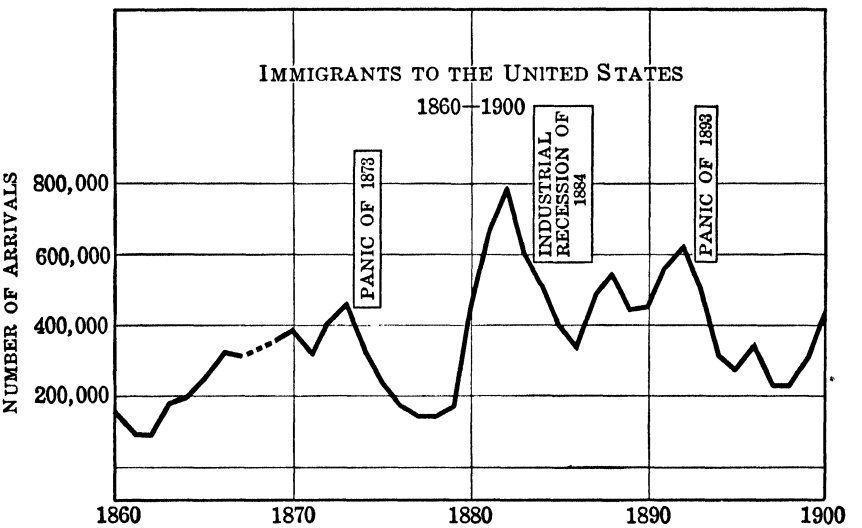
Origin	*Decade*		
	1871–80	1881–90	1891–1900
Germany	718,182	1,452,970	505,152
United Kingdom	984,914	1,462,839	659,954
Italy	55,762	307,310	651,893
Russia	52,254	265,089	602,011
Austria-Hungary	72,969	353,722	592,707

The immigration problem.—A variety of factors entered into the problem of absorbing these new elements of immigration. Desirable free lands were no longer available for those who cared to take up farming. Moreover, the typical Italian or Russian immigrant preferred urban life. Many of them, in fact, came under contract to work in congested centers of population. There in groups they lived much to themselves, untouched by the heat that had made America a melting pot. They preferred their own customs and manners and spoke their native tongue. Unlike the typical Irishman or the typical German, the Italian or Russian could never bring himself to believe that he had severed every tie with the land of his birth.

Mention has been made of contract labor among immigrants. Many of them, not unlike the indentured servants of the colonial period, came to our shores with heavy obligations to be discharged. The result was that they drove native American workers from jobs. This they were able to do because they were willing to work at less wages than paid normally to native laborers doing substantially the same work.

Much of the criticism directed against the newer immigration loses its weight when examined in the light of conditions as they existed at the time. Employers of cheap labor, until stopped by law, combined with ship owners to persuade many who lacked the essentials necessary to become useful and happy citizens of a

country where self-government ruled to migrate to America. They had suffered much at the hands of unscrupulous rulers, and for that reason they were in no frame of mind to believe in the honesty of their fellow men. Standards of living were generally low among them, and, while those who were yet children might hope with reasonable expectancy to become Americans, their elders too often remained content with the old ways.



Distribution of immigration.—Arrivals seeking homes in the New World tended to settle in groups. In the two States of New York and Pennsylvania, for example, there resided in 1890 almost two and a half million persons of foreign birth. At the opposite extreme the two states of North and South Carolina had but 9,745 such residents. Generally speaking, immigrants, those making up the newer immigration in particular, flocked into the large cities and located in the neighborhood of large industrial plants. At Homestead, Pennsylvania, the number of persons of foreign extraction, foreign born persons plus natives of foreign parentage, was almost twice as great as those born of native parents. Cook County (Chicago), Illinois, is a good example of congregating according to nativity. In 1900, that county housed three hundred thousand foreign born persons in addition to seven hundred thousand natives born of foreign parentage.

Giving attention to restriction.—As early as the turn of the century many thoughtful persons were coming to hold the opinion that the country's power to assimilate foreigners of every sort and description was inadequate to the load that was being placed on it. They asked themselves how, without denying worthy immigrants the benefits to be had in America, could the laws of the land be changed so as to lead to a more careful selection of those to be permitted to enter. Each group had its friends and advocates. Many employers looked to this steady stream of immigration as a constant source of cheap labor; social workers decried any act that might work a hardship on individuals; friends of freedom feared that restriction here might lead to political oppression abroad. All of this was preliminary to a series of restrictive bills later passed by Congress.

77. Occupational Distribution

Extent and variety.—Because of its size and of its wide range of climate, the United States of the late nineteenth century comprised practically every kind and type of industry known to mankind. Farming ranged from citrus fruits to spring wheat, while fabricating processes included operations from the crudest to those requiring the highest technical skill. Everywhere men busied themselves in producing goods for their own consumption, or what was more likely, for the markets of the world. Some of these men commanded relatively high wages; more of them performed the ordinary tasks of the day for which they received relatively low wages.

OCCUPATIONS, 1880–1900

(10 years of age and over)

	Numbers Engaged in:				
	Agriculture	Professional Service	Domestic Service	Trade & Transportation	Manufacturing & Mechanical Pursuits
1880	7,713,875	603,202	3,418,793	1,871,503	3,784,726
1890	9,148,448	944,333	4,220,812	3,326,122	5,678,468
1900	10,381,765	1,258,538	5,580,657	4,766,964	7,085,309

During the two decades 1880–1900, the importance of certain occupations as compared with others shifted materially. Agri-

culture declined relatively as an occupation, while the manufacturing and the mechanical pursuits moved in the opposite direction. This is as it should have been, for, with the disappearance of the frontier, coupled with an increased use of farm machinery, the need for man-power in farming was not as great as it would have been otherwise. Along with the rest of the civilized world this country had reached the point where it was no longer necessary for the people to expend the major portion of their time and energy in producing foodstuffs.

Women in industry.—In 1880 fifteen per cent of all persons gainfully employed according to the Census were women and girls. Of these a little less than one-half were engaged in domestic and personal service. Agriculture claimed more than a half million of them. Ten years later the percentage thus occupied was a little less than twenty; in 1900 it was about the same. It was not until later that women began a successful invasion of the industrial fields. In certain occupations, however, the women workers of the country had all but a monopoly, occupations requiring nimbleness of hand movement and attention to detail. In dressmaking they enjoyed a near monopoly; as milliners they dominated the field; in shirt making they outnumbered men three to one.

In the employment of women in industry were to be found wide divergences among states and sections and among the industries themselves. Massachusetts and Montana offered sharp contrasts. In the former men workers outnumbered women workers a little more than two to one; in Montana the ratio exceeded ten to one. Considering the country as a unit, about twenty per cent of those gainfully employed were women. In certain of the processes in the textile plants, however, women often equalled, and in some instances outnumbered, the men employed doing the same work. As teachers, nurses, and stenographers, women led the way.

Child labor.—Children in industry proved to be a troublesome problem during the latter part of the nineteenth century. Earlier, when most people lived on the land, children worked hard, but usually alongside their parents. There was not much driving to attempt tasks too heavy for their frail bodies. With the coming of the machine, conditions changed. Unscrupulous men sensed the profit to be had from the exploitation of little children, and

sensing this profit, they set about to obtain it regardless of the suffering that might follow. At one time approximately one-fourth of all the girls of the country between the ages of ten and twenty years worked at some trade or profession. But that does not tell the whole story, for among them were a quarter of a million children not yet fourteen years of age and a third of a million more only a year or two older.

CHILD LABOR IN 1900

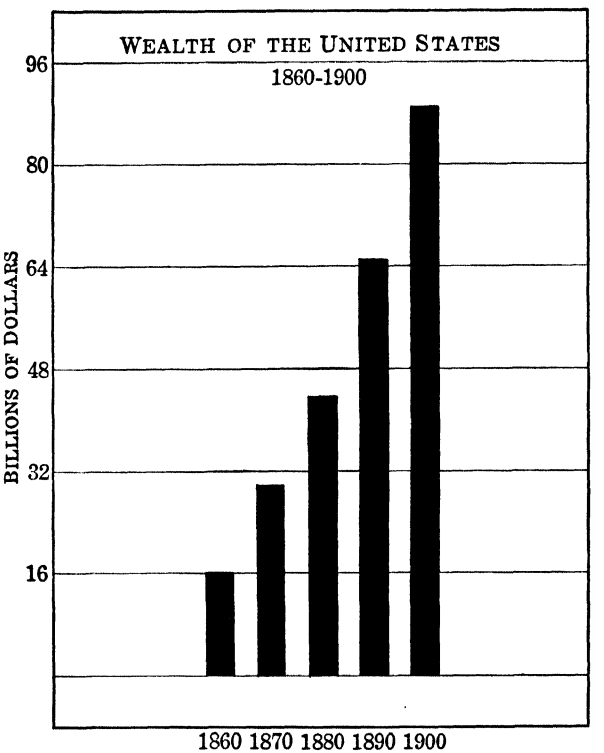
Division	*Males 10 to 15 Years of Age*		*Females 10 to 15 Years of Age*	
	Number	Per Cent of Total	Number	Per Cent of Total
New England	37,070	13.2	24,971	8.9
Middle Atlantic	157,870	18.3	84,411	9.8
East North Central	151,978	15.3	54,974	5.6
West North Central	135,745	19.5	26,833	4.0
South Atlantic	311,266	41.6	135,280	18.5
East South Central	262,282	47.3	95,859	17.9
West South Central	183,230	37.5	57,460	12.1
Mountain	12,645	12.9	2,748	2.9
Pacific	12,325	9.4	3,231	2.5

The child labor problem was not the same in all of the states. In 1900 about twenty-six per cent of all the boys between ten and fifteen years of age and about ten per cent of the girls of the same age group were gainfully employed. At one extreme stood North Carolina, South Carolina, Alabama, and Mississippi; at the other, Nevada, Montana, and Oregon. The ratio of children employed in gainful occupations to those not so employed varied between these extremes, Rhode Island and New Jersey with their light industries representing those states in which child labor remained a problem.

78. Wealth

Nature and amount.—The wealth of the United States was for many years proverbial among the peoples of foreign lands and in their eyes something that might be had for the taking. This wealth consisted of a great variety of things—real estate, livestock, implements and machinery, railroads, street railways, motor vehicles, money, jewelry, books, clothing, merchandise—

valued at many billions of dollars. To these must be added, in arriving at a proper notion of a nation's economic strength, natural resources which are gifts of nature, and the inherent qualities of the people. Energy and ingenuity, to mention but two, characterized the times. Men worked hard and assumed heavy risks in an effort to acquire control over wealth. The result was abundance in the aggregate, however unequally it might have been distributed.



One factor in the growth of wealth of the country after 1865 was the labor saving machine. American enterprisers led the world in adopting new methods of production. So quick were they to take up new ideas that often they scrapped machines long before they were either worn out or out of date. By so doing they pushed relentlessly forward in the development of methods designed to reduce unit cost of production. This they often did at tremendous cost to operatives. Some they speeded up; others they discharged. Nor did they always share their reduced costs with the consumers of their products.

Distribution of wealth.—These mighty streams of wealth flowed unequally among groups and among the individuals within groups. Many factors contributed to what many regarded as maldistribution—health, strength, natural skill, mental ability, personality, dishonesty, monopoly, family connections. Certain it was, whatever the cause, that at one extreme some enjoyed large shares; at the other, no share at all. Between these extremes the great middle group pushed steadily forward, the standards of living of its members mounting with the years. What had once been luxuries denied to all but a few, became in the hands of workers first comforts and then necessaries. Like the wealth of the country these standards became proverbial all over the world. Relative to his neighbors, the American workman might be poor; relative to his fellows abroad, he was a man of affairs.

Chapter XX

RURAL UNREST

THE coming of peace in 1865 ushered in a period of economic readjustment. Literally hundreds of thousands of men stepped from the ranks of war into the ranks of peace. The problem was to make places for them in normal industry. Many of them had marched away mere boys, and now they were at home again without any particular training and possessed of a restlessness common to discharged fighting men. Their situation was scarcely more trying than that of their comrades who had stepped from their places in the shop or at the bench to take up arms. The members of one group had never had a job; those of the other found their places filled.

Fortunately for the future of the country, vast areas of public lands located between the Mississippi River and the Rocky Mountains, and even beyond, remained unsettled. There, almost for the asking, soldiers of both armies might acquire new homes in which to begin life anew. There, on an equal plane with those about them, they could hope to accomplish what their fathers before them had accomplished in an earlier day.

The exploitation of raw lands was not altogether an unmixed blessing. Those already engaged in agriculture soon found themselves faced with a competition which many of them, particularly those on the poorer lands, could not meet without suffering loss. Viewed in another light, millions of acres capable of being cultivated at a profit under conditions of war prices, moved toward the no-rent margin as those prices gave way under the strain of an increased supply flowing from cheap lands of high fertility.

When the two Governments dropped out of the markets, prices declined with a decline in demand. With the return of millions of men to industry, an increased supply forced prices still lower. The effect of this price movement the people felt keenly. Many, if not most, of them yearned for the good old days of high prices. They did more than yearn; they cast about

to discover why that which they had for sale seemed so cheap and why what they had to buy seemed so dear. What they really faced, without being fully aware of it, was deflation.

There was genuine cause for unrest, particularly among the farmers. During the years following the close of the War bumper crops sold at low prices. Taxes were high, the public debt was fifty times as great as it had been in 1860, while governmental expenditures appeared to the man on the farm as being all out of reason. Added to this was the feeling, gradually becoming a conviction, that the seat of government was on Wall Street in New York City and not on Pennsylvania Avenue in Washington, D. C.

One important source of irritation among the farmers was the belief that the mortgage companies of the East pursued a ruthless policy in dealing with their debtors. Another was that the railroads were fattening at the expense of the communities which they served. Like all debtors during periods of declining prices, those owing money during the years after the War very generally blamed everyone except themselves for their predicament, not omitting to go to extremes in order to justify their position.

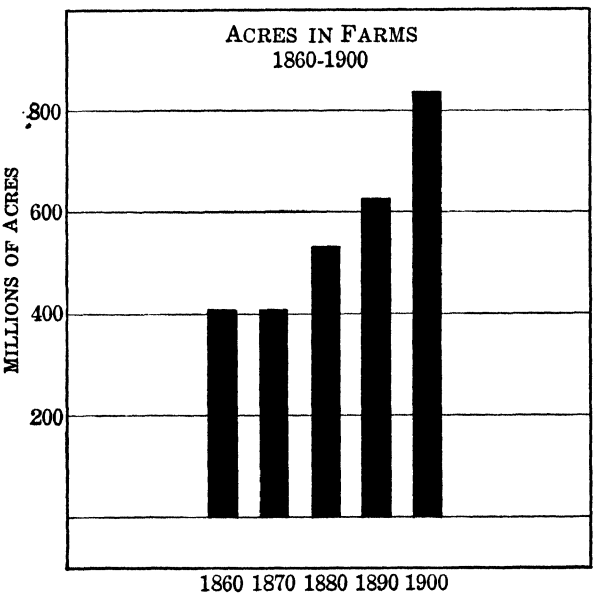
The situation following the War was, in essence, an aftermath of the War itself. No one was wholly responsible. Industry had rather easily adjusted itself under the stimulus of high prices to an abnormal condition. Its return to normalcy in the face of declining prices was a more difficult problem.

79. Expansion of Agriculture

Increased productivity.—War prices had stimulated the growing of food crops. The ending of hostilities in 1865 sent back to the farms of both sections hundreds of thousands of young men eager to take up where they had left off when they marched away to War. The result was inevitable. These men joined forces with those who had remained on the farm. They cleared new fields and cultivated the old ones more intensively, wholly unaware of the simple fact that the demand for what they had to sell had declined and would continue to decline until, through price, it should be raised to meet supply.

The corn crop of 1860 amounted to four-fifths of a billion bushels. Within a few years after the close of the War it had

risen to a billion and a half bushels. During the same period of time the acreage devoted to corn had doubled, and the price per bushel had declined from about eighty cents to below forty cents. What happened in the production of corn happened with some variations in the production of other leading crops.* The wheat crop doubled in size on twice as many acres and sold for approximately the same amount. That is, the growers of wheat received about the same amount of money for twice as much wheat grown on twice as much land.



Taking up new lands.—Much of this expansion in agriculture came from the exploitation of new lands west of the Mississippi River. The area devoted to corn, for example, increased between 1867 and 1877 two fold in Iowa, ten fold in Kansas, and fifteen fold in Nebraska. Combining these increases, we find that during the ten year period the acreage devoted to corn in these three states increased from 1,853,855 to 8,522,747. At the far extreme among states that had been once high in the

* This increased productivity was due in part to an increase in the number and size of farms, Selection 51, and in part to the increased use of machinery in agriculture, Selection 54. The use of improved machinery also had an effect on farm values. For the factors which influenced farm values in different sections of the country see Selections 52 and 53.

production of corn were New York and Virginia with increases of ten per cent, and Pennsylvania with an increase of thirty per cent. Other crops followed corn in this respect. Texas, for example, had a cotton crop of three hundred fifty thousand bales in 1870, and a million bales in 1878.

The bringing into cultivation of the new land was facilitated by the passage of the Homestead Act in 1862. This act culminated a long struggle for free land. Under its provisions a settler could acquire, upon payment of a small fee for filing his claim, possession of 160 acres free of all charges. Title, however, was not to pass until the homesteader had resided on his claim for five years. In 1912 this period was shortened to an actual residence of seven months in each of three years.

80. Prices and Price Ranges

Agricultural products.—Mention has already been made of the fact that following the close of the War the prices of agricultural products declined. This decline deserves more attention.

During the War cotton prices reached the unprecedented height of more than a dollar a pound. Such prices were wholly artificial and had no relation whatever to costs of production or what they would have been in a normal market. Yet, these prices spinners actually paid, and they served to make an advance from which it was painful to recede. The average price of the 1865 crop was 83.38 cents a pound. The next year it was 43.20 cents a pound. From that point the price of cotton declined to 31.59 cents in 1867, to 24.85 cents in 1868, and to 16.95 cents in 1871.

PRICE CHANGES, 1867–1879

Year	*Product*				
	Mess Pork (barrel)	Wheat (bushel)	Fine Wool (pound)	Lard (pound)	Tobacco (pound)
1867	22.13¢	$1.27	68¢	14.5¢	10.6¢
1868	26.52	1.90	48	14.6	11.1
1869	31.64	1.39	50	17.8	11.3
1870	26.88	1.29	48	16.6	11.4
1871	16.46	1.32	47	13.2	9.2
1872	13.61	1.47	70	10.1	10.3
1878	9.77	1.34	44	8.8	8.7
1879	9.88	1.07	34	7.0	7.8

Manufactured goods.—Changes in the prices of manufactured goods following the War show wide variations. Cotton sheeting followed the price of raw cotton on its way downward. During the last year of the conflict this material sold as high as fifty cents a yard. Two years later the price had dropped half. In 1870 it was less than fifteen cents. After another six years it was less than nine cents. Pig iron and iron products suffered less radical changes. Between 1865 and 1867 the price per ton paid for pig iron dropped exactly two dollars from $46.12 to $44.12. Two years later it was $40.63. The price of cut nails varied from $7.08 a cwt. in 1865 to $5.17 in 1868, and $4.52 in 1870.

Disparity in prices.—All prices tended to decline following the close of the War, but at different rates of speed and for different distances. Farm products suffered most, and as a consequence the farmers found that, while they could buy what they needed at prices below those which prevailed during the War, because of a greater decline in the prices of what they had to sell, their purchasing power had decreased. As might be expected under the circumstances, those dependent on the land felt as a group that something was wrong and that it could be made right by governmental action.

81. The Railroad Situation

Growth and development.—The railroad, being comparatively new as an agency in economic production, grew and developed during and following the War in response to a demand for more and better methods of getting about and of transporting goods and merchandise at lower costs. During the War itself, when the energies of both sections were being poured out in an effort to win battles, the railroad mileage of the country—more particularly in the north and southwest—increased something like five thousand miles. The next few decades saw an even greater growth of miles laid down and under operation. In 1865 the country could boast of 35,085 miles of railroad. By 1870 the total length of such lines had reached 52,922 miles. In 1880 the mileage was 93,296; it reached 166,702 in 1890.

Public support of railroad building.—Many of these thousands of miles of railroad were built with money subscribed by counties, townships, and other local governing units; these

the Federal Government supplemented with gifts of vast areas of public lands. It will be seen, therefore, that the public had a financial stake in an industry vital to the welfare of the nation. Having such a stake, it claimed the right to a voice in deciding questions of railroad policy.

INCREASE IN RAILROAD MILEAGE
1860–1890

Section	*1860–1870*	*1870–1880*	*1880–1890*
New England	834	1,483	851
Middle Atlantic	4,224	4,604	4,922
Central Northern	5,118	10,408	11,817
South Atlantic	1,018	1,993	8,826
Gulf and Mississippi Valley	1,379	1,889	6,347
Southwestern	3,463	9,460	18,802
Northwestern	4,349	7,343	14,947
Pacific	1,911	3,194	6,889

The first railroad to receive a grant of public land was the Illinois Central. This land the Federal Government gave to the State of Illinois to be used in financing a railroad under such conditions as the State might impose. Many favored the revival of the State's old scheme of building and operating its own roads; a majority, however, mindful of the collapse of the internal improvement schemes of 1836, decided to turn the land over to a private corporation, retaining partial control of the road to be built. That was in 1851. Four years later the Illinois Central, then the longest railroad in the country, operated more than five hundred miles of main trackage. Later the Government, through grants of land and other subsidies, encouraged the building of trans-continental lines. The scandalous construction company known as the Credit Mobilier of America was involved in the improper manipulation of one subsidy.

The securing of local financial help involved a wide variety of procedure. Promoters went about the country picturing in bright colors the advantages communities might gain by being on railroad lines. Drab indeed was the picture they painted of the town that refused to pull itself out of isolation by subscribing to this or that scheme. Such pictures fired the imagination of the people and led them to vote bonds bearing high rates of interest and often out of line with their ability to pay. Pay

day did come in time, and with it came the feeling that the money thus voted had, in large part, been wasted.

Attitude of the railroads.—During the years under consideration, transportation rates on the railroads declined, but not as much as did the prices of some agricultural products; certainly not as much as farmers in general felt that they should decline. This feeling, whatever its basis, was generated and kept alive by designing office seekers, who stressed the fact to willing listeners that the railroads had been built with the aid of public money, and hence belonged to the people. Nor did these same orators fail to enlarge on what they called the domination of eastern capitalists in their ownership and operation. Thus, on a genuine basis of complaint general discontent was built.

Rates in themselves would have been sufficient to create rural unrest despite anything the railroads might have done. Added to the rate controversy, however, was what may be considered the unwillingness of the operators to carry on their business in a spirit of take and give. Railroad after railroad resorted to various devices to escape state control and regulation. When it suited their purpose they accepted such control and regulation; otherwise they denied the validity of laws drawn with those objects in view.

Interstate Commerce Act.—In time it became evident that the states could not control the situation. Legislators legislated but often to no purpose, because they had no legal control over interstate commerce. Even the farmers themselves took matters in their own hands. They boarded trains and refused to pay any fare above what they considered to be fair and reasonable. Such conditions forced the National Government to take action. The practical result was the Interstate Commerce Act of 1887.

This law set up prohibitions against certain railroad practices. It forbade pooling, discrimination, and a greater charge for a short haul than for a long haul. Under the Act the railroads were required to make their rates public. In its broad outline the Act recognized the interstate character of railroad transportation, thereby putting to an end, it was expected, the confusion under which local regulating bodies were forced to work. To give the matter effectiveness, the President of the United

States was empowered and required to appoint commissions with authority to carry the law into effect.

The idea back of the Interstate Commerce Act was commendable; the operation of the law during the years that followed its enactment was something else. The railroads themselves went out of their way to show their hostility toward any attempt to take from them what they considered to be their inalienable rights. In this attitude they had the support of those who looked on the regulation of transportation facilities by the National Government as going beyond the power contemplated in the commerce clause of the Constitution. Together they made up a bloc of no inconsiderable size, possessing much power politically and otherwise. For years the railroads—many of them—resorted to the courts for protection against the Commissions, and this they did with marked success, for the legal talent at the command of the roads was superior to that controlled by the Commission. Later, if we may anticipate, Congress and the President amended the law, and successfully, in a way to make it serve the purposes originally intended.

82. Indebtedness and Interest Rates

The farm mortgage situation.—One serious cause of unrest concerned the heavy load of farm mortgages being carried by land owners at a high rate of interest. The experience of a typical mid-western state reflects an experience as widespread as the country itself, and goes far to explain the presence of rural unrest.

In this state approximately one-fourth of all the improved farm lands carried mortgages to secure promissory notes given in exchange for a valuable consideration. Measured in the amounts of money involved, one-sixth represented deferred payments on purchase price and five-sixths outright borrowing. In the first instance the seller of the land was likely to be the mortgagee, in the second, some financial concern dealing in mortgage paper.

Curiously, the life of the typical mortgage at any one time was comparatively short, averaging, over a period of two decades, less than three years. Some of them, to be sure, those but recently drawn, had longer to run; also, some of them had maturities only weeks and even days ahead. Investigation shows

that the average life of the Middle West farm mortgage of the 70's and 80's was less than five years. (In the state under consideration it was exactly 4.39 years.) Holders of mortgages on these lands represented practically every state and several foreign countries. New York and Connecticut led in this respect, followed by Missouri, Wisconsin, Ohio, Indiana, Pennsylvania, and Massachusetts. The important consideration in this connection is that of all the farm mortgages given in the Middle-West, ninety per cent were held by non-residents. The interest rates paid, although they showed a decline after 1870, irritated borrowers. In 1870 the average interest rate paid on farm mortgages in one typical state was 9.436 per cent. Ten years later it was 7.608 per cent, and in 1887, 6.909 per cent.

Nature of interest.—Payments of money in the form of interest are contractual and hence fixed during the life of the debt. That is exactly what the farmers of the time discovered, much to their discomfort. They saw the prices of what they had to sell fall far below what they had once been accustomed to receive; they saw, also, some compensation to be had in the falling prices of what they had to buy. What they did not see, because it was not to be seen, was any change in the interest obligation they had assumed. This situation irked them and provided a common ground on which they could rally in an effort to get relief. During these years the going interest rate did decline, but the benefits arising from their decline applied only to new financing to which, in many instances, substantial commissions were added to the going interest charges.

Appearance of sectionalism.—The sources of the moneys lent to Middle Western farmers were factors in this agrarian unrest. As has been pointed out, a great many of the mortgages held on farms were in the hands of non-residents. Particularly heavy were the holdings in New York and other eastern states, where surplus funds had accumulated over the years. The typical mortgagor was well aware of this situation, and being aware of it, he came to have the feeling that the money interests of the East were exploiting him. In this feeling he was supported by office seekers of every stripe. Thus there was built up over the rural area of the West the belief that every mortgage holder was a modern Shylock pressing for his pound of flesh. On such a belief it was easy to build the firm conviction that the panic of

1873 and the hard times which followed could be traced to the ruthlessness of Eastern creditors in their dealings with the necessities of the farmers of the West and Middle West.

83. Marketing Needs

Seasonal variations.—Much of the agrarian unrest of the time can be traced to a lack of satisfactory markets for farm products. There were produce exchanges, such as the Board of Trade in Chicago, but as yet the intimate knowledge now possessed of carry-overs and pending yields was something to be worked out in the future. The world at large had no method for regulating, through price, the consumption of staple food crops today in relation to their expected volume tomorrow.

LOCAL WHEAT PRICES 1867–1885
(per bushel)

Year	*May*	*June*	*July*	*August*	*September*
1867	$3.20	$2.30	$1.93	$1.92	$2.13
1869	1.47	1.21	1.16	1.11	1.06
1872	1.93	1.70	1.26	1.28	1.43
1873	1.54	1.35	1.10	1.22	1.30
1876	1.06	1.03	.96	.93	.93
1881	.99	.96	1.03	1.14	1.36
1885	.99	.92	.82	.78	.74

The result was that in local markets prices tended to move not on the basis of expectation but rather on the basis of immediate stock in hand. The wheat ledger of a Middle Western miller illustrates this tendency. In 1867, to cite an extreme example, the miller in question paid for wheat during the month of May up to $3.54 a bushel; his lowest prices during July of the same year were $1.80 a bushel. We have in this instance a decline in the price of wheat, as we move from one crop to another, of $1.74 a bushel, a decline of roughly fifty per cent.

Geographical variations.—The food markets of the world lacked at the time the uniformness which they now enjoy. Information bearing on stocks in hand and on conditions of growing crops was exchanged by men from all parts of the world. What they lacked was the general acceptability of the telegraph, the telephone, and the radio. Millers and other buyers of wheat, for example, might, and often did, have some knowledge

of conditions elsewhere. Sellers, however, the farmers of the neighborhood, must rely at best on the printed page. Information in itself, however widespread, would have been of little help to many. The farmers living twenty miles from a railroad station would have taken little comfort from the knowledge that in Chicago or New York his corn or wheat commanded higher prices. This problem, therefore, presented two aspects. One had to do with a lack of general knowledge concerning world production of food crops, the other with transportation and its costs.

Commodity exchanges.—Conditions such as have just been described led to the establishment and development of commodity exchanges. These exchanges provided a market for various and sundry products, chiefly agricultural. Of these exchanges the Chicago Board of Trade is, and has been for more

VARIATION IN WHEAT PRICES
1877–1885

Year	*Country Miller* (Annual Range)	*Chicago Board* (Annual Range)	*New York Pier* (Annual Average)
1877	$1.05 to 1.69	$1.01 to 1.76	$1.43
1880	.76 to 1.09	.86 to 1.32	1.27
1881	.88 to 1.36	.95 to 1.43	1.31
1883	.88 to 1.00	.90 to 1.13	1.17
1885	.74 to .99	.73 to .91	.96

than ninety years, outstanding in its service to agriculture and in the volume of its trade. Organized in 1848, this institution has now, for almost a century, provided a market for corn, wheat, oats, and other grains, a market that might at any time prove unsatisfactory to a given buyer or a given seller, but a market nevertheless.

This exchange did much to even prices, but there remained for many years a disparity, which, in the light of modern experience, appears to be unnecessarily drastic. Nor does there seem to have been a close correlation between local prices and exchange prices. Having these facts in mind, the farms of the West and Middle West sought to solve their problems of marketing through agitation for legal regulation.

Warehousing.—The receiving of grain at central points and the storing of it for future use were in themselves natural de-

velopments. It was necessary, as a help to trading on an exchange, that great quantities of the grain in question should be accumulated against the day of its use. Accordingly, men of means and vision erected huge granaries, generally known as elevators, and at a cost, not always the same, they received such grain as might be hauled to their doors. Up to that point the operation of such an elevator was a private matter very much like operating a store or a farm.

Variation in storage costs necessarily brought about variations in returns on grain bought and stored. Then the question arose concerning the relation of one of these elevators to the general public. Here and there men of understanding took the position that the storing of grain was not altogether a private business; rather that it was affected with the public interest. Elevator owners took the opposite view. Then, in an effort to reach an agreement on principles, the courts were appealed to by both parties to the dispute. The ultimate outcome elated the farming interests of the country. In the farmers' case, *Munn vs. Illinois,* decided in 1876, the Supreme Court of the United States held that an elevator such as we have described must conduct its affairs with the interests of the public in mind. This decision was another step in the direction of removing the causes for the agrarian unrest of the West and Middle West following the close of the Civil War.

Chapter XXI

STRENGTHENING THE FINANCIAL SYSTEM

THE necessities arising out of the War between the States forced radical changes in the country's fiscal system. We have seen already how both contestants resorted to the printing of paper money and how, in an effort to coordinate the functions of banking, the North set up the National Banking System. Following the close of the War, Greenbacks continued as a money, while the National Banking System shared with state banking systems the task of giving security to deposits and of providing credits for the rapidly expanding industrial growth.

Many problems arose to plague the lawmakers of the time in their efforts to enact sound and logical money and banking legislation. The Greenback issue divided the people for years. One group desired to increase the amount in circulation; the other, to restrict if not to abolish it entirely. Also, there was a sharp division of opinion concerning the desirability of redeeming these notes in gold and of keeping them at that point by providing for day by day redemption of such Greenbacks as might be presented at the Treasury.

The effort to keep Greenbacks in circulation at depreciated value was but part of a larger movement in support of so-called cheap money. Debtors clamored for relief. Aiding and abetting this clamor were those who believed that economic prosperity depended in the main on a relatively large circulating medium of relatively small unit value. They agreed that cheap money and higher prices were to be preferred over dear money and low prices. What the debtor wished was a money unit inferior in its command over goods compared to the command which it possessed when he contracted the loan; what his supporter wished was a greater number of money units than would be possible on a gold basis.

Agitation for cheap money colored the political thinking of the time. This issue candidates for public office were forced to face as they went forth in search of votes. As might be expected,

these issues reached the floors of Congress, where, in detail, they were discussed from every possible angle. Some of the arguments advanced were sound; many smacked of demagoguery. Cheap money, it was held, would bring about widely conflicting results. It would ruin the country, insure prosperity, give the man in debt a chance for a new start, break faith with creditors, destroy long accepted ideas of value. Such arguments created confusion and for a time served to bewilder the people.

84. National and State Banking

The National Bank Act.—What is known as the National Banking System dates from 1863, when, in an attempt to stabilize the finances of the country, Congress and the President (Lincoln) enacted legislation designed to create banking institutions owned by individuals and operated by them according to certain regulations set up by the Federal Government. This was done only after long and thorough discussion, and then by a rather even vote in the two Houses—twenty-three to twenty-one in the Senate and seventy-eight to sixty-five in the House. In 1865 the same authority laid a heavy tax on state bank notes. This was done in order to give a monopoly of note issues to the national banks. Since that time the only bank notes in circulation in this country have been national bank notes and (since 1914) Federal Reserve currency.

Some provisions of the Act.—The National Banking Act, as originally passed and subsequently amended, provided, among other things, that:

1. five or more persons might organize such a bank,
2. the Comptroller of the Currency had discretion in granting and withholding charters,
3. the life of a charter should be twenty years,
4. the minimum capital should be fifty (later twenty-five) thousand dollars in cities under ten thousand population and one hundred thousand dollars in cities over that population,
5. the functions of such banks should be restricted to:
   a. discounting and negotiating promissory notes, drafts and other evidence of debt,
   b. buying and selling coin and bullion,

c. loaning money on personal security,
d. issuing bank notes,
e. accepting deposits.

6. each bank should deposit in the United States Treasury bonds to secure its note circulation.
7. each bank should have at least five directors,
8. each stockholder was to be held liable for his proportionate share of the debts of the bank plus an additional amount equivalent to the par value of his holdings.

Back of these and other equally important provisions lay the desire on the part of the National Government to provide trade and commerce with a banking system both sound and adequate. The requirements of five organizers and five directors, for example, was an effort to keep the individual bank from falling into the complete control of one man. Likewise, the discretionary power placed in the hands of a government official, the Comptroller of the Currency, while it might lead to abuse, seemed necessary in order to keep down undue competition and to prevent the establishment of banks where no need existed. The double liability feature, now no longer effective, was intended to guard bank customers against poor management on the part of those in control.

Of the many salutary provisions thus set forth in the Act, the one that was to prove to be the most significant dealt with the issue of notes. At that time, and for many years previously, the paper money in circulation came from state and private banks, many of which carried insufficient money for redeeming them. This the Act changed. The notes of National banks had back of them Government bonds held in the United States Treasury. As they circulated from hand to hand the receiver felt assured that on presentation he could get gold or silver in exchange, or, in lieu of coin, legal tender paper money. For many years these notes made up a respectable share of the total money stock of the country.

State and other banks.—Although the National Banking Act, as amended in 1865, taxed state bank notes out of existence, it did not destroy the banks themselves. During the years that followed both groups of institutions flourished. Many of the states, in fact, imposed regulations as strict in every respect as those

under which national banks operated; a few went even farther. In number the banks operating under state authority increased until in time they exceeded national banks two to one. Many of these state banks were known as trust companies, but in general they transacted business much on the order of state and national banks.

NUMBER AND CAPITAL OF BANKS
1864–1898

Year	*National Banks*		*State and Private Banks*	
	Number	Capital	Number	Capital
1864	467	$75,200,000	1,089	$311,554,000
1868	1,640	420,100,000	247	66,364,000
1875	2,076	501,600,000	1,260	90,929,000
1880	2,076	455,900,000	1,279	109,319,000
1887	3,014	571,600,000	3,156	227,526,000
1898	3,582	622,000,000	5,918	370,074,000

Along with these two legally authorized groups of financial institutions went a third group—private banks—some of which played an important role in the history of the nation. These banks developed certain aspects of business denied to their competitors. They brought about mergers in industry, underwrote bond issues, and assumed risks of ownership on a large scale. This they could do because of their freedom from certain regulations imposed by national or state authority. Well known names associated with this type of banking are J. P. Morgan and Company, and Kuhn, Loeb, and Company.

Concentration of deposits.—One feature of the national banking system concerned the designation of central reserve cities, three in number—New York, Chicago, and St. Louis. Into the banks of these cities, more particularly into those of New York, there flowed the idle funds of so-called country banks seeking investment, sometimes at an exceedingly low rate of interest. Such funds were loaned, in the main, to brokers and their customers, where they were permitted to remain until demanded for local purposes. In time, with the movement of crops, for example, these country banks called for their funds. Then the current began flowing back to the point of origin. Under ordinary conditions this flow back and forth created no serious problem;

occasionally, however, the central reserve depositories found themselves hard put to return on demand the deposits made by their country correspondents. Then the nation at large experienced a money stringency.*

85. Resumption of Specie Payment

Suspending specie payments.—During the early months of the Civil War, the Government, as well as private institutions, found it necessary to cease using gold and silver as a common medium of exchange. What actually happened was that the banks of the country, led by those of New York City, declared in December, 1861, that they could no longer pay out specie on demand; shortly afterwards the Government issued a similar declaration. Back of this decision stood many factors, some of which provided issues for acrimonious debate. We can well believe, without examining these factors in detail, that among the people there existed a general feeling of uncertainty concerning the outcome of the conflict.

The suspension of specie payments continued until January 1, 1879, a period of approximately seventeen years. During that time paper money circulated at something below its face value. Gold was bought and sold on a shifting market, its price rising and falling very much as the price of wheat rose and fell during the same period of time. In the gold room of the New York Stock Exchange buyers and sellers gathered daily to bargain, the price at any moment being a reflection of the demand for the metal measured against the available supply. An attempt by Jay Gould and James Fisk to control the supply resulted in a panic and has caused the day of its occurrence, Friday, September 24, 1869, to be referred to as Black Friday.

Greenback agitation.—In 1864 an act of Congress provided that the amount of Greenbacks in circulation should never exceed four hundred million dollars. Two years later a reduction in the amount was begun. After retiring $44,000,000 of them, Congress, in 1868, reversed itself by prohibiting further reductions. One action of the lawmakers pleased some of the people; an action in the opposite direction pleased others. What divided these two groups was a difference of opinion concerning the

* Such a stringency occurred during the panic of 1873, Selection 55, and again during the panic of 1893, Selection 56.

proper amount of money to be kept in circulation and its value per unit. At one extreme were those who would return, as soon as possible, to the use of gold and silver as money; at the other, those who would use paper money exclusively and issue it lavishly. In between stood the majority of the people, uncertain as to the best course to take, and at times bewildered.

The Resumption Act of 1875.—When Congress convened in December, 1874, the question of resumption was again raised and once more it was debated in detail. Two months later, that body sent to the President for his consideration a bill which its sponsors hoped was a final answer. This bill the President approved. It provided (1) for the gradual retirement of Greenbacks until the amount in circulation should reach $300,000,000 (2) for the substitution of silver coins for fractional currency, and (3) for removing all charges formerly made by the mint to convert bullion into coin. Its chief provision had to do with resumption, for the Government had pledged itself to begin, on January 1, 1879, the redemption of Greenbacks at their face value in gold. To insure a sufficient quantity of the precious metal, the bill authorized the Secretary of the Treasury to use such surplus as he might have in his hands and, if necessary, to borrow on the credit of the United States Government.

The immediate effect of this particular bit of legislation was to raise the value of Greenbacks toward par. When the war came to an end in 1865, one hundred dollars in Greenbacks could have been bought for $49.50 in gold. Five years later $81.10 in gold would have been required in making the same purchase. At the time of the resumption legislation (1875) Greenbacks were worth about 88 cents on the dollar. The next three years saw this figure advance gradually, par being reached on December 17, 1878, exactly two weeks in advance of the day set for redemption.

For a period of time extending over sixteen years, the holders of Greenbacks had demanded that they be redeemed in gold on presentation. Now the Government was in a position to meet that demand. On the first day of the year (1879) numerous financial institutions over the country stood ready to exchange gold for Greenbacks at their face value. Curiously, practically no one cared to take the trouble to ask for the exchange. The ability to get gold for Greenbacks removed the preference of one

over the other as a money. For ordinary business transactions, the two (gold and Greenbacks) were exactly alike.

86. Cheap Money Agitation

The Greenback movement.—The question of resumption was one of public policy. Necessarily, then, in order to determine what was best to be done it must be placed before the people for their consideration and decision. Congress did, in 1875, provide for the redemption of Greenbacks at par, but not without a great deal of opposition on the part of those who held to the principle that many monetary units of low value were to be preferred over fewer units of greater value. The next year this opposition organized itself into a political party known as the Greenback. Its leaders, reflecting the feeling of the rank and file, demanded: (1) the repeal of the law providing for the resumption of specie payments on January 1, 1879; (2) the issuance of legal-tender notes, convertible into bonds bearing an annual interest rate of not more than 3.65 per cent; (3) retirement of all bank notes; (4) withdrawal from foreign markets all gold bonds issued by the Government.

The maiden effort of this new party to make itself felt in national politics took place in 1876, with results that must have been discouraging even to the most optimistic of its leadership. In that year it polled exactly 81,740 votes. Two years later, however, its combined votes in the election of members of the Lower House of Congress exceeded one million. Two years later it was 308,578. In 1884 it was 175,370. This election marks the death of the Greenback Party movement. The Labor Party took over its demands for a cheap money, and later these demands found their way into the platform of the Populist Party.

The free silver movement.—The Greenback Party grew to a formidable size and then declined and passed out of existence without answering in a satisfactory fashion the questions involving the inflation of the currency. Those who held the view that the economic ills of the country could be cured by adding to the medium of exchange continued to agitate. To that end, old line Greenbackers, in an effort to win the support of the voters, affiliated themselves first with a labor party and then with farmers. The combined forces took up the cry for the free and un-

limited coinage of the silver dollar. They pointed to the "Crime of '73" as a plot on the part of creditors to keep the unit value of money high. The contention was always the same; what the country needs most is a plentiful supply of currency, whatever its power to command economic goods.

87. Monetary Legislation

The Crime of '73.—The crime to which the advocates of the coinage of the silver dollar referred was, in itself, nothing more than failure on the part of Congress to include the silver dollar in the coins to be minted. In a report on the provisions of the proposed law, the statement was made that the coinage of the standard silver dollar was to be discontinued. "If, however, such a coin is authorized went on the report it should be issued only as a commercial dollar, not as a standard unit of account and of the exact value of the Mexican dollar, which is the favorite for circulation in China and Japan and other oriental countries."

Silver coinage to 1873.—At the time of the enactment of the "Crime of '73" no silver dollars were being coined. The simple

VALUE OF SILVER
1840–1896

Year	*Commercial Ratio*	*Value of Silver in Dollars*
1840	15.62 to 1	$1.023
1845	15.92 to 1	1.004
1850	15.70 to 1	1.018
1860	15.29 to 1	1.045
1870	15.57 to 1	1.027
1875	16.64 to 1	.961
1876	17.75 to 1	.900
1877	17.20 to 1	.930
1878	17.92 to 1	.892
1890	19.75 to 1	.809
1893	28.49 to 1	.604
1896	30.59 to 1	.523

truth is that none had been coined for many years. Two decades later, when the advocates of free silver were crying for a return of the dollars of their daddies, it was unlikely that many of the said daddies had ever seen a Standard United States Silver Dollar. The reason back of the situation is clear; silver was under-

valued at the mints. According to law, one grain of gold was worth approximately sixteen grains of silver; trade and commerce fixed the ratio higher, in the neighborhood, let us say, of one to fifteen and a half. The man possessing silver bullion would have been foolish indeed to surrender it to the mints for one-sixteenth of its weight in gold when by going into the market he could get more than that amount.

The Bland-Allison Act.—Whatever the merits of the agitation for the remonetization of silver, Congress, in 1878, enacted a law, in the face of presidential (Hayes) veto, that required the Secretary of the Treasury to buy each month silver bullion to the value of two million to four million dollars, and to coin it into dollars weighing 412.5 grains each nine-tenths fine.

Under this Act, the Secretary of the Treasury purchased a little more than three hundred million dollars worth of silver, out of which nearly four hundred million dollars were coined. The difference represented a profit known as seigniorage; this the Government retained. Despite the effort of administrative officials to put these dollars into circulation and to keep them there, they early formed the habit of finding their way into the sub-treasury. Paymasters and other disbursing officers paid them out for supplies and in the form of salaries; receivers deposited them in banks, which in turn sent them back to the Government. In 1886, Congress authorized the issue of silver certificates in small denominations, $1, $2, and $5, and in doing so solved the problem, for the people, while unwilling to use heavy silver dollars in their daily business transactions, had no prejudice against a form of paper money bearing the power to pay the holder silver dollars on demand.

The Sherman (Silver Purchase) Act.—Twelve years after the passage of the Bland-Allison Act, Congress again took up the question of purchasing silver bullion and turning it into coins. After lengthy debate in both Houses, the lawmakers of the country enacted a law (July 14, 1890), in which a radical departure was made from previous legislation. This law provided for monthly purchases of four and one-half million ounces of silver bullion and for payments to be made in treasury notes of full legal tender. The significance of this change in policy is that the Government undertook to buy more than fifty million ounces of silver a year with obligations that could at the discretion of the

Secretary of the Treasury be redeemed in gold coin. In other words, the emission of treasury notes to be used to buy silver was, in principle, the same as paying with Greenbacks bearing on their face the promise to exchange gold for them on presentation at the Treasury.

WILLIAM JENNINGS BRYAN

". . . shall not crucify mankind upon a cross of gold"

88. GOLD VS. BIMETALLISM

The silver agitation continues.—The production of silver bullion continued to expand. New mines were opened and old ones operated more efficiently. During the decade 1861-1870 the total production of the metal was 77,924,000 fine ounces; the next decade saw it rise to 278,764,000 ounces; the next, to 414,660,000 ounces. The producers of silver pressed the Government to buy greater amounts and pay higher prices. In this they

were supported by those who would profit, or thought they would profit, through an increase in the number of monetary units in circulation regardless of their value. Altogether they made up a formidable group, and in Congress they controlled a bloc as vocal as it was militant. Chief strength was in the mining states of the Far West, in the agricultural sections of the Upper Mississippi Valley, and in the South. Throughout these areas the paramount issue was, for many years, the coinage of silver, both unlimited and free.

The culmination of this agitation came with the presidential campaign of 1896. The forces back of "free silver" united in the support of William Jennings Bryan, a native of Illinois, but, at the time of his nomination by the Democratic Party, a resident of the State of Nebraska. This nomination split the Democrats into two camps, one advocating the adoption of a bimetallic money standard, the other a single gold standard. Thus the election of that year was rather sharply drawn with political lines cutting across the old parties. The Democratic ticket was Bryan and Stephenson; the Populist ticket, Bryan and Watson; the Gold Democratic ticket, Palmer and Buckner; the Republican ticket, McKinley and Hobart. After a spirited campaign, in which issues other than free silver were discussed in detail on the stump and in the press, the Republican candidates were elected.

An understanding of this contest requires some knowledge of the events that led up to it. In March, 1893, President Cleveland commenced his second administration. Five months later, Congress convened in special session to consider how best to solve one of the financial problems that pressed the country. Once more the doors were open to a thoroughgoing discussion of the principles underlying bimetallism, and of ways and means to give these principles effectiveness. The House of Representatives voted within the month to repeal the Silver Purchase Law of 1890. In the Senate, however, where the smallest state in the Union stands on an equal footing with the largest state, the matter was not so easily settled. There the advocates of continuing the policy of buying silver advanced every argument at their command to maintain conditions as they had been since 1890. Finally, on October 30, by a vote of 43 to 32, that body concurred in repeal. From that point the supporters of free coinage carried their cause to the people.

Adopting a gold standard.—The people appeared to have spoken in 1896, when, at the end of a bitterly fought political campaign, they elected McKinley on a platform pledged to support a single gold standard. Less vocal, but not less effective, was nature itself. Gold discoveries in Alaska led to an increase in the production of that metal, with an accompanying decline in its power in making purchases of commodities. This decline lessened the demand for cheaper money, and with this demand went the opportunity on the part of office seekers to keep the issue alive for political purposes.

PRODUCTION OF GOLD IN THE UNITED STATES

1866–1870	12,226,000 fine ounces
1871–1875	8,826,000 fine ounces
1876–1880	10,301,000 fine ounces
1881–1885	7,730,000 fine ounces
1886–1890	8,078,000 fine ounces
1891–1895	9,107,000 fine ounces
1896–1900	15,729,000 fine ounces
1901–1905	19,394,000 fine ounces
1906–1910	22,993,000 fine ounces

In 1900 (March 14) a gold standard was set up by law. This law embodied three outstanding features. First, gold was declared to be the standard money metal; second, the National Banking System was extended to smaller communities and smaller institutions; third, the public debt was refunded in bonds bearing lower rates of interest. This measure was in some ways a compromise between the gold controlled House of Representatives and the silver controlled Senate. It proved effective, however, and laid low for a generation and more the troublesome question dealing with the use of silver as a standard money metal.

Chapter XXII

THE PROBLEMS OF INDUSTRY

THE momentum given to industry by the demands of the War continued with interruption here and there, until by 1900 what had once been an agricultural nation was now predominantly industrial. Agriculture had not gone back; rather had it expanded with the settlement of vast areas of what were once public lands. It had, however, declined relative to industry; manufactures and trade, instead of engaging a little more than one-fourth of the workers of the country as in 1880, gave employment to two out of every five of them.

With the growth of productive processes in the cities went a tendency on the part of processors to join forces in order to gain advantages wherever possible. Such a tendency was monopolistic in character, and in time it generated a feeling among the people that it should be curbed. This feeling found its way to the floors of legislative halls where the whole subject of trade practices was reviewed and examined. From these discussions came the decision on the part of lawmakers to put an end to what was regarded as industrial combination in restraint of trade.

The courts and Congress destroyed the original trusts; later the term came to apply to combinations whose only resemblance to the trusts already dissolved was in size and in the methods employed to destroy competition. These combinations continued until in hundreds of industrial fields a small group of men in each controlled the conditions under which it was conducted. This is known as the trust movement.

The industry of this period was characterized by large units of production and by functional division of labor. Plants grew to enormous sizes. In their operation they employed vast capital and great armies of workers. With their productive resources they found it possible to reduce the labor of each man to a relatively few movements and thereby turn out a large volume of goods at a low price per unit. This was their chief contribution to the development of American industry.

With every forward step taken by industry, the question of giving manufactures protection through the imposition of import duties became more important. After 1880 the paramount issue in most political campaigns was the protective tariff. On this issue presidents were made and unmade, congressional debates joined, and our foreign relations determined. It was a period of tariff controversy in which the best minds of the nation took leading parts.

89. Growth of Industry after the War

Making readjustments.—We have noted already how at the close of the War industry faced the necessity of adjusting itself to conditions of peace. This was done but not without laying a heavy burden on producing plants of all kinds, particularly on those which had sprung up to meet demands for war goods. In due time, as always, the industries one by one found a norm from which they could begin a steady progress upward.

A post-war inventory.—Within five years after the close of the War, industry had regained lost ground and had climbed to a point far above where it had been a decade previous. In 1869, for example, the number of manufacturing establishments in the United States exceeded that of 1859 by eighty per cent. During these ten years the body of workers had grown from less than fourteen hundred thousand to more than two million, the capital employed from one billion to one billion seven hundred million dollars, the wages paid from $378,897,000 to $620,467,000, and the value of output to a billion and five hundred million dollars. Especially significant in this connection was the relatively large growth in the number of establishments operating and the aggregate value of their products. Over against an increase of eighty per cent in these two aspects of the industry, the working force increased but fifty-six per cent, the capital but seventy per cent, and the wages paid but sixty per cent.

Twenty years of growth.—Even greater was the growth of manufactures after 1869. During the twenty years that followed, old establishments expanded and new ones sprang up. Some continued old and well known kinds of merchandise; others struck out along new lines in an effort to meet new wants. During these years the inventive genius that had stimulated improvements in processing while the nation was yet young carried Amer-

ican industry to new heights. It is to be noted that the rate of growth of the number of establishments lagged behind the rate of growth in number of workers engaged and the wages they received, in the amount of capital employed, and in the total value of output.

GROWTH OF MANUFACTURES
1869–1889

Year	*Establishments*	*Workers*	*In Thousands of Dollars*		
			Capital	Wages	Value of Output
1869	252,148	2,053,996	1,694,567	620,467	3,385,860
1879	253,852	2,732,595	2,790,273	947,954	5,369,579
1889	355,405	4,251,535	6,525,051	1,891,220	9,372,379

The meaning of all this is that the size of the average establishment grew, thereby permitting these relatively larger increases in number of employees, amount of capital, and in value of output.

Specialization in manufactures.—As manufacturing plants grew in size they found higher and higher degrees of specialization possible. The furniture factory, for example, could, with an increased output, confine its attention to one or at most a few pieces of furniture. Instead of manufacturing tables, chairs, desks, and beds, it turned to specializing in a fewer number of products. It took up chairs, perhaps, with the result that in time its volume of output far exceeded what it had once been, and the variety which it offered to the buying public was wider than ever before known.

Specialization led to a superior product at a reduced price. Workmen, instead of performing many tasks in the making of a given article, could now devote themselves to one or two of them, thereby acquiring a skill that would have been impossible at an earlier day. The shoemaker no longer made shoes; he spent his time and effort on some particular part of a shoe. So it was with the tailor, the lathe worker, the watch maker, the machinist, and their kind. All this was possible because of improvements in machinery, which helped in two ways. First, they gave speed and precision to fabricating processes. With them an operative could turn out a product superior in most ways to the best he

could do "by hand." Moreover, with an increase in the volume of production, expensive machines were profitable in performing what had once been relatively unimportant but expensive functions. A wagon factory, for example, might employ with economy a thousand dollar machine to take over operations formerly costing but a few cents each when carried on by working with hand tools. It is understood, of course, that the number of such operations for the life of the machine must be relatively large.

Localization of industry.—A variety of causes combined to force industry in the direction of localization, and to these causes we have already given some attention. During the last two or three decades of the nineteenth century this movement continued with increased acceleration. Steel centered about Pittsburgh, more and more the production of textiles characterized New England industry, Chicago's packing establishments grew. Much was heard of stove cities, furniture cities, boot and shoe cities. Later we had automobile capitals, rubber capitals, and flour milling capitals. All of this means that in general the advantages to be had by one establishment of an industry in any particular location could be and were to be had by other establishments in the same industry. Whatever benefited one of them—markets, labor supply, source of raw materials, climate—benefited all of them. This localization of industry colored the political thinking of the times. New Englanders favored legislation designed to protect their major industry. New Yorkers regarded their industries in exactly the same way. Whatever the state or section or industry the people gave preference to those industries near at home in their efforts to stimulate business through political action. The result was that in drawing up tariff schedules intended to give protection to manufactures, members of Congress found it necessary to "trade and swap" until a majority could be had in support of the measure in hand. With this situation in mind a presidential candidate dared make the public assertion that the tariff was a local issue.

90. Monopolistic Tendencies

Destruction of free competition.—As an industry comes to be more and more localized and more and more specialized, it tends to fall into the hands of fewer and fewer persons. These persons, having common interests to serve, find the way open to

agreements of various and sundry kinds.* They can agree on volume of output, on the price to be asked for their product, and on the wages paid their workmen. Against them competition works with a handicap. They have a monopoly on the industry in question and on its product.

This happened during the generation following the close of the Civil War. Individual plants grew, and as they grew, they found that through specialization they could produce on a larger and larger scale with their workmen using machinery to turn out units at a progressively lower cost. Competition thus overtaken fell by the wayside.

Nature of monopoly.—The usual objection voiced against monopoly in industry is based on price. Many critics among the uninformed assume that a monopolist can and will, if unchecked, set any price on his output that meets his fancy. That, of course, is a false assumption on two counts. He *cannot* do such a thing because he has no control over demand; he *will not,* because to do so might bring him loss rather than profit. What he does is to set the price at a point, whatever its height, to bring to him the largest possible net profit.

General attitude toward monopoly.—Too often the price set by a monopolist, while it may very well be lower than would be necessary to move a large volume of his output, is high enough to cause criticism on the part of the public. This attitude is not a new one by any means, for throughout the centuries governments have endeavored with indifferent success to prohibit forestalling of every description.

The first general outcry in the United States against monopoly began with a whisper in the 80's, and during the decade that followed it increased in volume until a time it could be heard above every other voice. Certain conditions, as has already been noted, prompted the outcry; the success of designing politicians in capitalizing the situation gave it added strength.

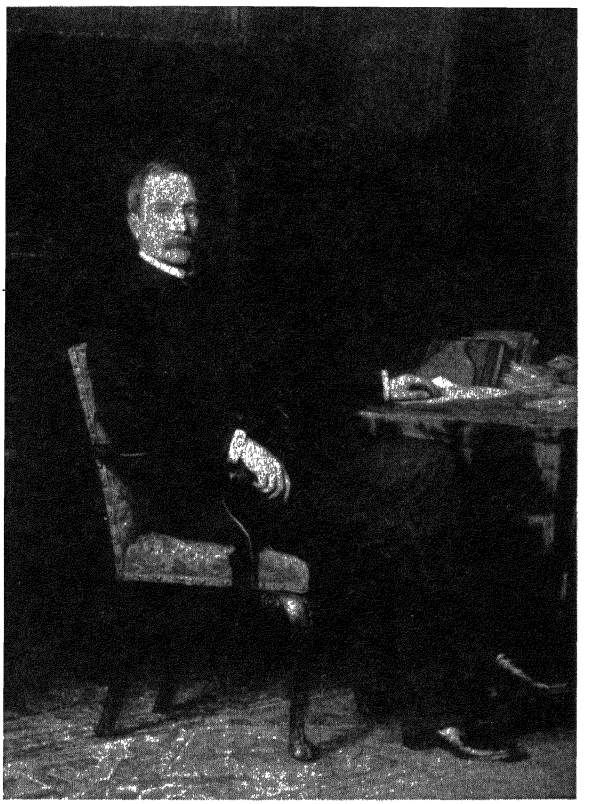
91. The Trusts and Trust Legislation

The Standard Oil Company.—The original trust dealt in the creation and marketing of oil products. During the early years of this industry countless small operators engaged in the recov-

* Some of these agreements and the progress of the combination movement are discussed in Selection 57.

ery of crude oil and its preparation for use. This they did at great risk, for at best it was a hazardous business, breeding in those that engaged in it an attitude of unconcern toward slow but steady progress.

One of these operators was the late John D. Rockefeller, Sr., then a young man and a resident of Cleveland, who in enterprises



JOHN D. ROCKEFELLER
Personification of big business

of a different nature had shown a marked ability to organize and direct business affairs. Unlike his associates, he saw the gain to be had from combining competitors in the oil industry. From a small beginning he climbed to great financial heights. His first step was to surround himself with a group of able young men in whom he had implicit confidence and who on their part believed in their leader.

Mr. Rockefeller organized the Standard Oil Trust, usually re-

garded as the first of its kind in America. This organization was called a trust, because a small number of men acting as trustees controlled the properties brought together as a Company. This they were able to do, because as a group they held in trust the stocks of the different oil concerns once competitors but now under a single management. They did not own the Standard Oil Company as we usually think of owning a piece of property; rather they administered its affairs. In setting up the trust they had exchanged for the stock they now held in trust a certain type of receipt known as a trust certificate.

From the very beginning the Company earned liberal profits for its owners. This it did by keeping down what its organizers called unfair competition. It regulated the flow of wells, refined only such oil as was needed, and through price reduction discouraged the entry of new capital into the field. Some idea is had concerning what happened when it is known that in 1870 the original Standard Oil Company was one of two hundred fifty such organizations and was doing about four per cent of the oil business, whereas later it did about ninety-five per cent of the business. Its trustees allocated profits on a predetermined basis among those who held trust certificates. Other lines of enterprise, seeing the success of the Standard Oil Company, formed trusts of their own. Two such organizations were the Distillers' and Cattle Feeders' Company (Whiskey Trust) and the Sugar Refineries Company (Sugar Trust).

Dissolution of the trusts.—Once the people came to a full realization of what was going on they moved to have competition restored by dissolving the trusts through court action. Chief interest centers in the Standard Oil Case. Both sides employed learned counsel; neither side left anything undone to insure victory. Government attorneys argued against the morality as well as the legality of permitting monopoly in American business. They combed history for precedent in support of their arguments, and in this respect they met with a fair degree of success. After listening patiently to both sides—the Government and the Company—the Courts ordered the Standard Oil Company trust dissolved. Since that time no trust, using that term in its original sense, has existed in the United States.

Developing a new type of trust.—After the dissolution of the trusts as such, the term trust came to have a wider meaning. It

then applied to "big business" regardless of its type of organization. The Standard Oil Company being required to break itself up into its original units, Mr. Rockefeller and his associates merely united them into a single gigantic corporation, without losing apparently any of the trade advantages they had once enjoyed. Its form the Court had changed; its spirit remained. Under the old order the companies retained a semblance of independence; now they were merely operating units of a single company.

The success of the reorganized Standard Oil Company stimulated other industries to undertake consolidation. The result was that within a decade practically every production field in the country was so organized. In the language of the street, American business men had gone "trust crazy." During the earlier years of this movement the idea developed that large size guaranteed success. Such a belief millions of men held. Under these circumstances high-powered promoters met little difficulty in finding investors in the stocks of these newly organized companies. They pointed to the success of those already in the field, and, in glowing terms, predicted even greater success for those to follow. This went on until in 1903, with the failure of the ship building combination, came the realization that size alone was no guarantee of success. At that time the trusts already organized numbered eight hundred, with a combined capital aggregating twenty billion dollars. Of these, the largest was the "Steel Trust" with a capital of $1,402,000,000.*

Regulation of the Trusts.—Already Congress and the President (Harrison) had given serious attention to combinations in industry that might lead to monopoly. In 1890 the Sherman Anti-trust Law became operative. In enacting this law those who supported it had in mind to do something that might prevent undue restraint of trade.

Curiously, this law, while it had been enacted in the firm expectation that it would cure the evils of monopoly, remained inoperative for years. Opinion differed as to its application. No one seemed to know in detail just how its various provisions might be carried out in the spirit in which they had been written. Even more curiously the first important case to be decided under

* The formation of the Steel Corporation is described in Selection 58.

the Sherman Anti-trust Act laid a heavy penalty on organized labor. Under its provision, the hat makers' union of Danbury, Connecticut, was convicted of unfair restraint of trade and fined in a sum equal to three times the damage claimed by the employers of the union members. Later, if we may run ahead with our story, the original act was amended (1903) so as to make prosecution easier and more effective. Eleven years later another amendment (the Clayton Act) set up certain important exceptions and without destroying the purpose of the Act itself.

Economic justification of big business.—No one socially minded can support a policy of an industry, whatever its size, in restraining freedom of trade. As long as an industry consists of many small units, little or nothing is ever said about the possibilities of its becoming monopolistic. When, however, through growth or consolidation, a single management comes into control of a sizable share of the business, it is viewed with a suspicious eye. Large scale production and monopoly, therefore, may be and are often regarded as the same thing.

We have seen already how large production units can effect economies denied to small ones. They can specialize to a high degree, buy raw materials to advantage, and save materially in selling expenses. These economies, when passed along to the consumers of their products, are socially beneficial; when, however, they are retained through monopolistic methods by the producers, they become a tribute levied on the consuming public.

One justification usually urged in defense of the large industrial unit is that it alone can compete in world markets. Two generations ago the typical American manufacturer found himself unable to compete on even terms with Europeans manufacturing goods of like quality. He lacked capital, and lacking capital he could not extend as favorable credit to customers as did his foreign competitors. This same lack of capital prevented his taking advantage of large scale production, forced him to forego the use of machinery in many of his operations, and limited his ability to build a sales agency with an international point of view. The trusts as they operated changed all this. With the economies that came from large scale production and with the advantage of unlimited funds he could and did compete on even terms in the markets of the world.

92. The Protective Tariff—Economic and Political

Agitations to reduce tariff rates.—The War came to an end in 1865, but the War tariff legislation in effect at the time continued with slight modifications for many years. In 1872 the rates were reduced ten per cent, but, with the coming a little later of a nationwide depression, they were restored to the old level. Later (in 1883), after prolonged debate, both protectionists and free traders maneuvered their forces for the battle that must eventually come between two principles so much unlike—one principle supported by a major political party, the other, by a party equally strong.

President Cleveland's position.—In 1884 the Democratic Party elected its first presidential candidate after James Buchanan, and this it did on a platform to revise tariff rates downward. Congress, although Democratic and hence a free trade Congress, paid little attention to President Cleveland's demand made during the first year of his first administration that something be done and done at once to meet the pledges made during the campaign. The Democratic House of Representatives and the Republican Senate appeared to be satisfied to leave matters as they stood. The President had other views. Accordingly, he devoted his entire annual (1887) message to the question of tariff rates. Such a bold innovation jarred the lawmakers out of their complacency, with the result that they set about at once to give the tariff major consideration.

Battle of giants.—President Cleveland's startling message was the signal for battle along a far flung front where words took the place of bullets, and parliamentary maneuvering the place of military strategy. On one side stood William McKinley of Ohio, Thomas B. Reed of Maine, William D. Kelly of Pennsylvania, and Julius Burrows of Michigan. These men were ardent protectionists. Opposed we find Samuel S. Cox of New York, John G. Carlisle of Kentucky, Benton McMillen of Tennessee, and William L. Wilson of West Virginia, all pledged by public utterances to work to lower tariff rates.

Unfortunately the political situation led to an impasse insofar as tariff legislation was concerned. The Senate was Republican; the House, Democratic. In the Upper Chamber the politics divided the members 39 to 37; in the Lower Chamber, 168 to 153.

Despite this failure to bring about legislation, President Cleveland's message performed a valuable public service. It called the attention of the people of the country to the need for reexamining the whole principle of protecting certain industries with tariff walls, and showed the opposition that to dilly-dally further might mean the loss of political control.

Out of these debates over the principle of protection came political issues of national significance. Each side solicited the support of the people, the Democrats with President Cleveland as their standard bearer; the Republicans supported Benjamin Harrison. The election of 1888 was as close as it was exciting. Harrison received a majority of the electoral votes cast and was, therefore, elected President of the United States. Cleveland, while losing the election, polled more popular votes than did his rival.

McKinley Tariff Law.—When the Republicans returned to power with Harrison's inauguration in 1889, they had a majority of two (39 to 37) in the Senate, and in the House a majority of seven (166 to 159). Accordingly, they set about to revise the tariff rates, not downward, as President Cleveland had urged, but upward to a point where protection would become more effective. William McKinley, the Chairman of the Ways and Means Committee of the House, brought forward a bill embodying a high degree of protection. Against it the Democratic members of both houses fought, but to no avail. This bill, after being modified, passed Congress in 1890 and received the approval of the President. Of the many provisions of this bill, the two most important ones concerned an import rate on tin plate and a liberal bounty to be paid to domestic producers of sugar.

Following closely the passage of the McKinley Tariff Bill came one of those political reversals characteristic of popular government. The Democrats swept the election, returning 236 members of the Lower House out of a total of 324. Even Mr. McKinley failed of reelection. Two years later the Democrats won their second presidential campaign following the Civil War, placing in the White House for a second term the man who had occupied it during 1885–1889, Grover Cleveland.

A free trade tariff.—Victory in 1892 was accepted by a Congress heavily Democratic in both Houses as a mandate from the people to lower the rates on imports. The result was the Wilson

Act, named after the Chairman of the Ways and Means Committee of the House, William L. Wilson. This law pleased nobody. Its sponsors hardly recognized it as the bill which they had introduced. Its tortuous journey through the pitfalls of local interests had robbed it of its vigor and left it but a shell of its old self. So unsatisfactory was it that when it came to his desk President Cleveland refused to give it his approval. What he did do was to permit it to become a law without his signature.

The outstanding feature of the Wilson Act was the provision for an income tax. Such a tax had been tried out during the Civil War as a means for raising money in an emergency, but now for the first time Congress adopted it as a permanent source of revenue. Later the Supreme Court of the United States declared this section of the law unconstitutional, the Court's decision resting on the declared purpose of the Constitution as then written that taxes levied directly on the people should be according to population and not wealth or income.

Restoration of protection.—For a second time within three years the people of the country reversed themselves on the question of tariff rates. In 1894 they returned heavy Republican majorities to both Houses, most of whom had been elected on the promise to support higher rates. Unfortunately for the success of the Wilson Act, its enactment accompanied the beginning of a major depression. The people, in most cases being unable to determine the relation between the two, were easily led to believe that the law was the cause of the depression. Believing this they supported at the ballot boxes those who favored modification of the law.

The election of 1896, while it involved different major issues, was in reality a victory for high protectionists. Much had been said by the victors during the campaign about the need of restoring smoking chimneys and full dinner pails. Having won on that platform they faced the necessity of making their promises good. In 1897 a new law known as the Dingley Tariff Act became effective. It carried protection to a point never before known in this country.

Thus, over a period of less than a decade, Congress passed three comprehensive tariff laws all apparently in response to demands on the part of the people. These laws differed radically in their purpose; perhaps the people were confused.

Scientific tariff making.—Any one of the three tariff laws passed during the last decade of the nineteenth century was little more than a hodge podge. It represented compromise pushed to the nth power. Some of the advocates of protection had an abiding interest in the subject; others voted the wishes of influential groups among their constituents; others had an eye on future elections. In any case the supporter, whatever his general attitude toward the principle of protection, had in the main, no interest in any of the bill's provisions except those which affected his district.

It was in an effort to put an end to such methods of constructing tariff schedules that Congress in 1882 provided for a Tariff Commission. The chief duty of this body was to view the country as a whole, not from any single angle, and to suggest methods to be employed in framing tariff legislation on a comprehensive basis. The Commission viewed and it suggested. Much of the value of its report was overtaken and destroyed by the fact that the Chairman of the Commission was a recognized leader in the wool industry, and hence in the minds of many a prejudiced investigator. Later other Commissions were set up and put to work studying the tariff scientifically. A discussion of their contributions to scientific tariff making must be deferred.

Arguments for protection.—During the twenty years from 1880 to 1900 every conceivable aspect of the tariff question was discussed thoroughly by men qualified to speak. These men treated the matter historically, beginning with Hamilton's Report on Manufactures. They reexamined Clay's home market argument; they subjected the high wage theory to known facts. Above the clamor of the demagogue seeking office they made themselves heard by those who sought truth. From a purely economic point of view the so-called free trader had the advantage. He took the high ground that a nation penalizes itself when it refuses to do those things which it can do best, depending on its neighbor for goods to be produced at home only at a relatively high cost. Against such logic the friends of protection brought the nationalistic theory of self-sufficiency. They argued, and with effect, that no nation, whatever its position in the world of politics and finance, can afford to neglect at any cost those industries necessary at all times to the safety of its people.

Chapter XXIII

THE ORGANIZED LABOR MOVEMENT

AMONG the social and economic phenomena of the nineteenth century, none exceeds in importance the growth of the organized labor movement. Back of this growth are to be found factors involving sordidness as well as altruism. At first only a few leaders seemed to see the way to be followed; with the passing of time mass thinking reached the point where the demands of the leaders became established principles.

In arriving at a satisfactory method for giving unity to the demands of labor, the trial and error method was used, with error giving way for something better. The independent union was the first to enter the field; then came the Knights of Labor; the American Federation was the third to enter the field. These organizations differed in some respects, but in other respects they had much in common. They had the same general objective —the improvement of the lot of the laboring man. Disagreements arose over the best methods to be employed in reaching these objectives.

What they had in mind in particular had to do with wages, hours, and conditions of labor. The worker himself generally regarded his wages as being too low and his working day too long; he was part and parcel of his working conditions. Such a state of mind, multiplied many thousands of times, gave solidarity to American labor and strength to its voice of protest against the social and economic position it held. Out of all this came strikes, boycotts, and even rioting. Labor was militant and on the march; it would not be denied.

The attitude of society in general was for a long time mildly hostile, then acquiescent, and finally sympathetic. As organized labor pushed forward in its battle against intrenched opinions based on conditions gone never to return, it made many mistakes but never lost its objectives. Win or lose, it consolidated such positions as it might hold and made plans to win new ones. An important factor in this success was its leadership.

Portions of the program of organized labor ran counter to long established legal concepts in which the human element played no great part. The result was that for many years the courts, while not always hostile to labor's program, checked progress in a way distasteful at times to the friends of the movement. We can say, however, that despite the mistakes of its leaders and in the face of forces as hostile as they were powerful, organized labor in America advanced far during the second half of the nineteenth century toward the position it now holds.

93. Background of Organized Labor

An economic transition.—The two decades following the Civil War saw mighty changes in the economic life of the nation. A people once preponderantly agricultural now faced in the direction of manufacturing processes. This transition, however gradually it might come, meant social and economic readjustment for those involved. Gone for them was the personal freedom they and their forebears had enjoyed. No longer could they point to the American workman as an example of how a man might become his own boss if and when in serving others he became irked and dissatisfied. This independence, the growth of urban centers, coupled with large scale production, was in the process of destroying.

What had happened was this. The beginning of a shift in emphasis that was to make the United States a world figure in manufactures was under way. The enlargement of old units and the establishment of new ones in populated areas forced workers to depend more and more for their daily living on the owners of those plants. With this dependence had come to unscrupulous employers the opportunity to exploit the unorganized laborer and his fellows.

Disappearance of the frontier.—The typical American workman of the Civil War period lived close to the land. He often combined farming with mechanical pursuits. Moreover, he could, if it seemed to be his advantage, secure land of his own at a nominal cost, thereby becoming an independent operator. The American frontier, that mythical line marking the boundary of settled areas, was far to the westward for many a worker along the Atlantic seaboard, but it was there with its cheap land. He himself might never "pick up" and go West. That was a small

matter. More important than his going was the freedom of action which others gave him when they went. In time, as might be suspected, this frontier disappeared and with it much of the opportunity which the American workman had had to leave his desk or bench behind him and to take up farming.

Factors in prices.—Wages during the years following the close of the Civil War were low and often paid in commodities instead of money. Over against these low wages went high prices for manufactured goods. In 1870, five dozen eggs were required in some sections of the country in exchange for one yard of calico. As this is written, one dozen eggs can be exchanged for five yards of calico. Why, if wages were low, were the prices of manufactured goods high? The answer involves a variety of considerations. Workers were inefficient, marketing expenses high, and profits large. These combined to force an undue spread between what a worker received in the form of wages and what he was required to pay for the product of his own hand.

The industrial laborer of the middle nineteenth century was not the earlier mechanic whose skill has been extolled in song and story. He possessed no tools, was, on the whole, inexperienced as a workman, and inclined to be unambitious. Behind him lay generations of the crudest kind of hand work on and about the farm. Cut off from cheap land he found himself hopelessly tied down to long hours at little pay. His was a familiar figure in Western Europe; in America he had attracted little attention.

The expenses of marketing took a heavy toll of workers of all kinds including farmers. Goods in their flow from the producer to the consumer took the most circuitous routes in an effort to reach markets. City dealers assembled them in bulk to be repacked for other dealers in small communities. From there they were handed down in turn to jobbers and wholesalers for distribution among the retail trade. The expense of finding customers and of displaying wares was no small item, for buying confidence had not yet been established in the minds either of the merchants or of their customers. The hall mark of excellence that came later as a guarantee of quality was still in its infancy; the buyer must be on his guard.

Because of the wide differences in the goods offered for sale, markets, using that term in its proper sense, lacked about every

thing good markets should possess. Manufacturers possessed little knowledge about the work of their competitors, and had only inadequate ideas at best concerning market demands. Brokers, jobbers, and wholesalers occupied very much the same position. Faced with such uncertainty, therefore, they protected themselves wherever possible through advanced prices. Whether or not they personally profited in the long run by so doing is beside the point; what is really important is that the consumer paid more for the goods he bought than would have been necessary had conditions been more favorable.

Working conditions.—The working day of the time was a long one. It sometimes reached fifteen hours and in some cases it was longer. Under such conditions young men became old in a few years. Much of the work was as heavy as it was irksome. Far in the future were the labor saving devices now so common in American industry. Then workmen strained at tasks that taxed their strength and vitality, and this they did day after day filled with long hours. To them the forty hour week was a stranger. Equally vicious were the surroundings in which they labored. Little was known of sanitation, and less was practiced in shops and factories. No general provision was made for pure drinking water, lighting was poor at best, first aid unknown. Daily men risked injury and even death as alongside unguarded machines they toiled. The safety-first movement was at most little more than a day dream of a few altruistic men and women; nor had an adequate provision yet been made for compensating workers in case of injury or death.

Technological unemployment.—Already the use of machinery in manufacturing processes was beginning to make itself felt. In some instances the machines actually displaced workmen already employed; in others, they merely lessened the need for employing additional workmen to meet increased demands for goods. Whichever the phase of this displacement the results were the same: the buyer of consumers' goods was robbed temporarily at least, of the power to buy. In other words, the use of machinery then as always, reduces for the time being the demand for man power with a consequent reduction in buying power.

Attitude of employer.—The typical American employer of the period following the close of the Civil War was a hard task master. He himself had risen to his position through applica-

tion and long hours, and he could see no good reason why those who worked for him should not follow the same path. He was intolerant with indolence, stupidity, and lack of purpose; his world was one in which the individual depended on his efforts alone in getting ahead. His employees he knew personally, and with them in solving their personal problems he had sympathy and gave support. When he viewed them in the mass, he was inclined to regard those who worked with him as machines to be used as long as they remained in good condition and then discarded for others. Such an attitude on the part of the factory owner and his kind served in the long run to give impetus to the movement that resulted in the organization of labor as a militant group fighting for its rights.

Radicalism.—Although the periodic waves of radicalism that swept Europe did little more than cast a fine spray in America, they were seen and felt here. To a small fighting group in this country, Karl Marx and his doctrines showed the way along which labor must advance in its march toward better working conditions and higher standards of living. This group provided, although ridiculed and sometimes persecuted, effective leadership. Its strength as measured in numbers was never large; its influence through agitation and propaganda was reputable in size and effectiveness. Its members kept everlastingly at their task of attempting to arouse workmen to the point of demanding their rights at any cost. These agitators, whatever their motives, served a useful purpose; they took a bad situation as they found it, and with skill they led those most concerned in it to a realization of what could be done to remedy it.

94. Organizing Labor

Early attempts.—The organization of workers in America found a sound precedent in what had taken place in Great Britain. The legal problems that must be solved before labor could hope to advance its cause through its own efforts the two countries shared in common, for in the absence of positive statutory statements of what might or ought not be done legally, court decision rested in the main on the same body of common laws. Thus American leaders had the advantage of the experiences arising out of a British movement similar in principle to the movement they headed. These experiences they could not,

of course, *adopt* in their entirety, as a guide for action here; what they could and did do was to *adapt* them to American conditions.

Early attempts at organization on the part of workmen met a variety of obstacles incident to the times themselves. Leadership had not yet developed; no coherent plan of action had been formulated; communication and transportation was yet slow and costly; unification in the matter of sentiments was lacking. As early as the beginning of the nineteenth century craftsmen along the Atlantic seaboard organized locally for the purpose of resisting encroachment and competition. Among these groups were the Philadelphia Carpenters, the Baltimore Tailors, the New York Shipwrights and the Philadelphia Cordwainers. A generation later (1827) the modern notion of a trade union had its beginning in Philadelphia with the organization of the Mechanics' Union of Trade Association. Labor demands of the time included the ten-hour day, the restriction of child labor, free schools, abolition of imprisonment for debt, freedom from competition with convict labor, exemption of wages and tools from seizure for debt, and the abolition of sweatshops.

A second bulge in the efforts of leaders to organize workmen into unions came during the decade immediately preceding the Civil War. In 1852 the Typographical Union set up a national organization, to be followed along the same lines by the stone cutters, hatters, moulders, and blacksmiths. Other matters absorbed the attention of the people to the disadvantage of the attempts to organize labor; the slavery question refused to be answered; in 1857 hard times set in with disastrous effects on labor.

With the Civil War at an end labor leaders could once more give their attention to the strengthening of their organization and to the expansion of their influence among the workers of the nation. In 1866 the National Labor Union was organized at Baltimore. A year later a group known as the Knights of St. Crispin came into existence. It was organized along the lines of a secret fraternal order. This group held its first national convention in 1868. During the next six or seven years the organization reached its height and then disappeared as a factor in organized labor.

Knights of Labor.—This organization had its inception in the mind of a Philadelphia tailor named Uriah S. Stevens. His first

step taken in 1869 was to bring together seven garment cutters. From that point the Noble Order of the Knights of Labor grew until in 1886 it comprised a membership of about 700,000, made up of all kinds of workers, the only groups excluded being lawyers, bankers, stockbrokers, professional gamblers, liquor dealers, and for a time, physicians.

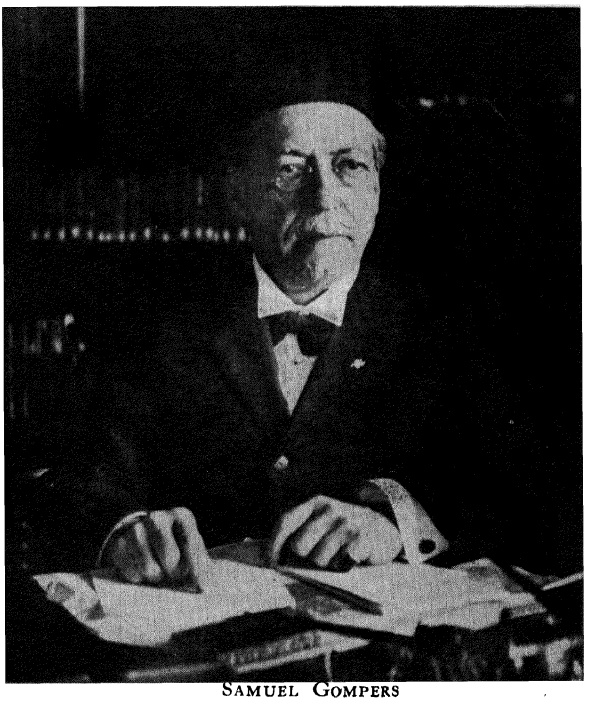
As originally organized the Knights of Labor was a secret order with an elaborate ritual.* Soon, however, this feature was dropped, and from that time on it concentrated on a program of action rather than on form of operation. The basic principle that held the Knights together was that "an injury to one is an injury to all." As might be expected, the membership comprised workers regardless of their economic or social status. That is, unskilled laborers as well as skilled laborers participated in the organization's management and the benefits it promised its members.

The Knights operated under what may be called a "tight" organization. Supreme power was vested in a General Assembly. Local groups, therefore, had little authority; theirs was to follow such directions as might be handed down from the "top." The executive officers had authority to suspend local officials and members, to revoke charters, and, by unanimous action, to settle strikes. In their meetings all participated on an equal basis, their deliberations having to do, in the main, with local matters.

The originators of the Knights of Labor disliked the strike as a means for attaining their objects; they preferred political action plus cooperation and education. What they had in mind was the ultimate abolition of the wage system, its place being taken by cooperative effort between employers and employees. They dreamed of the time when an eight-hour day would prevail in industry, of the time when arbitration would take the place of strikes, and when throughout the country income and inheritance taxes would bear a large part of the cost of government. Their program—much of which has since been accomplished—was comprehensive, too comprehensive in fact for its time. The rank and file of workers, while they might approve it, were not prepared to wait with patience its accomplishment by piecemeal.

* A brief history of the Knights is given in Selection 59.

The American Federation of Labor.—During the years of the rapid rise of the Knights of Labor to power and prestige, another organization, the American Federation of Labor, under the able guidance of Samuel Gompers and his associates, was beginning to make itself felt in the industrial life of the people.* The Federation—and that is exactly what it was and is—rooted back into the Federation of Organized Trades and Labor Unions



SAMUEL GOMPERS

Trusted leader of labor

organized in 1881. It built its foundation on the general principle that labor should organize along natural lines into national or international groups and as such to exert its influence through the groups. It set out to unite the group into a Federation where the interests common to all labor might be furthered. This principle, the early leaders could clearly see, while it ran counter to that on which the Knights of Labor had built, was the one held in highest esteem by the rank and file of American labor.

* Mr. Gompers related the early history of the American Federation of Labor in his testimony before the Industrial Commission, Selection 60.

The organization of the Federation of Labor dates from 1886, when, at a convention held in Columbus, Ohio, a group of trade unions already well acquainted with the common aims of labor agreed to federate in an effort to give effectiveness to these aims. Four years earlier the same groups at a meeting held in Cleveland had issued what may be considered to be a manifesto of labor. This manifesto deplored the unwillingness of certain labor leaders to sink their personal differences for the sake of the cause, and appealed for unity. In doing this it must be understood that no compromise of the fundamental principle concerning union independence was either offered or suggested. Apparently the leaders of the new movement saw clearly that the federation of existing unions would in time displace every other type of organization.

The type of organization adopted by the Federation must have been sound in principle and fairly easy of operation, for it grew in numbers and strength as the Knights declined. The year 1886 marks the beginning of the one; it marks also the greatest strength of the other. Gradually thereafter with increasing tempo the Federation went forward as the spokesman of American labor. Soon the Knights as an effective force in the councils of labor had all but disappeared.

95. Aims and Objects of Organized Labor

General tenor.—The general demands of organized labor have undergone no radical changes since the beginning. Then, as now, it has fought for higher pay, a shorter work day, and better working conditions.* Along with the three fundamental demands have gone many others—abolition of child labor, suppression of the sweat shop, regulation of women in industry, improved schools with emphasis on the mechanical arts, regular employment, the right to strike, recognition of the union, and collective bargaining. Such a program was forward looking. Its accomplishment required patience as well as time, and only men of vision and determination would have dared to dedicate their lives to the undertaking.

* Testimony given before the Industrial Commission throws some light on wages, hours, and child labor in the last decades of the nineteenth century, Selections 61, 62, and 63.

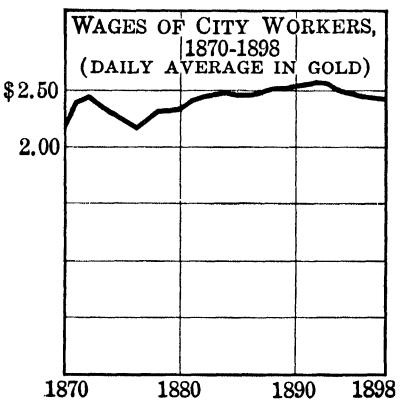
Conditions of labor.—Something has been said already about hours and the environment in which men worked. Labor itself, insofar as it was articulate, looked on these conditions as being intolerable and capable of being removed without lessening the volume of production. Its leaders argued, and with logic on their side, that a shorter working day would, in the long run, increase production. The basis of their argument was that the typical workman had so much energy to expend, and that he would, and preferably so, rather spend it in eight or ten hours than in fifteen or sixteen hours. To this argument they added a second, and that was lighter and airier workshops equipped with sanitary conveniences would more than pay for themselves in increased output and go far to keep down illness, thereby bringing in added profits and at the same time winning the good will of workers.

The one major demand that won public favor from the beginning concerned the guarding of moving machine parts. Daily scores of workmen fell victim to these machines. Some were killed, more crippled for life, a great many temporarily disabled and hence unable to earn a living for the time being. Against these hazards workmen had little protection. They could not, while acting as individuals, force their employers to equip their machines with guards. Nor could they when injured exact from the same employers compensation commensurate with the injury sustained. They might and did sue for damages; they might and sometimes did get a judgment in their favor. More often, however, they failed to collect on the ground that the accident in question was attributable not to the employer but to the injured workman and his fellow workers. To the public in general such a situation was repugnant. It failed to place the responsibility where it belonged and, what was more practical, burdened society as a whole with crippled dependents.

Wages.—Measured by present-day standards the wages of industrial workers during the last half of the nineteenth century were notoriously low. In 1860, for example, the average annual earnings of all persons employed in manufacturing establishments approximated two hundred fifty dollars; by 1880 they had risen to $346.91; in 1890 they were $444.83. Despite this relative increase they continued low, and to the leaders of organized labor, unsatisfactory. Breaking down the group for 1890, we

find that in the boot and shoe industry, where relatively high wages prevailed, male operatives received average annual wages of $535; female operatives, $320; children, $147. In the manufacture of tobacco and snuff the comparable figures were $322, $193, and $83.

A number of unrelated factors entered into the wage problem. One had to do with the displacement of men by women operatives at greatly decreased wages. In thousands of instances the employer preferred women not only because he could usually secure their services at a relatively low cost, but also because of their superiority as workers in certain industries and



of their greater willingness to follow instructions. Especially in those industries in which light machinery moved quickly and automatically did male operatives give way to women. The extent of this movement becomes apparent when we know that in 1890 approximately three out of every five cotton mill employees were women (48%) or children (10.5%).

Especially obnoxious to the early leaders of the organized labor movement was the employment of children in industry. They took the position that such employment ran counter to sound social welfare and that its continuation would tend to destroy free labor. What irked them was that with children as competitors their efforts to organize adults would be retarded if not annulled. They based their arguments, however, on more altruistic grounds, and on this ground they appealed to the general public to support them.

Collective bargaining.—From the very first, students of employer-employe relationships have recognized the tremendous disadvantage under which the single workman bargains with an employer of many workmen. The employe may face the necessity of finding a job; the employer, the loss, in money, which another workman would bring him in the form of increased profits. What to the workman appears to be stark tragedy might even escape the attention of a man employing many workmen. Obviously, therefore, the early leaders of the organized labor movement gave particular attention to ways and means of uniting their forces with a single purpose and then giving these forces voice in negotiating conditions of labor. It would not be too much to say in this connection that the success of the movement depended on the ability of the leaders to organize employes and then to persuade employers to recognize the organization by bargaining with it and not its individual members. To put the matter in another way, a vital factor in the success of the organized labor movement was the degree of willingness shown by employers in recognizing labor unions.

96. Organized Labor in Action

Setting up a program.—Drawing up a set of principles as a guide to action was a simple matter indeed compared to putting these principles into operation. Leaders might, for instance, agree that young children should not be employed in textile plants. Such an agreement, however, was not in itself sufficient to prevent employers from hiring children in place of men and women. Something must be done, therefore, to give effectiveness to these principles. This something eventually took various forms—strikes, boycotts, legal pressure.

Strikes.—The labor movement was yet young when the industrial strike as a weapon for enforcing demands came into rather general use. The first of a long series of major conflicts between laborers and their employers came in 1877. In that year the employes of the two great railroads, the Pennsylvania and the Baltimore and Ohio, struck against a reduction in wages. During the struggle, which in the end the men lost, several lives were sacrificed, and much property was destroyed. Eight years later labor, headed by the Knights of Labor, won a strike against the

Wabash Railroad, but in turn lost much of the ground already gained by attempting to force the eight hour day.

The next few years were years given over by organized labor in perfecting the Federation that was later to prove such a force in American employer-employe relations. The year 1890, however, saw a renewal of the struggle for labor's demands. In that year the carpenters partially succeeded in establishing the eight hour day in their craft. Of the industrial conflicts of this period, the Pullman strike of 1894 and the bituminous strike of 1897 were the most spectacular. The one spread to the railroads, many of which refused to handle Pullman cars; the other established the eight hour day in the soft coal fields, secured an increase in wages, and, what was even more important, the recognition of the United Mine Workers' Union. It was during the Pullman strike that the injunction first became important as a weapon used against striking workmen.

Boycott.—In some respects the boycott resembles a strike. In one, work ceases; in the other, men join together to refrain from doing some particular thing such as buying a certain product. Union men, for example, refuse to smoke a certain brand of tobacco or cease buying at a certain store. The object in either instance is to enforce some demand through economic pressure. Strikes have exactly the same objective. These closely related methods the leaders of the organized labor movement used with effectiveness during the closing years of the nineteenth century.

Legislation.—Although society in general had already made some advance through legislation to give protection to its weaker members, the organizers of labor set themselves the task of hurrying the process. They brought pressure on state legislatures to abolish child labor and to limit the conditions under which women might work. They pointed out, and with justification, that children of school age had no place in industry. Nor, following the same reasoning, should the mothers of these children be overworked at tasks too heavy for their strength and for hours unreasonably long.

Chapter XXIV

THE GROWTH OF COMMERCE

THE expansion that took place in agriculture and manufacturing between the close of the Civil War and the end of the century was reflected in the expansion of our trade and commerce. Exports increased two fold, while the value of the commodities shipped in during the same period more than doubled. We know less about our domestic trade, but in the light of what we do know, we can say with reasonable assurance that its growth exceeded that of our trade with foreign countries.

Important aspects of our foreign trade were: (1) balances, that is, the difference for any period of time between exports and imports; (2) origin of commodities imported; (3) nature of commodities exported; (4) nationality of vessels engaged in the trade; and (5) chief export and import ports. These influenced industrial development, and an understanding of them is essential to an understanding of other phases of the economic life of the people. Agricultural prosperity, for example, depended in large measure on foreign markets. To sell our surplus crops abroad we must buy what others had to sell. The same can be said of American manufactures.

Foreign trade goes beyond buying and selling; it touches vitally the relationships that exist at any given time among nations. An Indiana farmer and a Connecticut manufacturer meet no legal barriers when the one exchanges his products for the products of the other. When, however, either attempts to trade with some one in France or Germany, he may find in his way high walls over which he can go, if at all, with great difficulty. All this means that in their trade relations one with another, civilized nations set up certain modifications of restrictions regarding trade. These modifications we call trade treaties.

Domestic trade during the years following the close of the Civil War underwent radical changes. It increased many fold; what had once been luxuries became comforts and even necessaries; methods of marketing improved. The opening up of new

lands and the enlargement of our manufacturing outlets gave us a flow of consumer's goods characterized by their volume and variety. Prices fell with improved production, with the result that families could now buy what once was beyond their reach. Equally important was the growth in ease with which surplus outputs found their way from the producer to the consumer. Without an increase in the facility of moving goods, all other improvements would have been of little value.

97. Foreign Trade and Commerce

Nature of foreign trade.—Two general classes of items enter into foreign trade. One of these items is visible; the other, invisible. Visible items consist of commodities produced on the farms and in the shops and mills, commodities that can be seen and handled and subject, therefore, to being counted and weighed, and even circulated and taxed. These items only are considered by many people in discussing the foreign trade of a country. They merit discussion in detail. Invisible trade is something more elusive. It consists of such things as insurance premiums, money spent by traders and tourists, and investments in the form of money and security. A country might, therefore, export a few hundred thousand dollars worth of merchandise and yet import merchandise valued at hundreds of millions of dollars during the same time without creating an unfavorable balance of trade.

Visible exports.—The visible export trade of the country comprised, for the period under consideration, a great variety of commodities drawn from every section and every type of industry. From farms came great quantities of foodstuffs and raw materials; from factories, fabricated goods of every kind and description; from mines and wells and quarries, coal, oil, limestone, sands, and silica. Every state and every section made contributions. Corn from Iowa, wheat from Minnesota, and cotton from Texas, joined with the leaf tobacco of Virginia, the textiles of Rhode Island, and the coal of Pennsylvania, to form an ever widening stream of American commodities flowing into the civilized nations of the world.

An important characteristic of our export trade for the period 1860–1900 was its growth in value from less than a half billion to more than a billion dollars. During the War this increase

was only normal. With the return of peace, however, it got under way, and within a period of a decade it had almost doubled. This increase, it is well to note, fell short of the increase for the same period of time in the value of manufacturing and in the volume of agricultural output, which means that domestic trade outstripped foreign trade in its volume and value.

During these years the relative importance of various exports shifted. In 1883, for instance, about eighteen per cent of the value of our domestic exports consisted of corn and wheat. Meat and dairy products made up about thirteen per cent; raw cotton, thirty per cent; and cotton manufactures, two per cent. The

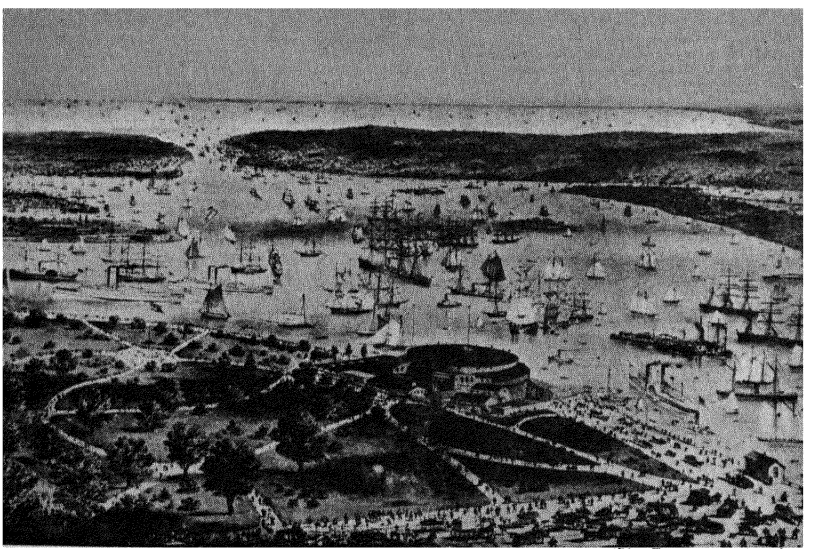
EXPORTS AND IMPORTS OF COMMODITIES
1860–1900
(Millions of Dollars)

Year or Yearly Average	*Exports*					*Imports*				
	Total	By Water			Land	Total	By Water			Land
		Total	Amer. vessels	For. vessels			Total	Amer. vessels	For. vessels	
1860	400	400	279	121	....	362	362	228	134	....
1870	451	451	170	281	....	462	462	153	309	..
1876–1880	711	704	142	562	7	514	501	147	354	13
1886–1890	738	714	76	638	24	717	685	122	563	33
1891 1895	892	851	73	778	41	785	748	125	623	37
1896–1900	1157	1079	78	1001	78	742	706	101	605	36

year 1892 saw notable shifts with corn and wheat rising to twenty per cent, cotton falling to twenty-five per cent, and cotton manufactures falling to one per cent. To put the matter in another way, this period saw radical shifts in importance of domestic production as factors in our export trade. In some years food crops bulked large; in others, cotton or tobacco; in yet others, manufactured goods. Determining factors in this respect were volume of output, both at home and abroad, relative price levels among the countries, and shifts in consuming habits and in productive processes.

In their importance as export centers, New York, New Orleans, San Francisco, Boston, and Savannah led in the order named. In 1866, for example, approximately one-half of all our

domestic exports passed through New York. New Orleans followed with a little less than one-fifth, San Francisco with one-twentieth, Boston with one-thirtieth, and Savannah with one-thirtieth. All other export points combined handled the rest of this trade, which amounted to approximately one-fourth of the whole, or a little less than $135,000,000, out of a total of $556,684,277 for the nation. A quarter of a century later New York continued to lead in export trade, with about forty per cent of the total. New Orleans came next with thirteen per cent,



The Bettmann Archive

The port of New York, 1870

followed by Baltimore with nine per cent, and Boston with eight per cent.

The exports went to all parts of the world. Our best customers, however, were Europeans.* In 1870, four-fifths of our exports went to Europe, and about one-eighth to Canada and Mexico. Among the European nations we shipped heaviest to Great Britain, Germany, and France. Significant in this respect was the relative growth in our export trade with Asia, Africa, and Oceania. In 1870 the combined export trade of the country with these three continents aggregated less than nine million

* The increased trade with Europe was referred to as the "American Commercial Invasion of Europe," Selection 64.

dollars; in 1885, this trade amounted to almost forty million dollars, and in 1900 to more than one hundred twenty-five million dollars. To reduce the situation to percentages, the income in exports to Europe doubled between 1884 and 1900, while the same trade with Asia, Africa, and Oceania increased from $34,274,000 to $127,775,000.

Visible imports.—During the early years of the Republic, while the country was yet in a frontier state, the people needed many things which they themselves could not produce, so many in fact that they found it necessary to buy on credit. The result was that for decades imports exceeded exports in value. Prior to 1870, the current was reversed but once and that was just previous to the Civil War. After 1870 exports usually exceeded imports. We were paying portions of our debts in both merchandise and invisible items; on what remained we were paying interest in the same way.

Some foreign commerce flows back and forth between two countries; some, roundabout in what is known as three-cornered trade. In 1878, for example, the United Kingdom, one of our best customers in import as well as in export trade, purchased merchandise in this country far in excess of what was sold here from that nation. The value of the flow eastward was $280,140,053; westward it was $107,290,677. From Cuba, on the other hand, we bought goods valued at $56,901,332, and sent in return goods valued at but $11,989,263. The same general conditions continued to prevail down to the close of the century. In 1900, three-quarters of our total foreign trade was with Europe, whereas we shipped to that continent slightly more than one-half of the merchandise we exported. During the same year less than three per cent of our exports went to the countries of South America; eleven per cent of our imports came from these countries. For the period under consideration our best foreign customers were the United Kingdom, Germany, France, Belgium, and Holland, all money-lending nations; among the countries where our purchases exceeded our sales were Cuba, Brazil, Switzerland, China, and Japan.

The nature of the commodities imported reflected the needs of the country. Some of these needs the people themselves would not meet because they could supply them cheaper abroad; others they were prevented from meeting by nature. In one

group were chemicals, cotton manufactures, wood products, and woolen cloth; in the other, tropical fruits, raw silk, sugar, molasses, coffee, and India rubber. Here is the explanation for the Cuban, South American, and Far Eastern trade in which imports played such an important role.

Balance of trade.—It is inconceivable that our import and our export trade with any country over a given period of time would be exactly the same. The difference is called a balance. Sometimes this balance is in favor of exports; sometimes, of imports. Custom and usage applies the term favorable to one and unfavorable to the other. Thus, when the exports of a country exceed its imports that country is said to enjoy a favorable balance of trade. Likewise, when the trade flows in the opposite direction, it is said to be unfavorable. Beginning with 1845 and ending with 1875 the foreign trade of the United States was unfavorable except for the four years 1847, 1858, 1862, and 1874. During the next twenty-five years the only years showing such a balance were 1888, 1889, and 1893. What had once been all but a continuous flow of goods into the United States reversed itself after many years; an unfavorable balance of trade gave way to a favorable balance of trade. That is, an excess of exports took the place of an excess of imports.

The carrying trade.—In this nineteenth century trade between the United States and the foreign nations of the earth, vessels varying widely in design and size, and flying a variety of standards, moved to and fro in a continuous stream across the seven seas. In 1860, approximately seven-tenths of all our exports and five-eighths of our imports were carried in American bottoms. By 1870, these ratios had changed to three-eighths and one-third. Combining exports and imports we find that during the ten year period, 1860–70, the relative importance of American owned and American operated ocean going vessels declined approximately one-half. The story is not all told. During the decades that followed, this decline continued, until in 1900 less than one-fourteenth of our exports and about one-seventh of imports were being carried in our own ships. Within a generation we had surrendered a high place in the shipping of the world for practically no place at all.

A number of factors contributed to this decline. During the Civil War the Confederate ram, the *Merrimac,* led in destroy-

ing many of the wooden ships of America belonging to citizens of the North. This destruction combined with the necessity of shifting emphasis from peace to war to cripple American shipping beyond recovery. Also, the ship owners themselves had contributed to a bad situation by refusing to change to iron and steel as ship building material and to substitute steam power for sails. In assuming this attitude their strength of another day had been their undoing. Skilled as was the sailing captain and speedy as was his vessel, he fought a losing battle against the inevitable.

TONNAGE OF VESSELS CLEARING FROM AMERICAN PORTS
1870–1892

Year	*Sailing Vessels*			*Steam Vessels*			*Grand Total*
	American	Foreign	Total	American	Foreign	Total	
1870	1,707,477	2,164,120	3,871,597	822,121	1,667,910	2,490,031	6,361,628
1880	1,918,949	5,813,302	7,732,251	1,158,775	6,404,671	7,563,446	15,295,697
1885	1,520,053	3,654,161	5,174,214	1,288,522	6,033,539	7,322,061	12,496,275
1888	1,305,645	3,640,615	4,946,260	1,638,568	6,667,369	8,305,937	13,252,197
1890	1,372,947	3,153,641	4,526,588	2,017,070	8,885,391	10,902,461	15,429,049
1891	1,343,089	2,915,753	4,258,842	2,372,994	8,778,874	11,151,868	15,410,710
1892	1,425,906	2,982,504	4,408,410	2,325,144	11,524,611	13,849,755	18,258,165

Because of the low estate to which American shipping had fallen, many men with a genuine interest in the welfare of the country put forward the argument that the Federal Government, in order to stimulate ship building, should subsidize American vessels. This they proposed to do by giving them profitable mail contracts or other advantages which by their own efforts they could not hope to get. In taking this position they had two considerations in mind. One was economic and hence of a private nature; the other, international. In this one instance they had in mind the advantages that would be gained by building American vessels with American workmen and by manning them with American sailors. Beyond that they saw the help which such vessels could render the American Navy in time of war. These ends they would gain through cash or other subsidies.

Foreign trade influences.—With the growth of foreign trade came the need for business adaptations. One by one industrial concerns entered this trade in an effort to share with their home competitors such profits as might be made there. In time they became foreign trade conscious. That is, they began for the first

time to encompass within their thinking such problems as foreign tariffs, port regulations, marine insurance, and foreign exchange.

Not all such concerns either exported or imported directly to or from foreign countries. Many of them preferred to sell to export houses or to buy of import houses. This they did either because of the smallness of the volume of goods handled or because of the desire to concentrate on the business processes with which they were already familiar. Entering the foreign field meant the employment oftentimes of representatives versed in foreign affairs and capable of speaking some language other than their mother tongue. It meant also the establishment and maintenance of a foreign trade department involving an expense often out of line with the profits to be secured. Only the larger units of industry, therefore, undertook this trade directly, the rest relying on brokers or others to supply the needed service.

Along with the growth of foreign trade went a closer relation between the United States and other commercial nations. Every step forward in foreign trade brought increased specialization in operation with an accompanying dependence of each nation on all the rest. Tariff walls retarded this growth, but they did not destroy it. The United States in common with the other countries tended to follow the policy of doing what it could do best, leaving to others to do what they could do best. Many chemicals, for example, and certain kinds of cloth we continued to import from Germany and Great Britain, paying for them with foodstuffs and raw materials and with manufactured goods. Thus the self-sufficiency of the early years of the nineteenth century had given way by its close to a type of economic interdependence.

The precious metal trade.—The elements that enter into this aspect of foreign trade and commerce are many and important. One of them is gold. This metal flows in and out of a country seeking safety and profitable investment. Ships passing in the night may very well have in their cargoes boxes of gold bullion on their way from one country to another. Obviously, other things being equal, gold tends to flow from where it is produced to those places where it is held in relatively high esteem.

Prior to the discovery of gold in California in 1848, the total output of all the gold mines in the United States beginning with the first voyage of Columbus approximated eleven hundred thou-

sand ounces, valued at something more than twenty-two million dollars. During all those years, therefore, this country depended on its trade with foreign countries to secure the gold stock it needed for coinage and the arts. After 1850 the flow started in the opposite direction and continued with some interruption until the close of the century. During the war years, annual exports of gold exceeded imports of gold by more than forty million dollars. In 1886 this excess was more than twenty-two million dollars; in 1890, about four million dollars; in 1900, a little short of three million seven hundred thousand dollars.

Invisible items.—Much of the foreign trade of any country is invisible. Among the invisible items are (1) earnings by owners of vessels engaged in the trade; (2) money spent in paying harbor dues and for ship stores; (3) expenditures of tourists; (4) money remittances to or from the country; (5) loans; (6) interest payments; (7) insurance premiums; and (8) moneys paid by one government to another. All of these items enter into our foreign trade. Sometimes they are on the side of exports, sometimes on the other side. Wherever they may be they are usually lost sight of by those not trained to see them. So important are they, however, that a country might, over an indefinite period of time, continue to import many more millions of dollars a year in merchandise than it exported. The difference that country would pay in the form of interest coupons, freight bills, and insurance policies.

The Department of Commerce of the United States issues annually an estimate of the value of the invisible trade of the country. These estimates are combined with the known volume of commodity trade to arrive at an adequate notion of the actual situation. A few years ago this complete statement appeared somewhat as follows:

Visible Items of Export		
Net	Exports of merchandise	$666,000,000
	Exports of silver	34,000,000
	Exports of gold	134,000,000
		$834,000,000
Invisible Items of Export		
	Interest on foreign investments	$515,000,000
	Motion picture royalties	75,000,000
	Foreign loans paid	140,000,000
	Sales of securities abroad	411,000,000
	Debt paid to United States	27,000,000
		$1,168,000,000

All this means that a great deal of the trade between the United States and foreign countries is hidden from general view. At the end of a given year we are inclined to rejoice in the fact that we have sold more goods abroad than we have imported to an amount, let us say, of a hundred million dollars. This difference may very well be represented by cancelled interest coupons, by drafts marked paid, by insurance policies no longer in force, and by receipts for freight already earned by foreign ship captains. The important consideration to keep in mind is that the foreign trade of the United States consists of more than an exchange of goods—wheat for coffee, iron for rubber, cotton for spices.

98. Commercial Treaties

Nature and extent.—Trade and commerce between the United States and foreign nations is far more complex than that to which we are accustomed among our states. Goods move in this country across state lines as if they had no existence whatever. The moment, however, they reach the shore of a foreign country they encounter regulations designed in the main to favor the nationals of that country. Many of these regulations concern themselves with levying an import tax; some, with determining value; others with the honesty of labels. Obviously, in the absence of agreements among commercial nations, such regulations might serve as a barrier to all trade. It was with this in mind, therefore, that the United States, beginning during the Revolutionary period, negotiated such treaties with other nations as the conditions of trade warranted.

Treaty with France, 1778.—The first treaty entered into by the United States was with France. That treaty was commercial in its nature and it established precedents followed to the present day. The principles which it laid down were followed throughout the latter half of the nineteenth century. It secured for the citizens of the United States favorable treatment on French soil and in return obligated the United States to treat French nationals in exactly the same way. Moreover, it bound each party to extend the most liberal privileges to the others. That is, no other nation was to be more favored.

Following this early treaty came literally scores and even hundreds, all dealing with trade and commerce. Some dealt with

tariffs, others with river navigation, still others with the fisheries. In 1880, for example, a treaty between this country and China prohibited the importation of opium into the United States by Chinese and the importation of opium into China by citizens of the United States. It provided further that the prohibition should extend "to all vessels owned by the citizens or subjects of either power, to foreign vessels employed by them, or to vessels owned by the citizens or subjects of either power and employed by other persons for the transportation of opium." Here, as in most other instances of treaty making, the United States was actuated by a desire to give its citizens wider opportunities in foreign trade and commerce.

99. Domestic Trade and Commerce

Nature and volume.—A lone inhabitant on an island would be interested only in foreign trade and commerce. The coming of a second inhabitant, however, would in all probability cause our original settler to divide his interest between trade abroad and trade at home. With the coming of other inhabitants to the island the emphasis on foreign trade would likely decline, as domestic trade was more and more emphasized. That is exactly what happened in the United States. During the nineteenth century the foreign trade of this country did increase, but not as rapidly as did domestic trade. In 1860, with a population of thirty-one million and with wealth estimated at sixteen billion dollars, we exported a third of a billion dollars' worth of merchandise and imported about an equal amount. During the next twenty years population increased about sixty per cent, foreign trade and commerce more than one hundred per cent, wealth more than one hundred fifty per cent. The next twenty years saw increases in these three items of fifty per cent, fifty per cent, and one hundred per cent. Thus the country's growth in wealth —also in incomes to be spent for commodities and services—exceeded its growth either in population or in foreign commerce.

Channels of trade.—More significant historically than the volume of the domestic trade are the methods with which it was carried on in getting goods from the producer to the consumer. Generally speaking the method most widely emphasized resembled a chain. In it were connecting links, each as vital as any one of the rest. A break in any one of them meant a broken

chain. This chain comprised producers, middlemen, and consumers.* Some idea can be had of its size and length from the number of middlemen thus employed. In 1860 there were 267,921 persons who were occupied as retailers and wholesalers of merchandise. In 1870 and 1880 these numbers were 357,647 and 479,439. Some of these establishments handled merchandise only in quantities. They were known as wholesalers. Many more served the consuming public from their stores and shops. This latter group occupied the very outposts of the mercantile field.

WHOLESALERS AND RETAILERS
(From the Census of Occupations)

Year	*Wholesalers*	*Retailers*	*Merchants and Dealers Not Specified*
1890	31,086	660,239	446,262
1900	42,326	790,886	364,710

Wholesaling of merchandise.—At the time of the outbreak of the Civil War the seaport cities, New York, Philadelphia, Boston, Baltimore, and New Orleans, controlled the wholesaling of merchandise. It was here that great stocks of foreign as well as of domestic products were assembled and made ready to be shipped to retailers. It was here also that merchants from all sections of the country gathered to examine merchandise and to make such purchases as they desired. After the War, however, and with the rapid spread of population westward, other cities dared contest their older rivals. This they were able to do with considerable success. Their stocks in trade were large and varied and their locations favorable. Thus in time Chicago, Cincinnati, St. Louis, and Louisville became important wholesale and jobbing centers.

The annual or semi-annual visit of the typical retailer to some large wholesale center characterized the merchandising methods of Civil War days. Toward the close of the century, however, the custom began to wane. Then the wholesalers took the offensive by sending out traveling salesmen with samples of merchandise. These men, known generally as drummers, numbered

* There were certain developments which were tending to eliminate some of the middlemen, Selection 65.

more than seven thousand in 1870, twenty-eight thousand in 1880, fifty-nine thousand in 1890, and ninety-three thousand in 1900.

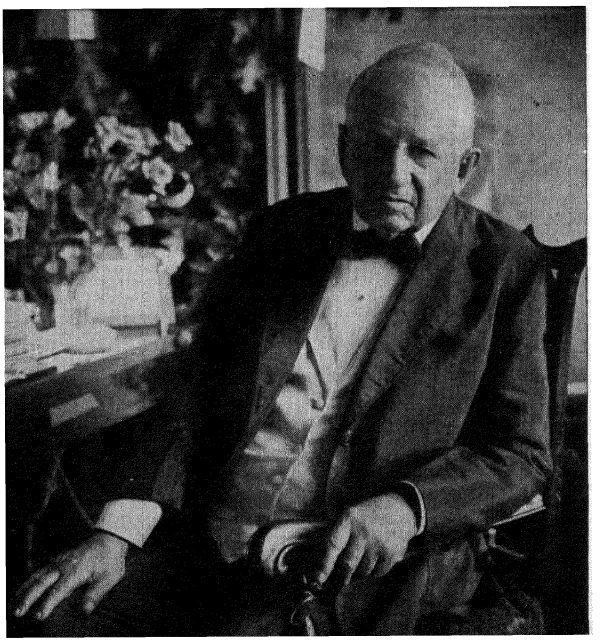
One obstacle to the easy flow of merchandise immediately following the close of the Civil War was a lack of credit information. Wholesalers and jobbers felt this lack and did what they could to meet the situation. They made inquiries by correspondence with lawyers and others who knew customers and picked up such gossip concerning their general standing as might be available. Already the modern commercial credit agency, such as we know it today, was getting under way slowly and with difficulty, the chief obstacle to its growth and development being the wholesalers and jobbers themselves. Apparently, such an innovation was too much for a business that had been built on extreme conservatism.

The retailing business.—The typical retailer of the Civil War days was something more than a merchant catering to a group of consumers. He carried a wide variety of merchandise for sale, bought from his customers such articles as poultry, eggs, and butter, extended liberal credit on purchases, advanced money for taxes and other necessary expenses, and served as a general friend and counselor of the neighborhood. He was more than a merchant; he was an institution. He represented a group that played a leading role in the history of American business.

The second half of the nineteenth century saw significant shifts from the general store of an earlier day to specialization in merchandising—dry goods, groceries, clothing, hardware, drugs, harness. In the larger cities the general store became a department store in which specialization was carried on under a single management. It was in essence the old store of the cross roads enlarged and improved. There, as of old, customers could buy calico, coffee, candy, tobacco, and nails. Once a single clerk had sufficed; now they went from department to department where specialized service was to be had of men and women trained along narrow lines. The first great American retail merchant was A. T. Stewart. Leaders of a later day were John Wanamaker and Marshall Field.

The general store persisted in another form. In 1872 A. Montgomery Ward conceived the idea of selling goods by mail. His first catalog was a modest affair in which he gave little more

than prices. Later he described his wares and added illustrations to his descriptions. Here was the beginning of the modern mail order catalog. During the decade that followed, an enterprising railroad employe in a small Minnesota town began selling watches to his fellow employes. From that modest beginning grew Sears, Roebuck and Company. Each organization is the general store of the 60's grown up and enlarged, and catering to a public as widespread as the mail service itself.



Underwood & Underwood

JOHN WANAMAKER

His was a new kind of store

As the mail order movement spread, it met the violent opposition of retailers everywhere. They argued that to send money out of the community for groceries and other merchandise was harmful to the community and would, if persisted in, destroy it as a social and economic unit. To this argument they added the older one that money spent elsewhere would never find its way back. Despite these and other arguments, mail order houses continued to grow, and while, in a comparative sense, they were yet small in 1900, they had already proved that as an agency for

moving commodities from the producer to the consumer they had taken root permanently.

Commodity exchanges.—The commodity exchange as a place where certain products could be traded in on a large scale had its beginning during the years just preceding the Civil War. The Chicago Board of Trade, organized in 1848, was incorporated in 1859. Other exchanges were New York Produce Exchange (established, 1850; incorporated, 1862), Merchants Exchange of St. Louis, 1854, New York Cotton Exchange, 1870, Minneapolis Chamber of Commerce, 1881, and New York Coffee Exchange, 1882. These exchanges, although dealing in different kinds of commodities, had one common purpose, and that was to provide market facilities for their members. The result was, and is, that anyone with wheat, corn, or any of many other commodities, could find a buyer at some price. Thus, day by day it was possible, by consulting the newspaper, to gather a fair idea of what was being paid for various commodities of standard quality.

Advertising.—During the late years of the nineteenth century the use of advertising for stimulating sales underwent radical changes. Before and after the Civil War the typical newspaper advertiser was content to state the facts and let it go with that. What he said to the readers of the paper, he said in a monotone. Usually he confined himself to simple facts—two barrels of New Orleans sugar just received; three thousand false teeth for sale; the latest in shirting. In addition to newspapers he might, and did, use barns and fences for advertising his wares.

Far-seeing merchants turned their attention in time to display advertising of one kind or another. So far as they were concerned, word pictures were not enough; they sought something more attractive and easier understood. A threshing manufacturer of the time, for example, sent his machines out with pictures of half starved roosters painted on them. What he was trying to do was to impress on farmers the great efficiency of his machine in separating the wheat from the straw. Instead of depending on explanation he associated the hungry animal with the machine he manufactured. City merchants, particularly department store owners, took up advertising seriously. They employed men to study ways and means of making known to the general public the superior quality of the merchandise they had

for sale. So effective were the efforts of some of these merchant princes, that throughout the rural areas and in the smaller cities other merchants found it profitable to follow them both in the matter of style and of content. Thus a Wanamaker advertisement might find itself in a new garb on the back page of some country weekly of the Middle West or South.

Organized business.—With the growth of urban centers came a desire on the part of merchants to organize in a common cause. These organizations took various names such as Board of Trade, Chamber of Commerce, Association of Commerce, Commercial Club, and Business Men's Association. Whatever the name, they followed the policy of doing everything possible to further the business interests of their respective communities. They desired more retail business, more factory pay rolls, better transportation facilities, and favorable state and national legislation.

One of the earliest of the modern chambers of commerce was the Merchants Association of New York City, organized in 1897. As its name suggested, this association was an organization of merchants. A little later came the Chicago Association of Commerce. In a short time other large cities organized similar groups until the business men of the country were fairly well organized in local units.

These early organizations encountered a great deal of earnest opposition and, in some instances, ridicule and even contempt. They were regarded in many quarters as little more than factory grabbers. There was enough truth in this charge to give it general credence. Some of those organizations went out with the avowed purpose of buying industry. By one method or another, not always creditable perhaps, they persuaded manufacturers to move their establishments, to the detriment of the cities where they were already located. This they were able to do by offering bonuses in various forms. Sometimes it was free light and water for a period of years, sometimes a cash consideration, sometimes a building, sometimes favorable action on the part of a city council.

In due time the chambers of commerce of the country found themselves. Then they turned their attention to constructive activities. Instead of regarding a new factory as the most desirable thing, the typical chamber looked about to see how it might improve what it already possessed. Encouragement was

given to young but promising industries; and attention focused on methods for improving merchandising. Civic departments were set up for the purpose of interesting citizens other than retailers. School boards and city councils aided in the administration of their duties, and subjects, such as sanitation, were studied for improvements. In view of the record made, we can say that the business men's organization of 1900, whatever name it employed, was an influential factor in urban growth and development.

Chapter XXV

TRANSPORTATION AND COMMUNICATION

THE story of the development of the means of transportation and communication in the United States, during the second half of the nineteenth century, stirs the imagination and appeals to those who admire vision and daring. Here and there in numerous sections of the country men of affairs consolidated short railroad lines and extended others in an effort to bring rapid transportation at a reasonable cost to the doors of the masses. In the Far West, railroad builders, aided by the Federal Government, made a continuous way for the iron horse from one ocean to the other. What had once been months away from the Atlantic seaboard could now be reached within a week. The golden spike used on that memorable day in May, 1869, did more than fasten an iron rail to an underlying timber; it united the country, thereby confusing those who had opposed the acquisition of the Pacific coast on the ground that its remoteness from the country's centers of population and trade would prove to be a liability rather than an asset.

Even more romantic was the growth in river traffic, especially along the rivers of the Mississippi system. Luxuriously appointed packets carried thousands of passengers annually up and down these streams at a speed hitherto unknown. Here during the travel season the beauty and wealth of the inland could be found enjoying an ease and comfort that caught and held the attention of the world. Now and then competing lines staged steamboat races in an effort to win supremacy in the field of speed and thereby increase their patronage. Of such races the most noted was that between the *Natchez* and the *Robert E. Lee* on the Mississippi in 1870 from New Orleans to St. Louis. Over these same rivers steamboats and barges moved commodities of every kind—cattle, hogs, grain, merchandise.

Improvements in communication went hand in hand with improvements in transportation. The magnetic telegraph, begun in 1844, expanded over the country along railroad lines and

wagon roads until even the most out-of-the-way places were brought into instant contact with the centers of the country. During these years Alexander Graham Bell introduced to the world the telephone. What must have appeared a plaything, when in 1876 he showed his invention at the Centennial Exposition in Philadelphia, had by the close of the century come to be an established method for carrying on communication by the means of wires.

100. Expansion and Consolidation of Railroads

Building local lines.—With the close of the Civil War railroad building, which aggregated but a little more than three thousand miles during 1861–1864, was resumed with increased vigor.* The United States was entering an era of rapid transportation along iron rails, and every community with an eye to the future strove to secure a railroad. Counties and other local units granted rights of ways, voted money raised through the sale of bonds, and did what else they could to secure a share of the new form of transportation. In most instances such lines were short and local, and too often much of the money voted went to the promoters rather than to the builders. The important consideration in this connection is that scores of communities working independently began a movement that was to serve as a foundation for the finest transportation system then known to mankind.

Consolidation of lines.—A second stage in railroad development was the consolidation of short lines into systems operating thousands of miles each. Commodore Vanderbilt had shown the way in 1853, when he combined the seven or eight lines between Albany and Buffalo into what we know as the New York Central. From these consolidations, sometimes through absorption on the part of a single company, we have such systems as the Southern Railroad, the Burlington Route, the Rock Island, and the Cotton Belt. Whatever the name and wherever located, these systems profited from the short lines built largely as community enterprises.

In 1860 the longest railroad in the country under the same management was less than a thousand miles. By 1880 the Penn-

* The development of the American railroad system to 1898 can be divided into three periods, Selection 66.

sylvania controlled and operated four times as much trackage. At the close of the century sixty per cent of the railroad mileage of the country belonged to systems having at least a thousand miles each. In 1880, for example, 2,085 railroad companies had a combined mileage of less than a hundred thousand; twenty years later less than a thousand companies operated twice as many, or almost two hundred thousand, miles. Along with consolidation went quicker, cheaper, and more satisfactory service; the short, local line had served its purpose—a community enterprise.

Railroad expansion.—The total railroad mileage in 1860 was 30,626. By 1870 it exceeded fifty thousand. Just ahead was a major depression, brought on, many have thought, by the fever-

GROWTH OF RAILROAD MILEAGE
1866–1887

Year	*Miles Built*	*Total Miles*
1866	1,716	36,801
1869	4,615	46,844
1871	7,379	60,301
1872	5,870	66,171
1873	4,097	70,268
1874	2,117	72,385
1881	9,846	103,108
1887	12,876	149,214

ish expansion of railroad building. Whatever its cause, the depression affected adversely the construction of new lines, the low point for the period being reached in 1874 with a little more than two thousand miles built and put into operation.

The settlement of a given section and the construction of railroad lines into that country are closely associated. Either may be a cause; either, an effect. New settlements demand increased transportation facilities; such facilities encourage new settlements. Much of the railroad building during the 70's and 80's ran ahead of settlement. The result was an enormous amount of frozen capital, that is, capital on which no immediate return in the form of interest was to be had. Here is the basis of the argument that over-building in the railroad industry brought on the depression of the 70's.

The Pacific railroads.—The first trans-continental line was opened in 1869 with appropriate ceremonies in which the Presi-

dent of the United States (Grant) took a prominent part. That event was heralded the world over as one of far-reaching importance. It put to rest forever the fear in the minds of many that because of distance and lack of contact the Pacific States might in time attempt to set up a government of their own.

Fourteen years later (1883) three other transcontinental rail routes had been completed. Early in that year the gap at El Paso, Texas, was closed by the Southern Pacific. This route provided a continuous railway passage from New Orleans to San Francisco. Farther north the Northern Pacific was in the process of completion after almost fifteen years of construction more or less intermittent. On September 8, 1883, a group of distinguished citizens watched the laying of the last rail in a continuous line of approximately eighteen hundred miles in length connecting Duluth, Minnesota, and Tacoma, Washington. The fourth route was opened that year at the Needles on the Colorado River, and it was a combination of the Atlantic and Pacific Railroad, the Southern Pacific Railroad, and the Santa Fe Railroad.

Railroad passenger service.—The passenger service provided by the railroads of the United States during the 60's and 70's, while it was luxury compared with the land transportation which it had displaced, left much to be desired. The speed of trains was in most instances slow and the accommodations to be had meager. In 1865, for example, the Burlington advertised with much satisfaction a special train to be run between Chicago and Burlington, a distance of 210 miles, in 10 hours and 10 minutes. The next year the same road stressed in its advertising that along the same line neither conductor nor cars would be changed and that passengers would be "supplied with water on the cars by the train boy."

With the coming of the sleeping cars in 1854, and the hotel car in 1867, travel became more pleasant. The one gave opportunity for rest under fairly normal conditions; the other, opportunity to eat without leaving the train. Measured by modern day standards both were crude and unsatisfactory; considered as a stage in the development of land transportation, they were far in advance of anything hitherto known in America. From the dining car menus of the time (1876) are to be had glimpses of the eating habits of the passengers. One such menu carries a

seventy-five cent dinner (table d'hôte) consisting of soup, fish, boiled meats, roast meats, wild game meats, cold meats, entrees, relishes, vegetables, desserts, pastries, and drinks. The wine list carried items from $3.50 a quart down, single drinks at 20 cents, and cigars 15 cents and 25 cents.

Freight service.—The speed with which the early railroads could move freight overland, and at a cost much lower than had ever been known before, excited the wonder of everyone. Twenty-ton freight cars traveling at ten miles an hour and more contrasted sharply with the old Conestoga wagon hauling light loads at a snail's pace. Cars grew larger as engines grew stronger and the road bed became safer. In 1876 the typical

FREIGHT CHARGES PER TON MILE
1872–1882

Line	*Cents Per Ton Per Mile*							
	1872	1874	1876	1878	1879	1880	1881	1882
New York Central	1.59	1.46	1.05	.93	.78	.88	.78	.73
Pennsylvania	1.41	1.25	.89	.91	.79	.88	.80	.81
Michigan Central	1.86	1.57	1.11	.84	.69	.84	.71	.77
Milwaukee	2.43	2.38	2.04	1.80	1.72	1.76	1.70	1.48
Illinois Central	2.16	2.09	1.80	1.64	1.52	1.54	1.52	1.42
Maine Central	4.57	4.06	3.34	3.32	2.87	2.74	2.74	2.75
New York State Canal	1.01	.74	.68	.42	.46	.49	.38	.42

freight car had a capacity of ten tons. In 1882 it was twenty tons; in 1889, thirty tons; in 1895, forty tons. Steel rails played an important part in this development. In 1880 more than two-thirds of the rails in use were made of iron. By 1890 this ratio had dropped to one-fifth and by 1895 to one-eighth.

Battle of the gauges.—One factor in the movement of freight was the adoption of a uniform gauge by the leading railroads. At first, and for many years following, three different gauges were in general use—narrow, standard, wide. Each had its supporters who could advance many arguments why this or that distance between the rails should prevail. This is known as the battle of the gauges. As long as this condition prevailed cars could not always be moved from one line to another. The result was delay coupled with expense. In time, however, experience itself solved the problem with road after road giving up one or

the other of the extremes and adopting the standard gauge, which is 4 feet 8½ inches.

Relative costs of construction.—Compared with the railroads of Europe of the time, those of the United States were being constructed at a relatively high cost. A variety of reasons accounted for the difference. Labor in the United States demanded higher wages, building materials, except timber, were more costly, the prevailing interest rate on borrowed money was higher. Because of these relatively high costs, American railroad builders kept cuts and fills to a minimum, used as light material as was consistent with safety, and avoided curves having long radii. Furthermore, unlike their European contemporaries, these builders made little or no effort to avoid grade crossings, utilized city streets, and followed lake shores and river banks in locating roadways.

Rates of speed.—Toward the close of the century many of the more important railroads experimented in speed. In 1891 the New York Central engine No. 999 drew a train of cars from New York City to Buffalo in 7 hours and 20 minutes, at a rate slightly under sixty miles an hour. The next year a train on the same road covered a distance of 115 miles in 110 minutes, at a rate slightly over sixty miles an hour. In May, 1893, the famous No. 999 ran a mile in 32 seconds and ten days later five miles in three minutes. Such speed was not confined to exhibitions. During the Chicago World's Fair (Columbian Exposition, 1893) the New York Central maintained regular traffic between New York and Chicago on a 20-hour basis. Other roads challenged the supremacy of the New York Central in this respect with the result that practically all of them stepped up their speed to points thought to be impossible but a few years previously.

101. Competition among the Railroads

Simple competition.—With the development of railroads there developed also a keen competition for business. Particularly keen was this competition west of the Mississippi River. There the roads had built ahead of settlement with the result that the traffic to be had was wholly inadequate to give employment to the transportation facilities available. As might be expected, the competing lines resorted to varied devices in order to secure freight and passengers. In this competition the four

transcontinental lines already in operation faced a number of roads reaching westward from Chicago connections. The St. Paul, Minneapolis, and Manitoba (later the Great Northern) had reached Helena, Montana; the Chicago and Northwestern, Fort Casper, Wyoming; the Burlington, Denver. Keenest of all western competition was that among the Santa Fe, the Missouri Pacific, the Burlington, the Rock Island, and the Union Pacific. All of these lines had been built far ahead of actual needs, and all of them fought bitterly for such traffic as existed.

Rate wars.—Occasionally this competition turned itself into war. Railroad expense is largely fixed. That is, much of the expense of maintaining and operating a railroad goes on regardless of the traffic carried. Anything, therefore, to be secured in the way of earnings above actual outlay made in connection with the service was to be preferred to nothing at all. Accordingly, the competing roads often reduced passenger and freight rates to ridiculously low levels. The story is told of an eastern railroad magnate patronizing a competing line as a matter of economy; he could hire a service cheaper than he himself could provide it.

Pooling of traffic.—The first railroad pool to attract more than passing attention was established in 1870, and it was known as the Chicago-Omaha pool. Two years later (1872) came an agreement among certain roads concerning the hauling of anthracite coal. Others followed: cattle pool, 1875; Southwestern Railway Association, 1876; Central Traffic Association, 1877. Whatever the details of the various pooling agreements, the object was always the same—the elimination of competition.

The anthracite coal pool illustrates what happened. This pool of 1872 concerned the Philadelphia and Reading, the Central of New Jersey, the Delaware, Lackawanna, and Western, the Delaware and Hudson, and the Pennsylvania. These roads divided the traffic in anthracite coal according to arrangements entered into when the pool was formed. After four years the roads concerned terminated this agreement, and a little later entered into another one in which greater advantages promised. In 1892, a new type of pooling combination appeared. The Philadelphia and Reading Railroad leased the Lehigh Valley and the Central of New Jersey, making arrangements at the same time to purchase coal of operating companies in which they had large

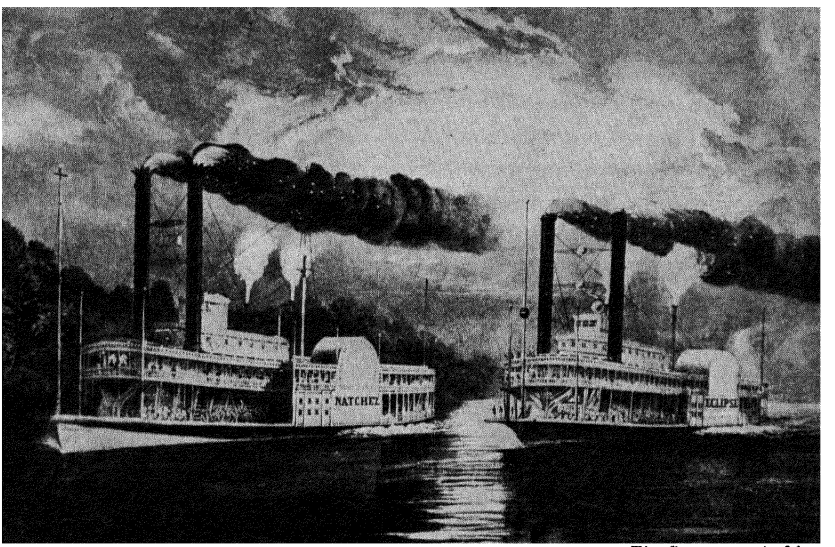
if not controlling interest. This combination the two states of New Jersey and Pennsylvania viewed with a mixed feeling. In the New Jersey courts, a decision was rendered against the pool, and the leases on which they were based were permanently enjoined. The Pennsylvania court held otherwise, but without invalidating what had already been done in New Jersey. Late in 1893, the whole plan was abandoned by the parties concerned.

The justification advanced by those organizing pools dealt with efficiency and economy. They argued that cutthroat competition in the business, while it might for a time appear to benefit shippers, would inevitably result in destruction for those participating and in social and economic loss to those needing their services. This position the public at large very generally approved. A sharp difference of opinion came, however, when the question arose concerning who should control the terms of the pool. The roads themselves felt that they themselves knew how to manage their own affairs; the public thought otherwise. The result was state regulation in various forms and Federal regulation under the Interstate Commerce Act.

Transportation and monopoly.—In deciding to regulate the operations of railroads, the President and Congress departed radically from old and well established notions, and in so doing, they alarmed those who regarded such regulations as a first step in government control of business. What these alarmists overlooked was that railroading, because of its very nature, was not self-regulatory through free competition. Furthermore, the building of parallel lines to those already in operation would have entailed enormous social waste. The only alternative, therefore, to cutthroat competition with its destructive results was regulation by the Federal Government. The Interstate Commerce Act of 1887 marked the first definite long step in this direction. Under this Act prohibitions were laid on certain practices considered harmful to public interest and a Commission was provided for making these prohibitions effective and given power to establish regulatory procedures.

Difficulties of administration.—Despite the logic back of the Interstate Commerce Act, its enforcement during the early years of its application to railroad transportation was anything but satisfactory. Many of those in key positions among the roads resisted what to them appeared to be an invasion of their rights

to conduct their businesses as they saw fit. These men were able. Many of them had reached the top by the hardest kind of work and in doing so they had learned how to overcome the greatest obstacles. Against them and their paid attorneys the typical official could do little. To add to the difficulty the personnel of the early Commission was not always what it might have been. None of them had had the opportunity to be trained in the service they were now called on to render; some of them were political lame ducks. The effectiveness of the Commission as we know it now came after 1900.



The Bettmann Archive

When the Steamboat Era was at its height

102. Inland River and Canal Transportation

Nature and extent.—A study of the development of river transportation in this country and its decline to the point of extinction must of necessity be confined in the main to the Mississippi River and its numerous tributaries.* It was here that the packet boat provided for many years a method of travel as luxurious as it was speedy. Northern merchants and Southern planters, they and their ladies, spent their evenings on deck dancing to the music of a negro band and met as equals about

* The different packet lines and some of the influences which brought them to an end are discussed in Selection 67.

the boat's heavily laden dining table. Nowhere else in all America could be found so much romance—a romance in which chivalrous men and shy maidens divided attention with fancy vested gamblers aboard and free-for-all fights at every landing.

We know a great deal about the nature of this industry; we know little about its extent. With the close of the Civil War came a revival of Mississippi River steamboating. The next fifteen years saw the industry reach great heights, saw scores of richly appointed packets and other scores of long, sturdy barges ply back and forth with their precious cargoes, leaving little or no permanent record of their actual operation. How many tons were handled each year? What made up this tonnage? What was its origin; its destination? Our answers must be guesses, for as yet no central agency had attempted to collect complete information concerning inland river transportation.

The Mississippi River system.—A variety of factors contributed to the greatness of the river traffic in the Middle West. There were, first of all, thousands of miles of navigable waters adjacent to fertile farm lands, busy factories, and populous cities. Nowhere else in the whole world were to be found a fertile area equal in size to that reaching westward from the Alleghany Mountains to the foothills of the Rockies. Nowhere else were to be found in a single river system so many industries and so many cities of considerable size—New Orleans, Natchez, Memphis, Louisville, Cincinnati, Pittsburgh, St. Louis, Kansas City.

This great inland waterway divided itself into four natural areas. There was, first of all, the Ohio River system including the Tennessee and the Cumberland rivers. Its chief ports were Pittsburgh, Cincinnati, and Louisville. The Upper Mississippi system extended northward from St. Louis. Its chief ports were Dubuque, St. Paul and Minneapolis on the Mississippi, and Peoria on the Illinois. The Missouri River system tapped the far western areas as far as the mountain region. From St. Louis southward was the Lower Mississippi system, fed by the Red, the White, the Arkansas, and the Ouachita rivers. Along the banks of the parent stream were Cairo, Memphis, Vicksburg, Natchez, Baton Rouge and New Orleans. Much of the history of the Middle West was for decades the history of these ports with their warehouses and landing places reflecting the restless spirit of a frontier people.

Decline of river traffic.—Despite what to all appearances seemed to be a condition that would last forever, the inland river traffic of the country faced decline, if not extinction; the steamboat and the barge could not compete on equal terms with the railroad as a method of getting about and moving freight. Several factors were involved. As a transportation agency the railroad line was far more flexible than river or canal. One was wholly, or in large measure, a gift of nature, its location fixed within narrow limits; the other, the product of man's ingenuity and capable of being built into the most out-of-the-way places. A second factor concerned speed. The steam driven river boat had in less than three quarters of a century cut the

SHIPMENTS AND RECEIPTS OF FREIGHT AT ST LOUIS
1871–1900

Year	*Shipments (in Tons)*		*Receipts (in Tons)*	
	River	Railroad	River	Railroad
1871	770,498	959,882	884,401	2,298,321
1875	639,095	1,301,450	663,525	3,232,770
1880	1,037,525	2,755,680	893,860	6,096,524
1885	534,175	3,537,133	479,065	6,764,168
1890	601,862	5,270,850	663,730	9,969,291
1895	303,355	5,349,327	508,830	10,489,344
1900	245,580	9,180,309	512,010	15,375,441

running time from New Orleans to St. Louis from four months to less than four days, but that was not enough. Passengers and shippers demanded faster service; the railroad alone could meet that demand. Another factor had to do with service. The rivers of the country had the bad habit of overflowing their banks at one time and of going all but dry at other times. At best, therefore, they could not offer uninterrupted year-around service to those who would use them. The result was decline on the one hand and growth on the other. The steamboat had served its purpose well; it gave way to the steam locomotive with its power and speed and its ability to go where its services were required.*

The New York canals.—Practically all the inland canal traffic of the post-war years was confined to the canals of the State of New York, with the peak being reached during the decade 1861–

* For another phase of inland water transportation, traffic on the Great Lakes, see Selection 68.

1870. Comprising the bulk of freight carried on these canals were grain, sand, gravel, stone, and petroleum products. It was during this period that the State of New York ceased to collect tolls for the uses of the Erie and other canals.

TONNAGE MOVED ON NEW YORK STATE CANALS
1856–1875

Yearly Average	*All Canals*	*Erie Canal*	*Yearly Average*	*All Canals*	*Erie Canal*
1856–60	3,911,407	1,889,759	1876–80	5,219,888	3,542,020
1861–65	5,049,341	2,743,929	1881–85	5,210,389	3,495,590
1866–70	5,987,724	3,018,359	1886–90	5,281,441	3,589,631
1871–75	5,974,097	3,326,073	1891–95	4,112,061	2,962,528

Travel and communication in 1900.—Measured by twentieth century standards the facilities for getting from place to place a generation and more ago were wholly inadequate. That in itself is not significant. Important is it to keep in mind that within a hundred years mankind had done more to improve travel and communication than had been done in all previous centuries. The Americans of Washington's day traveled no faster than had the Romans of Caesar's day. They still depended on sails and oars and poles to move their river crafts, on oxen for heavy freighting, and on horse flesh for overland speed. The century was scarcely under way when Fulton showed how steam might be applied to river transportation. Then came the same power applied to land movement. From that point on improvement followed improvement until we were able to cross oceans with ease and to span the entire continent with a continuous means of travel. The signal fires of the ancients we had exchanged for instantaneous communication by electricity. Europe was no farther away than our next door neighbor.

103. Developing Means of Communication

The electric telegraph.—Between 1866 and 1892 the miles of telegraphic wire operated by the Western Union increased nine fold, the number of offices from 2,250 to 20,700, and the number of messages annually from less than five million to more than sixty million. During the same quarter of a century the average charge per message dropped from more than a dollar

to 31.6 cents. Several smaller concerns carried on similar operations, some in direct competition with the Western Union, others serving their own territory exclusively.

It was during these years that the Western Union expanded to the point where it dominated the field. In 1881 that company secured by purchase the lines of the American Union Company and the Pacific Telegraph Company. Later it leased and operated the properties of the New York Mutual Telegraph Company. In 1887 the Western Union expanded further through the purchase of the lines formerly operated by the Baltimore and Ohio Railroad. Other absorptions and purchases included the American Rapid Telegraph Company and the Northwestern Telegraph Company. The chief independent in the field was the Postal Telegraph Cable Company of New York.

THE AMERICAN TELEPHONE INDUSTRY
1889–1893

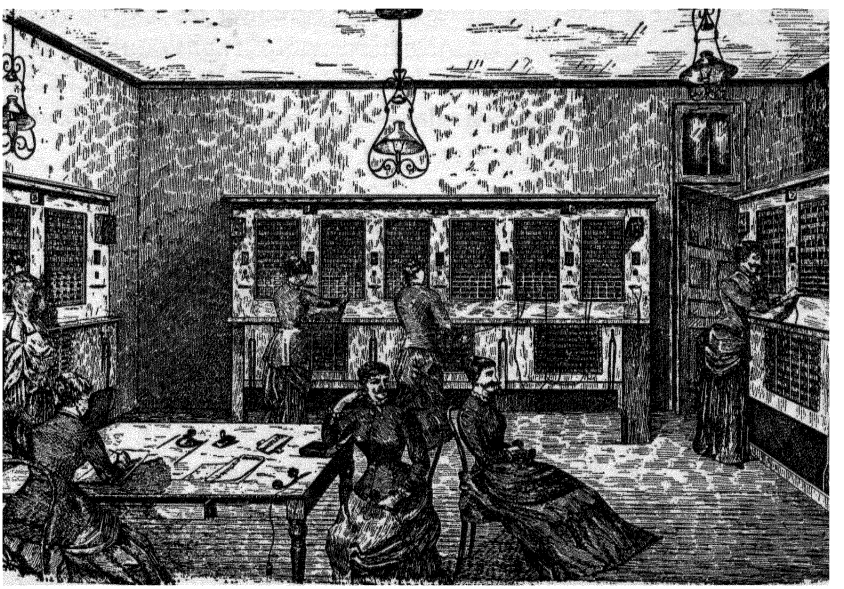
	1889	*1890*	*1891*	*1892*	*1893*
Exchanges	742	757	774	788	813
Miles of wire	170,471	193,213	240,412	266,456	307,748
Miles of wire (submarine)	536	603	779	1,029	1,336
Subscribers	171,545	185,003	202,931	216,017	232,150

The telephone.—From a toy in 1876, the telephone had come to be indispensable as a means of communication. Measured by present-day standards the industry was yet in its infancy; its future was assured. In 1892 more than a half million instruments were in daily use, most of them being in the largest cities, and through them calls aggregating two-thirds of a billion a year were being made. Leaders in the field were the Bell Telephone Company with its subsidiaries, and the Long Distance Telephone Company. These two groups had a combined capitalization of about $90,000,000. Ten years later (1902) the Bell System controlled the industry with 1,317,178 instruments, and 3,387,924 miles of wire carrying more than three billion calls for the year.

The postal service.—Hand in hand with the growth of population and with the spread of settlement across the country went the postal service. By train and boat and by stage coach and star route the country's mail reached even the most out-of-the-

way places. The Texas rancher deep in the cow country kept in touch with the country's markets through the medium of the mail service, the same service on which the captains of industry relied in carrying on their affairs.

Between 1869 and 1892, the number of post offices in the country increased from 27,106 to 67,119. Eight years later the number was 76,688. More significant was the increase for the same period of postal revenues. In 1869 they totaled $18,-



The telephone exchange comes to America

344,511; in 1880, $33,315,479; in 1892, $70,930,476; in 1900, $102,355,000. From a comparison of these changes together with the growth of population, certain conclusions can be drawn: (1) the average yearly business per post office had increased; (2) a larger proportion of the people were using the mails; and/or (3) the average annual expenditure per person was becoming greater.

An important factor in the growth of the postal service was the railroad. In 1870 mail was carried over more than eighty per cent of the country's 52,922 miles of railroads. At the same time the total mileage of all post-routes was 231,232. During the next two decades these figures changed to 93 per cent of

174,750 miles of railroad with a total of 447,591 miles of post-routes. The same twenty years saw increases in the annual railroad mail-miles operated from less than fifty million to about a quarter of a billion, in the amount paid the railroads for this service from a little more than five million to more than twenty-five million dollars, and in the personnel employed from 1,106 to 6,417. Of even greater importance than this growth in number of postoffices and of route-miles was the shortening of the time consumed in carrying mail from one place to another. What the people were really beginning to enjoy for the first time in the history of civilization was a rapid, reliable mail service made possible by the railroads.

Newspapers and periodicals.—The four decades following the close of the Civil War saw the number of newspapers and periodicals continue to grow. By 1900 the number of newspapers was about 21,500. Newspaper subscriptions had exceeded the population in 1890. The postal law of 1880, the most favorable American newspapers had operated under, was partly responsible for this rapid expansion. The low price of newsprint and the fairly general use of improved printing machinery also favored the wider circulation.

Business periodicals multiplied fast in this period. Previous to the Civil War they had been relatively unknown. The *American Railroad Journal* had begun its long career in 1831, and in 1833 the *United States Economist* and *Dry Goods Reporter,* later the *Dry Goods Economist,* had appeared. The forerunner of *Iron Age* and *Hardware Age* had made its appearance in 1855 and the *Shoe and Leather Reporter* had been founded in 1859. As various other industries had increased in number of establishments and volume of output trade journals had been founded to report and discuss common problems.

Chapte. ---- -

THE UNITED STATES A WORLD POWER

THE turn of the century (1895–1905) marks the beginning of a period filled with events of far-reaching importance. For more than a full century our people as a nation had busied themselves largely with their own affairs, spending their energies in clearing wild lands, building cities, operating mills and factories, and in developing a land system of transportation unequalled anywhere else in the whole world. Now changes were under way. The frontier had disappeared; from our productive enterprises poured streams of goods in excess of domestic needs; capital was seeking investment abroad. We had reached the end of economic self-sufficiency; our course henceforth was in another direction.

The problems that confronted us were varied and difficult of solution. Our success in the War with Spain gave us the appearance of an empire. Hitherto we had been the dominant power in the Western Hemisphere; now we had interests in the Orient. We could no longer view with complacency the foreign policies of other nations. Then, too, we had progressed to a point where we no longer needed the help of foreign capital in developing our industries. Already, our exports were running in a continuous stream far ahead of our imports; this new situation demanded a reexamination of our tariff policies and such alterations as might be necessary to bring them into line.

Viewed from any angle, the United States stood in 1900 on the threshold of radical changes. For a century and more the people had stood facing the center of the continent; now they looked out on other continents. This country was on the verge of becoming a world power in fact as well as in name. Future policies of trade and commerce must be made to conform to new and changing conditions.

104. Acquiring Foreign Territory

Early beginnings.—It was in 1867 that the United States began an expansion of territory beyond what for years had been regarded as natural boundaries. In that year the Secretary of State (Seward) persuaded a relucant Congress to appropriate $7,200,000 to be used to purchase Alaska from Russia. So strong was the feeling in opposition that for years this new possession was often referred to as Seward's Ice Box. Twenty-two years later, feeling the need of a naval station in the Pacific, this country entered into an agreement with Great Britain and Germany to control jointly the Samoan Islands. Later this control was divided between the United States and Germany, Tutuila and the harbor of Pago Pago being handed over to the United States. In the meantime the Hawaiian Islands were in a ferment. An influential group favored annexation to the United States; others opposed the plan. The outcome was revolution accompanied by a sharp division of opinion in this country. In the end (July 7, 1898) the Hawaiian Islands became American territory.

The War with Spain.—The climax to what was coming to be a change in attitude on the part of the people regarding foreign relations came with the War with Spain. Repeatedly the Cubans had revolted, but without success, against the mother country, and with each revolt sympathy on the part of the American people had become keener and more widespread. Finally, in 1895, Cuban revolutionists made a final attempt to free themselves. In an effort to suppress the uprising, the Spanish Government adopted measures that shocked the civilized world. With the blowing up of the battleship *Maine* in Havana Harbor on the night of February 15, 1898, the feeling in this country mounted high. The result was a declaration of war by Congress.

As wars go, this struggle does not rank high; as an influence on the thoughts and actions of the people of a great nation, it shares first place with the life and death struggle between the North and the South and with the World War. War was declared in April, 1898. In May an American fleet commanded by Admiral Dewey defeated a Spanish naval force in the Harbor of Manila without the loss of a man killed in action. Later one

army defeated Spanish land forces in Cuba, while another overran Puerto Rico. On December 10, 1898 (Treaty of Paris) Spain gave up Cuba and ceded outright to the United States Puerto Rico, Guam, and the Philippines, in exchange for $20,000,000 and other valuable considerations.

Establishing new relations.—The acquisition of this new territory forced Congress and the President to give serious consideration to the formulation of new foreign policies. The Philippines, for instance, did not constitute a state; nor were they a territory in the generally accepted meaning of that term. Moreover, their location on the far side of the earth required a point of view on our part not at all unlike that which we had often criticized in the past. Those in authority went about their task seriously. Arrangements were made by the Platt Amendment to the Cuban constitution for relations between the United States and Cuba, the Foraker Act of 1900 provided a government for Puerto Rico, and after a time the Philippines had their own government with a resident Governor-General appointed by the President of the United States.

The cry of imperialism.—With the War out of the way, those opposed to the new policies of the Government raised the cry of imperialism. As a point of departure in their campaign for changes they charged that the real reason back of the acquisition of naval bases in the Pacific and of the espousal of the Cuban cause in 1898 was the desire on the part of certain industrialists to expand their businesses. The Democratic Party was the opposition party of the time. It nominated in 1900 as its standard bearer William Jennings Bryan and declared in its platform that imperialism was the paramount issue before the people. The Republicans won the election with William McKinley as their candidate for President, and had, for the time being at least, a mandate to continue the new foreign policy which they had inaugurated.

105. Industrial Expansion

Manufactures.—The War with Spain, while it called relatively few men from industry and provided a market of no great size, did exert a lasting influence on the manufactures of the country. There was a temporary loss of man-power, but this was quickly regained through a greater use of machinery, which

pointed the way to an even greater use after the War was over. What the manufacturing establishments of the country did was to maintain production at old levels with fewer men at work, while at the same time they stepped it up to supply war needs. In meeting these two situations they found it possible by substituting capital goods for man-power to increase their output at a higher speed.

GROWTH OF MANUFACTURES
1899–1914

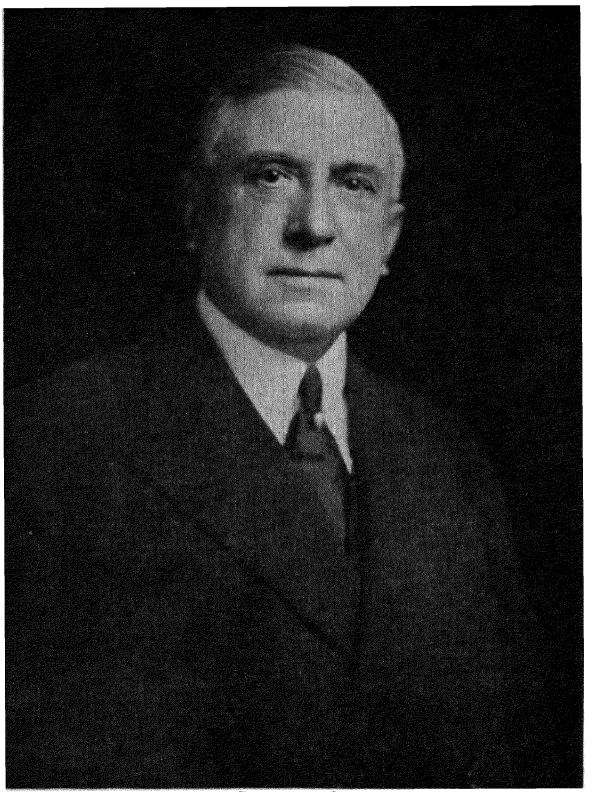
Year	*Wage Earners*	*Per Cent Increase*	*Capital (000 Omitted)*	*Per Cent Increase*	*Value of Output (000 Omitted)*	*Per Cent Increase*
1899	4,712,763	. . .	$8,975,256	. . . .	$11,406,927	. . .
1904	5,468,383	16	12,675,581	41	14,793,903	30
1909	6,615,046	21	18,428,270	45	20,672,052	40
1914	7,036,247	6	22,790,980	23	24,246,435	17

Thus, during the fifteen years, 1899–1914, the manufacturing plants of the country, with production valued at $500 or more each, increased the value of their total outputs in excess of one hundred per cent with man-power increasing slightly more than fifty per cent. In 1899 the ratio of output to capital employed was approximately twenty-five to nineteen; in 1914, it was in the neighborhood of twenty-five to twenty-three.

Trust busting.—It was during the early years of the century that industry, using that term in a narrow sense, felt for the first time the heavy hand of the Government. The trust movement already discussed in an earlier chapter continued with its menace to free competition. Organizations became larger and larger, the climax being reached for the time being with the organization of the United States Steel Corporation in 1901 with stocks and bonds aggregating $1,402,000,000. Just what the course of events might have been had not an assassin's bullet cut short President McKinley's career as a statesman and elevated to the highest post in the land the vice-president, Theodore Roosevelt, no one can predict with any assurance. Hardly had the new President been settled in office before he called to the attention of Congress the need for stricter regulation of business. This he did in his first annual message to that body.

The straightforward pronouncement of the President of the

United States stirred the people in a variety of ways. The man on the street, insofar as he held an opinion concerning the subject, received it with pleasure. Those, however, who profited from monopoly or who hoped to profit thereby, regarded it as demagogic and hence intended to incite the majority to radicalism



CHARLES SCHWAB

One of America's master salesmen

and perhaps worse. The President himself faced forward, determined to leave nothing undone to restore fair trade practices among the businesses of the country.

Such justification as President Roosevelt may have needed for waving the "big stick" he had in recent developments in industrial consolidation. Mention has just been made of the organization of the so-called steel trust in 1901. More ominous was the railroad situation. There such giants as Harriman and Hill

struggled for supremacy. Through his domination of the Union Pacific, the former is said to have controlled at one time not less than one-sixth of all the railroad mileage in this country. Despite this great power, he found a worthy foe in the late James J. Hill. In time these men joined their interests in what was known as the Northern Securities Company.

In 1903, President Roosevelt instructed the Attorney-General of the United States to move to dissolve the Northern Securities Company. This he did by instituting suit in the Federal Courts. The next year the Supreme Court of the United States ordered the Company dissolved. This action led men who desired great industrial monopoly to turn away from the holding company as a control device and toward consolidation and direct ownership. Fortunately, Congress in the Elkins Act, passed in 1903, had provided for an increase in the power of the Interstate Commerce Commission, and, in addition, for the setting up of a Federal Bureau of Corporations.

This fight on the part of the President to destroy monopoly, and thereby to restore free competition, is as old as civilization itself. With the growth and development of industry came an increased need for protecting the public interest against sharp practices and sometimes fraud. Against him the President found powerful interests joined in a common purpose. These interests questioned his motives, criticized his acts, and blocked his progress. He did, however, succeed in arousing public sentiment in a way and to a degree that brought to an end such industrial practices as were most dangerous to the best interests of society.

106. Tariff Changes

Agitation for revision of tariff rates.—During the early years of the twentieth century, the rise of the general price level stimulated industry of every sort and caused the people to feel prosperous. For this situation the friends of relatively high tariff rates claimed the credit and with apparent success; in 1900 William McKinley was reelected president, and again in 1904 the party of high rates defeated the opposition by large majorities.

During the 1908 campaign, the question of rates again came to the fore. Times were not as good as they had been, and many people, hitherto supporters of the protective principle,

came to have doubts. Both political parties in the campaign promised, if successful, to give early and serious consideration to rate revision. For the fourth successive time the Republicans emerged victorious, electing William H. Taft of Ohio to the Presidency.

The Payne-Aldrich Tariff Law.—The Republican Congress set about to revise rates along traditional party lines. Some rates were lowered; others, raised. The net results satisfied only those who could see gain to be had. In some respects this Act resembled the old Abomination Act of 1828 and the Mongrel Act of 1883. It followed no particular principle with any degree of consistency.

Political realignments.—The failure on the part of the dominant party to redeem its pledges, implied or otherwise, displeased many influential persons, some of whom held high places in the councils of the Party. This was one cause of the split in the Republican Party that lasted for a generation. Here and there dissenters, without giving up formally their party allegiance, rebelled against what they regarded as violation of a sacred promise. With other causes this split the Republican Party in 1912. One branch, calling itself regular, nominated President Taft to succeed himself; the second chose Theodore Roosevelt and called themselves the Bull Moose Party. The outcome was a Democratic victory with Woodrow Wilson's election to the Presidency.

The Underwood-Simmons Act.—Soon after returning to power the Democrats set about making a tariff law to conform to their 1908 and 1912 platforms. The result was the Underwood-Simmons Act passed in 1913. This Act reduced the rates on many imports and extended the list of goods to be admitted free. Thus for a second time in more than fifty years, industry in general was required to operate without the aid of high tariff rates.

107. Innovations in Finance

The panic of 1907.—This disturbance was in the main financial rather than industrial. Already in another connection notice had been had of the practice of so-called country banks to keep the bulk of their ready money on deposit in the three Central Reserve cities—New York, Chicago, St. Louis—by far the

greater part being in the New York banks. That was the situation in the late autumn of 1907, when the local demands for money to be used in the movement of crops outran the ability of local banks to meet that demand.* These banks called for their deposits from their correspondent banks in the Central Reserve Cities. This call was heard for a time and then, through sheer necessity, entirely ignored.

The correspondent banks, more particularly those of New York, had loaned great amounts of money to their customers, who, when the strain came, could not repay as they had promised and expected. The result was that the banks themselves could not meet the needs of their country bank customers. There ensued days and weeks of uncertainty. Money in circulation became more scarce. Then the machinery of business slowed down and threatened to come to rest. At this point the banks of many different cities joined together city by city, their resources pooled, to issue what went generally under the name clearing house certificates. Fortunately, the people in general maintained their confidence in the banking institutions of the country. They accepted these certificates in lieu of actual currency and with them carried on trade as best they could. In due time matters straightened themselves and the banking business of the country resumed its normal course.

Effects of the panic.—This situation demonstrated graphically what economists had been trying to teach for years—the danger of concentrating money reserves in the hands of a few banks in the large cities. Even the man on the street could understand it when he felt his financial nerve pinched. What to him had been for years something academic and of no great consequence had become practical and pressing. He would do something to prevent the recurrence of a similar situation. His thinking was reflected in high places. Men of affairs set about to find some solution to a problem that must have a correct answer. The upshot was the selection of a group of men to study banking and finance in all of its phases—foreign as well as domestic, private, and public banking.

The Federal Reserve Banking System.—The group thus selected went about its work in a spirit of open-mindedness.

* The course of the panic is given by the Comptroller of the Currency, Selection 70.

Through specialists it examined carefully and critically foreign banking systems and weighed one against another. Then by adapting here and adopting there it endeavored to formulate a system that would combine the best of all and yet remain characteristically American. This examining group, known as the National Monetary Commission, submitted through its chairman, Senator Aldrich, a comprehensive plan for centralizing American banking without setting up a central bank.* What its members had in mind was to secure for the country the advantages to be had from a single gigantic institution operating hand in glove with the Government, without at the same time incurring the risks incident to such a relation. This plan took form in the shape of a bill introduced into Congress, where it was discussed but not passed.

Soon after President Wilson's inauguration in March, 1913, another bill, one more acceptable to the party then in power, was introduced under the short title, Federal Reserve Act. This bill Congress discussed and modified to some extent. On December 23, 1913, it became a law.

The Federal Reserve System as authorized provided for a Federal Reserve Board of seven members and for twelve regional banks. The Board itself did not conduct a bank; its chief functions were to formulate policies and to coordinate the activities of the regional banks. In order to insure proper business representation on the Board, the Act provided that two of the seven members should be public officials (the Secretary of the Treasury and the Comptroller of the Currency) and that five should be selected by the President of the United States—not more than one of the five to be selected from any regional bank district, and in the selection of all five the President should give consideration to various industries and to different sections of the country. Later all members were made appointive for fourteen years.

The twelve regional banks were located in twelve different centers of trade and finance. One was to be in Boston; the others in New York, Philadelphia, Richmond, Atlanta, Cleveland, Chicago, St. Louis, Kansas City, Minneapolis, Dallas, and San Francisco. Each of these banks was to be a bankers' bank.

* The weaknesses of the National banking system were summarized by this commission, Selection 69.

That is, it was to be owned by member banks, and its business would be largely with these and other banks.

The chief advantage sought in these radical changes in our banking machine was a more elastic currency. Hitherto the amount of money in circulation had varied but little from year to year. Under the new plan the banks were expected to loan Federal Reserve Notes to their members, if and when these members asked for such loans and could provide satisfactory security. Thus with the movement of crops, for instance, a member bank, instead of having to depend on some correspondent bank to return its deposits, could, by placing security in the form of notes of its customers, borrow of its regional bank. Best of all, the money so borrowed would in due time be returned to the regional bank and there kept for future use or destroyed.

The Federal Reserve System was a creature of the Government. Its success, therefore, depended on its management being kept out of politics. This the original Act did by laying on the chief executive the responsibility of choosing men of widely different points of view for the Board—men of varied sectional interests and economic outlooks—and of leaving to each regional bank the right to choose six of its nine board members. All in all the system was a success from the beginning; it met a pressing need. With minor modifications the system, as originally set up, withstood the shock of a worldwide conflict and later the even greater shock of a worldwide economic disaster.

Federal revenues.—For more than a century the ordinary receipts of the Federal Government consisted largely of import duties and internal revenue taxes. Import duties were authorized by various tariff laws, and were laid on goods brought into the country from foreign lands; internal revenue taxes were, in the main, paid by tobacco manufacturers and by distillers and brewers. In 1903, for instance, the total ordinary receipts of the government exceeded a half billion dollars with the customs providing $284,480,000 and internal revenues almost as much more. Other items entered into the total income, but compared with the two already mentioned, they were insignificant. Gradually, during the next ten years, the amount of money going into the national treasury increased until in 1912 it fell a little short

ORDINARY RECEIPTS AND EXPENDITURES OF THE GOVERNMENT
1899–1913

Year	*Receipts (000 Omitted)*			*Expenditures (000 Omitted)*			
	Customs	Internal Revenue	Miscellaneous	Civil	War and Navy	Pension	Miscellaneous
1899	$206,128	$273,437	$36,396	$108,459	$293,783	$141,916	$61,014
1902	254,445	271,880	36,153	122,696	180,075	140,903	41,560
1905	261,799	234,096	48,380	125,554	243,644	144,188	53,893
1907	332,233	269,667	63,960	143,502	246,903	141,449	47,275
1910	333,683	289,934	51,895	169,709	213,997	162,569	48,342
1913	318,891	344,417	60,803	167,816	335,392	177,072	44,232

of seven hundred million dollars. The huge sums to be raised from an income tax were matters of the future.

Early attempts to approve an income tax.—The income tax idea rooted back to Civil War days. During that conflict, the Federal Government, hard pressed for funds, resorted to collecting a tax on incomes. After a time it was abandoned. A generation later the Wilson Tariff Act of 1894 carried a provision for such a tax. Shortly after its enactment this section of the law was attacked as being unconstitutional on the ground that no tax other than one spread evenly over the people of the states could legally be levied and collected by the central government. This contention the Supreme Court of the United States upheld, thereby putting an end forever to an income tax under the Constitution as it was then written. The only way open was to amend that document.

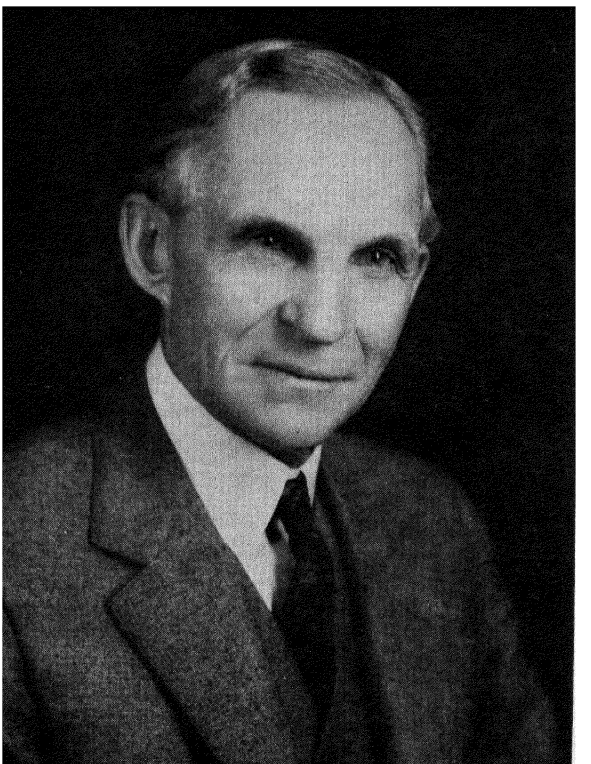
The Sixteenth Amendment.—Following the declaration of the Supreme Court concerning the power of Congress to lay an income tax, agitation got under way to alter the Constitution. This agitation gathered force with the years. First, the idea that each should share his income with organized society was a popular one, particularly among those who did not expect to do any sharing. Second, the Government needed additional revenues if new projects were to be undertaken, especially if relief from import duties was to be had. As might be expected under the circumstances, the people ratified the Amendment. It became effective February 25, 1913, and it reads as follows: "The Congress shall have power to levy and collect taxes on incomes from whatever sources derived, without apportionment among

the several states, and without regard to any census or enumeration."

Collecting on incomes.—The adoption of this amendment to the Constitution was a rousing victory for two groups: (1) those who sought newer and more fruitful sources of Federal revenue, and (2) those who sincerely believed that the proper basis on which to lay taxes was income rather than property. With the way clear to legislate, Congress set about to draw an income tax law. The first of such laws made modest demands compared to what happened later. During 1924 the total income and profits taxes collected rarely exceeded seventy million dollars. Six years later this total fell but a little short of four billion dollars.

The decision on the part of the people to lay taxes on income stands out as an event of major importance. Without such a tax Government would be confined within the narrow limits of public defense and similar functions; with it, the temptation to embark on a great variety of projects would be ever present. Moreover, such a tax, as was repeatedly pointed out, might be used to redistribute incomes as well as for carrying on the functions of government. In view of pending events, the finding of new and rich sources of revenue plus the establishing of a nation-wide banking system appears to have been providential steps in a history of the Nation. Without this the problems of government finance during the World War would have been greatly complicated; with them in operation we were able to do what at the time must have been next to impossible.

WAR AND POST-WAR ADJUSTMENTS
1917–1929



HENRY FORD

He gave America economical transportation

Chapter XXVII

MEETING WAR CONDITIONS

THE World War, which broke out in August, 1914, influenced the trend of the industrial life of the people of the United States and left impressions that can never be erased. It created a demand for goods of all kinds such as we had never before experienced. These goods we could and did produce, but in doing so we increased our productive capacities far beyond the need for meeting normal consumption.

Our own entry into the War in 1917 added complexity to problems already complex. Until now we had produced for the Allies; henceforth we must step up production to provide for the wants of American troops, and this we must do with a depleted man-power. Producers, farmers as well as manufacturers and mine operators, set about at once to meet the new situation. They reorganized along more efficient lines, added machinery where possible, and brought women into places hitherto occupied only by men. This they did under the stimulus of higher prices.

The Government itself faced the necessity of financing an expensive war. Fortunately the income tax was now available; and with prices rising and incomes on the increase, this source of revenue proved to be highly productive. The billions thus raised, however, were not enough. To make up the deficiency, Liberty Loans were floated on a large scale. Repeatedly the people on their part responded liberally. The importance of the role thus played by borrowing money for carrying on the War is reflected in the difference between ordinary receipts and ordinary expenditures for the three years 1917–1919. From various sources the Government received $9,959,131,000; during the same three years it spent a total amount of money approximating thirty-five billion dollars.

The problem then of the war years was one of adjustment—adjustment largely to new and greatly increased demands for goods in the face of a depleted labor supply. In this as in all

other modern wars, success depended as much on the Army behind the Army as on the Army itself.

108. Foreign Demands for Goods

The situation abroad.—In August, 1914, there broke out in Europe an international conflict known in history as the World War. On one side was a small group of countries led by Germany; on the other, an alliance in which France and Great Britain assumed leadership. In a short time practically all of Western Europe was involved; the leading neutrals being Holland, the Scandinavian countries, and Spain. A war of such a magnitude meant, of necessity, the upset of normal economic activities in the countries concerned. With disastrous results to industry millions of men marched away to battle. The warring nations needed supplies of every sort. They needed great quantities of food stuffs for their soldiers—more than those who remained at home could possibly produce. To these must be added clothing, iron and steel products, cotton, tobacco, and manufactured goods. To them the pressing matter in hand was to win the War at any cost. Accordingly, they exchanged what and when they could with the United States, and floated loans here for purchasing additional supplies. The result was inevitable; the demand for goods in this country rose to unprecedented heights.

Meeting war demands.—American producers lost no time in adjusting the productive capacities to the demands on them—demands reflected in higher prices. Farmers increased their acreages, manufacturers enlarged their plants, the railroads bought new cars and locomotives. Everywhere the spirit of optimism pervaded industry; everywhere the stimulation arising from increased demand made itself felt. Wages and dividends rose with production; land values soared; great was the expenditure of paper profits.

The food situation.—The bulk of our foreign trade during the War was with the Allies, that is, with those nations united for the time being against Germany. These allied nations could not feed themselves even under normal conditions; with millions of their young men under arms they were still further handicapped in this respect. Their only recourse was to depend on the United States for food stuffs, both raw and manufactured. In 1913 we exported various kinds of food stuffs, crude and manufactured,

amounting to a little more than a half billion dollars. During the next two years the value of such exports doubled. In 1917, the year we entered the War on the side of the Allies, this figure stood at $1,315,703,000. Thus within a period of forty-eight months our exports of food stuffs had almost trebled in value.

Domestic prices.—Much of this increase was in value rather than in volume. In 1913 the price of corn on the home market was 69 cents a bushel, that of wheat 80 cents a bushel. These prices in 1917 were $1.28 a bushel and $2.00 a bushel respectively. What had happened was that the corn and wheat farmers of America received for their 1917 crops more than twice what

CORN AND WHEAT PRODUCTION
1913–1917

Year	*Corn*		*Wheat*	
	Bushels	Price per Bushel	Bushels	Price per Bushel
1913	2,446,988,000	$0.691	763,380,000	$0.799
1914	2,672,804,000	0.644	891,017,000	0.986
1915	2,994,793,000	0.575	1,025,801,000	0.919
1916	2,566,927,000	0.889	636,318,000	1.603
1917	3,065,233,000	1.279	636,655,000	2.008

they had for their 1913 crops of about the same size. Farm prices were, in 1917, about ninety per cent higher than they had been in 1913, while prices in general were but seventy-seven per cent higher. In this prosperity the grower of corn and wheat shared. They were helping to supply a war market.

Manufactures.—The first year or two of the War appears to have had little effect on our exports of manufactures. In 1913 the total value of manufactured goods shipped abroad approximated a little more than a billion dollars. This flow continued through 1914 and 1915. In 1916, however, it stood above three and one-half billion dollars. Of this export trade in manufactures, $912,262,000 represented semi-manufactured and $2,625,364,000 fully manufactured goods. Here, as in agriculture, the increase was not altogether real because of differences in prices. Considering only values measured in dollars the export trade of manufactured goods in 1916 compared with the similar

trade of 1913 was about three to one; reduced to the same price basis it was less than two to one.

Effect of increased demand on prices.—The incessant demand by the Allies for more and more goods, forced prices up in the United States. American industry responded with increased

PRICE LEVELS, 1913–1917

	All Commodities	*Farm Products*	*Foods*	*Clothing*
1913	100.0	100.0	100.0	100.0
1914	98.0	103.0	102.0	98.0
1915	101.0	104.0	105.0	98.0
1916	126.8	122.8	121.2	127.0
1917	177.2	189.6	167.2	175.3

supplies. Farmers planted new acres and cultivated old ones more intensively; manufacturers built new plants, installed additional machinery, and employed more men. Prosperity was in the air; wages rose with prices; inventories increased in value; the people were on the way to becoming wealthy.

109. The United States under Arms

Call for troops.—Our entry into the War in 1917 changed the economic situation in one particular; it called millions of vigorous, young men into military service, thereby reducing the working force of the Nation. Moreover, it threw on to industry the responsibility of devising ways and means of increasing production to a high plane with a depleted man power. In addition to supplying the Allies as formerly, the farmers and other producers of the Nation must supply their own boys now mobilized for warfare. This responsibility the productive forces of the country accepted, and out of the experience gained during the three or four previous years they did remarkably well considering the obstacles they had to overcome.

Increasing production.—As a neutral we had expanded our industrial output far beyond its normal size; as a belligerent we went much farther. Between 1914 and 1919 our manufacturing establishments increased the value of their output from less than twenty-five billion dollars a year to more than sixty-one billion dollars. With due allowance for differences in prices, this was

an increase of more than thirty per cent over an output already abnormally high. The farmers, too, stepped up their production under the stimulus of higher prices. All this they did while five million men were under arms.

The export trade during these years rose to unprecedented heights. In 1914 we shipped out goods valued at about two and a third billion dollars. This figure was two and three-quarters billion in 1915, five and a half billion in 1916, more than six billion in 1917, and the same in 1918. Of this enormous value of exports in a typical war year, one-sixth consisted of raw materials, one eleventh of crude foodstuffs, one-fourth of manufactured foodstuffs, one-eighth of semi-manufactured goods and one-third of finished manufactured goods.

Many and varied were the devices resorted to by producers to keep their production at a high level. Thousands of women were called into industry to take the places of the men then under arms. Stores and offices and even shops and factories filled with women the vacancies created by men going to war. All of this was at the time regarded as an emergency measure to be abandoned on the return of peace. The entry of women into many fields called for the additional use of machinery. What a man had once done could now be done by a woman with the aid of a machine, and done more quickly and at less unit cost. Nor did the farmers lag in this respect. They took up the slack where they could by working longer hours and giving more attention to their operation. Like the manufacturers they too substituted machine power for man power.

Conserving resources.—Despite the best efforts of American industry to support its own troops in addition to aiding the Allies with goods of every sort, the task was too great for complete accomplishment. In the absence of further production, something must be done about limiting consumption. Obviously, the place for such conservation was among the civilian population and not in the trenches. Accordingly, the Government, reflecting the sentiments of a patriotic people, undertook by various methods to reduce the home consumption of certain goods essential in carrying on war.* We had wheatless days and heatless days; we restricted the consumption of print paper; we took over the railroads of the country and operated them under a

* Conservation in manufacturing facilitated this, Selection 71.

single management.* To carry out these plans, Administrators were appointed: Herbert Hoover became Food Administrator; Harry A. Garfield, Fuel Administrator; W. G. McAdoo, Director General of Railroads. Two forces operated to make the conservation program a success; one embodied compulsion; the other appealed to sentiment.

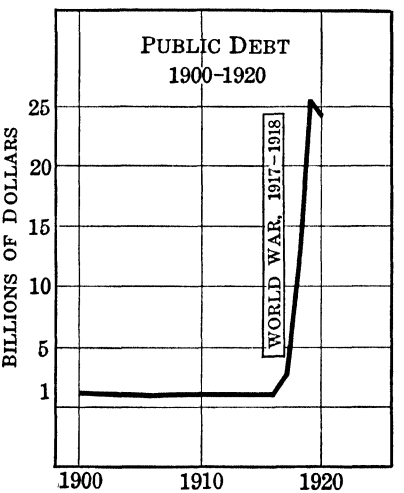
Price fixing.—In an effort to keep the armies adequately supplied with food the Federal Government moved to assure farmers of a relatively high price for certain crops. One of these crops was wheat. This movement did more than stimulate production; it discouraged consumption. Despite higher incomes, consumers drew back from the idea of excess use of a commodity now bringing in the markets a price three or four times as great as it had brought a few years earlier.

Transportation.—The movement of troops and supplies taxed to the utmost the capacity of our transportation facilities. Five million troops had to be assembled for training in conveniently located camps. They must be fed and clothed and equipped with arms. Of this mighty army, two out of every five became members of the A.E.F. (American Expeditionary Force) in Europe. Here then is the transportation picture of 1917–1918: the moving by railroad of five million men, many of them several times, plus the moving of millions more engaged indirectly in war activities; the handling of foodstuffs, equipment, and arms from center of production to the camps where in feverish haste these millions were being transferred into a fighting machine; the transporting of two million of the same men to Atlantic ports for going abroad. This last stage in getting men from their homes in Massachusetts, Texas, or Oregon to the battle fronts in France, presented an even more serious problem. American shipping, as it existed in those days, was entirely inadequate. So obvious was this deficiency that already the Government had under way a ship building program of a large size. In addition to building steel vessels in private as well as in publicly owned ship yards, resort was had to timber and even to concrete in their fabrication.

Financing the War.—The money costs of the World War stagger the imagination. At the turn of the century public indig-

* Some of the economies effected during the period of Federal operation are discussed in Selection 72. Note the main purpose of Federal operation.

nation was expressed against a Congress that had voted a billion dollars in the form of appropriation over a period of two years. On the eve of the War such appropriations were less than a billion and a half. With our entry into the War, however, came a marked change in the situation. In 1917, ordinary expenditures of the Federal Government exceeded two billion dollars. In 1918, they were $13,791,908,000, and in 1919, $18,952,141,000. Where did the Government find enough revenue to meet these huge outlays?



Mention has already been made of the Sixteenth Amendment and of the income tax laws based on this Amendment. During the years 1913–1916, incomes were normal and the rates imposed relatively low. The year 1917 showed a radical increase in both respects. For that year the people of the country paid (in 1918) more than two and a half billion dollars in the form of income and profits taxes. The next year this figure stood at $2,600,763,000, and in 1919 at $3,956,936,000. Other tax sources, while continuing in the same general trend insofar as amounts are concerned, declined comparatively until they were of no consequence. In 1913, for example, customs dues accounted for 44 per cent of all Federal taxes; that percentage in 1918 was slightly in excess of four. Thus within a period of five years a source of revenue that had been relatively profitable for more than a century practically disappeared under the strain of financing a war.

Huge as were these new sources of revenue, they fell far short of actual needs. Resort was had, therefore, to borrowing. Some notion can be had of the situation by comparing income with outgo. In 1913 Federal receipts equalled Federal expenditures. From then on through 1916 a similar situation prevailed. In 1917, however, began marked differences that lasted for three years. During those three years the Government spent and loaned more than twenty-five billion dollars in excess of receipts.

How was so much money used? War frenzy disturbs normal thinking. During such struggles the nations involved have but one prime object in view: the winning of the War. All other considerations are pushed aside. Out of all this comes confusion, with the opportunity for well intentioned citizens to put

ORDINARY RECEIPTS AND EXPENDITURES
1913–1919

Year	*Receipts*	*Expenditures*	*Deficit*
1913	$724,111,000	$724,512,000	$401,000
1917	1,124,325,000	2,086,042,000	961,717,000
1918	4,180,425,000	13,791,908,000	9,611,483,000
1919	4,654,381,000	18,952,141,000	14,297,760,000

forward their pet ideas, for others less well intentioned to play politics, and for unpatriotic ones to grow fat on the necessities of the country so engaged.

With the outbreak of war in the Spring of 1917, the country found itself caught up with great excitement. Soon Washington was the Mecca toward which the people turned their faces daily. There with feverish haste thousands of men, many of them unaccustomed to handling affairs of any magnitude, planned the details necessary to convert farm boys, clerks, and college students into soldiers within a period of a few months. The general idea, so it seemed, was to spend as much money as possible on as many things as possible; it appeared that there was no bottom to the national purse.

Foreign loans.—A particularly heavy drain on the resources of the country were the loans made to the various Allied Nations. These nations must have more supplies than they were able to buy for cash. Accordingly, they took the money ad-

vanced by the Government of the United States and used it to pay for supplies.

Liberty and other loans.—In borrowing money in such large sums the Government went directly to the people. This they did through nation-wide organization, manned in the main by patriotic citizens whose one desire was to win the War. The largest of all these loans, four in number, were known as Liberty Loans. The first such loan bore the authorization date April 24, 1917, and it was floated between that time and October 24 of the same year. Three other such loans followed: the Second in 1917, and the Third and Fourth in 1918. For those of small means who might wish to help finance the struggle, baby bonds in denominations of $50 were made available; War saving stamps made possible loans of as little as a few dollars.

The loans floated by the Government served a variety of purposes. They raised, first of all, vast sums of money, sums never before considered as being within the reach of the people. Only a little less important was the way in which they were floated. Through their absorption by the people of all social and economic classes, their existence in such large amounts created no particular fiscal problem. They were being absorbed largely by current income. Finally the participation by the man on the street in financing the War was in itself an evidence that the decision on the part of Congress and the President to enter the conflict had the support of the general run of citizenry.

110. Economic Maladjustments of the War

General price level.—The War created abnormal demands for goods, and as the demand rose, prices rose with them. Assuming 100 as the price level in 1913, we find that it reached a maximum of 194 during the War and 226 after the War was over. This shift created two general impressions. The first was that high prices were permanent, and the second, that real incomes were generally on a higher level. A workman, for example, received in 1918 a third more per hour than he had received in 1913. This he did in the face of prices twice as high. What he could see was that his pay envelope was fuller than it had once been. What he could not see in most instances was that its contents had lost a portion of their purchasing power.

This situation, because of its being partly hidden, created wrong impressions.

The manufacturer, and the merchant, too, faced a similar situation. Each saw his inventory grow in value as measured in dollars, with constantly increasing paper profits. Each advance seemed to improve their financial positions. Such appreciation tended to encourage the accumulation of stocks of goods of all kinds, goods ranging all the way from the crudest raw materials to finished products. Even worse, for it lasted longer, abnormally high prices rising out of war conditions destroyed the normal notion of relative values.

Regardless of price levels, increased incomes stimulated the buying of merchandise and the incurring of debts. The man on

UNION WAGE RATES, HOURS OF LABOR, AND PRICE LEVEL
1913–1918

Year	*Hourly Wages*	*Hours per Week*	*Weekly Wages*	*All Commodities*	*Foods*
1913	100	100	100	100	100
1914	102	100	102	98	102
1915	103	99	102	101	105
1916	107	99	106	127	121
1917	114	98	112	177	167
1918	133	97	130	194	188

the street, finding his income rising, was tempted to spend more freely and, in many instances, to anticipate demand by buying on credit. As long as prices continued to increase, such a procedure carried no great risks. Recession of prices, however, was another story. What the War really did was to create abnormal economic standards and in doing so to build up false security.

The wheat grower, for example, took the proceeds of his crops—at one time in excess of $2.00 a bushel, and invested in lands priced on the basis of high priced wheat. Many of them purchased labor saving machinery on credit. Under normal conditions land prices would have been lower and the temptation to buy machinery less. As it was, our farmer obligated himself to pay principal and interest in terms of cheap money, an obligation which would and did remain fixed long after such cheap money had disappeared and its place had been taken by dearer money.

Maladjustment in industry.—The excessive demands laid on industry by the War brought about maladjustments in two directions: general output was stimulated; particular outputs reacted to temporary demands.

Under the influence of rising prices, industry in general expanded far beyond peace-time needs. Factory owners, for example, enlarged their plants, bought new equipment, increased their labor force, and placed orders for raw materials. This they did in the face of the inevitable fact that with a return to peace conditions, such expansions would no longer be needed. The country could use their products, the people were willing to pay for them. Perhaps demand might never return to old levels. These and other arguments they used to justify their expansion. What the manufacturer did, the farmer did likewise. He, too, under the mixed influence of patriotism and greed, cast discretion aside and stepped up his output to the highest possible point. No one in fact escaped being led into bigger and better production.

The production of certain goods necessary for the prosecution of the War concerned vitally the general welfare and had to be carried on regardless of consequences. Uniforms, equipment, arms and ammunition were as essential as troops themselves, and as little needed in times of peace. Nevertheless, the mobilization of workers and materials in such industries made maladjustments that would arise after the War to plague the economic life of the country.

"Business as usual" ranks high as a meaningless slogan coined during the War, for in this particular instance business as usual meant business on a normal basis. Any one who took the trouble at the time to analyze its true meaning must have known that no country, however rich and populous, can possibly carry on its business affairs under conditions of War as it does under conditions of peace. This is true because in the upsetting of business through maladjustment, no other force is as strong as war, particularly war on a large scale.

Chapter XXVIII

POPULATION AND WEALTH

THE decade following the close of the World War was one of marked changes in the population and wealth of the United States. The growth that had characterized previous decades continued but at a slower pace; birth rates declined relatively, while adverse laws through the use of quotas reduced the flow of immigration until it was small compared to what it once had been.

The trend toward the cities continued until three out of every five persons were classed as urban residents. Long established populous centers grew rapidly during the years under consideration; new ones pushed to the front. Outstanding examples in the one group were New York and Chicago; in the other, Los Angeles, Detroit, Newark, and Gary. As might be expected under such conditions, increases in rural population approached the diminishing point. The average farm increased in size; the size of the family that operated it decreased. Thousands of one-room schools that once boasted of many pupils could make that boast no longer. Many of them had but three or four pupils each; some had none.

During these years the notion gained strength that as a melting pot the United States was cooling off, and hence not doing what it had once done in fusing the foreign elements of the country into a people with the same general ideals of society and government. The result was a reversal of policy on the part of the Federal Government in its attitutde toward immigration. Acts of Congress set up barriers in the form of quotas, in which maximum figures were set for each foreign nation. Two general results followed. The stream of immigration as such was narrowed and made shallower; the countries of northwestern Europe were favored.

The ten years prior to 1930 saw long strides forward in making business education available for adults of all ages and of

every level of ability. Colleges and Universities expanded their facilities for training their students in business, opened the way for adults already employed to attend late afternoon and evening classes, and made possible instruction by correspondence. Private agencies shifted their emphasis toward home study in subjects dealing with business in all its aspects.

Wealth and income grew with population. Measured in current purchasing power, both wealth and income increased tremendously between 1919 and 1929. Its distribution was another matter. Some had more than they could possibly enjoy; more lived on the border line between want and bare necessities. In spite of these extremes, however, the standards of living of the people in general increased beyond anything ever known in the history of civilization.

111. Growth and Distribution of Population

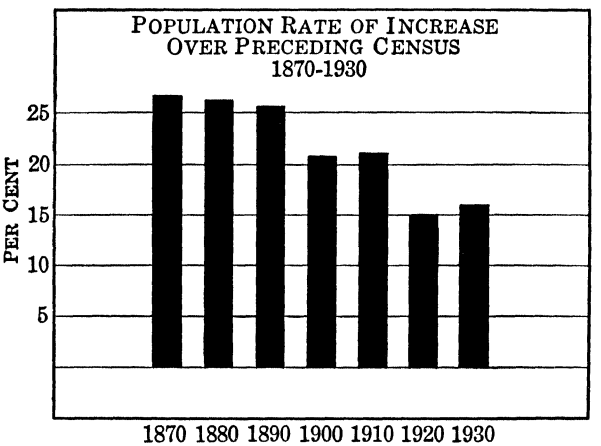
Trends in urban growth.—The United States entered the World War in 1917 with a population of approximately one hundred million about equally divided between town and country. A generation earlier five-sevenths of all the people had resided on the land or within villages and small towns. By 1900 this ratio had changed to three to five; in 1910 it was eleven to nine. To put the matter in another way, we can say that over a period of approximately thirty years the urban population of the country had grown from a little less than fifteen million to more than forty-two million, while the growth in rural population had been much slower, from almost thirty-six million to a little less than fifty million.

URBAN AND RURAL POPULATION
1880–1930

Year	*Urban*		*Rural*	
	Number	Per Cent of Total	Number	Per Cent of Total
1880	14,358,167	28	35,797,616	72
1890	22,298,359	35	40,649,355	65
1900	30,380,433	40	45,614,142	60
1910	42,166,120	45	49,806,146	55
1920	54,304,603	51	51,406,017	49
1925	62,766,000	55	52,612,000	45
1930	68,954,823	56	53,820,223	44

This decided shift from the country had created new social and economic problems and added to the complexity of many old ones.

Post-war years saw the movement continue with increased speed. The War itself had done two things. It had demonstrated beyond question that not for a long time, if ever, would additional man power be needed in agriculture. Also, it had given many of the men under arms a new point of view, a city complex as it were, a point of view at variance with the one which they had held at the time of their enlistment.



The trend of the population toward the cities was confined to no particular section of the country. In those states, however, in which manufactures predominated the trend came to be a movement filled with great significance. In 1930 nineteen cities of this country each had four hundred thousand or more inhabitants. Their combined population exceeded twenty-three million. Within the corporate limits of these nineteen cities, therefore, about one out of every five persons in the United States resided ten years following the close of the World War. Since 1910 these same nineteen cities had enjoyed an increase in population in excess of eight million, a number equal approximately to the total population of the entire country in 1820. In New York City alone more people resided in 1930 than in any one of the states, New York, Pennsylvania, and Illinois excepted. At the same time, the 1,208 cities of the country having a population of eight thousand or more inhabitants each had a combined

population of 60,333,452, which was almost one-half (49.1%) of the total population of the country.

City growth in some instances approached the impossible. Los Angeles, which was little more than a cluster of houses about a plaza in 1880, was a city of more than three hundred thousand inhabitants in 1910. Twenty years later it housed approximately a million and a quarter persons. Less spectacular, but significant nevertheless, were the growths in population of cities like Newark, Birmingham, Seattle, Detroit, Houston, and Gary.

Inter-state migration.—The movement of native born Americans, colored as well as whites, from section to section and across states lines increased following the close of the War. This movement was in every direction, its greatest strength being ever westward. In 1930 there were more New Englanders, for example, residing outside New England than natives of other Geographical Divisions residing within New England. Of the 6,596,477 natives of New England alive in that year, 795,680 resided outside New England; of the 6,289,484 inhabitants of New England, 488,687 had been born in other Geographical Divisions of the country. A similar situation prevailed in the Middle Atlantic, the South Atlantic, and the East South Central States.

Farther west the situation was reversed. Among the 3,298,382 native people of the Mountain States, a little less than three-fifths (59.4%) were native sons. That is, two out of every five had been born in other Geographical Divisions, and were therefore immigrants in a sense. What had just been said about the Mountain States applied with equal force to the West South Central and to the Pacific States. Of the 4,246,752 native-born Americans residing in California in 1930, approximately three-fifths had come in from other states. Of these states the ones making the greatest contribution in this respect were Illinois, Iowa, New York, Kansas, Pennsylvania, and Texas.

The states making the heaviest gains in attracting outside native Americans were, in their order of importance, California, Oklahoma, New Jersey, Michigan, Washington, and Florida. Altogether these six states had a net gain of 5,382,661 persons through inter-state migration. On the other side of the picture we have Pennsylvania with a loss of 750,569, Kentucky with 671,113, Iowa with 587,581, and Georgia with 583,652.

Center of population.—This imaginary point moved into the State of Indiana in 1890. By 1930 it had reached the neighborhood of the boundary line between that State and Illinois. To be more exact, it was a mile or two northeast of Linton, Indiana. The trend of this point for more than a century had been almost due westward. At no time was it far from the parallel of 39 degrees. As in the past, the median of population lagged behind the center of population in its journey westward. It was, in 1930, a few miles west of the Ohio-Indiana line.

Occupational distribution.—What was said in an earlier chapter concerning the occupational distribution of the people holds true in general for the period under consideration. About half of those ten years of age and above were gainfully employed in a wide variety of industrial activities reaching all the way from the extraction of the crudest materials to the fashioning of the most delicate bit of artistry. Altogether 48,829,920 were so employed in 1930.

Certain occupational trends emerged after 1900. Of these, two merit consideration. One has to do with child labor, the other with the workers in agriculture.

GAINFUL EMPLOYMENT
1910-1930

Years	*Male*			*Female*		
	10 to 13 years	25 to 44 years	65 years and over	10 to 13 years	25 to 44 years	65 years and over
1910	609,030	.	. .	286,946	. .	. . .
1920	258,259	15,579,586	1,492,837	119,804	3,417,373	196,000
1930	162,260	17,776,868	1,938,749	73,068	4,546,676	266,218

After 1900 there was a noticeable drop, absolute as well as relative, in the number of boys and girls gainfully employed. In 1910, for example, such workers numbered about a million. During the twenty years that followed, this number declined to 235,328. Chief causes back of this decline in child labor were (1) agitation on the part of organized labor, and (2) raising of compulsory school ages. Together they combined the selfishness of those who hated what they called unfair competition for jobs with the pretty well-settled American notion that all children,

regardless of rank and status, are entitled to such educational facilities as will fit them for useful and intelligent citizenship.

The number of workers in agriculture declined during the two decades 1910-1930. At the beginning of this period farming claimed the attention of more than ten million men; within ten years that number had declined a million; there it was in 1930. The significance of this situation was that American agriculture had reached a point in its development where, with fewer workers, it could feed the country as substantially as it had ever been fed.

112. Racial Elements in the Population

Amount and distribution.—The total population of the United States in 1930 was 122,775,046, which was an increase for the decade 1921–1930 of 17,064,426. Of this total population, foreign born whites numbered 13,366,407. That is, about one out of nine persons in the United States in 1930 was born in a foreign country. To this foreign element should be added native children of one or both parents of foreign birth. Those of foreign parentage numbered 16,999,221; of mixed parentage (father or mother native), 8,361,965. Combining the population elements, we find that almost forty million persons residing in the United States in 1930 were either foreign born or children of one or both foreign born parents.

Considering only their places of residence in 1930, New York State was at one extreme insofar as foreign born persons was concerned, and at the other extreme was North Carolina; 3,191,349 resided in New York; 8,788 in North Carolina. To put the matter in another way, less than three-fourths of the population of New York in 1930 were native born, while in North Carolina less than one out of a hundred residing there had been born outside the United States. Much of the foreign element of the time was congested in the large cities. Of such persons New York City had more than two million, Chicago a little less than a million, and Philadelphia and Detroit each about four hundred thousand. In Montgomery, Alabama, on the other hand, and in Macon, Georgia; Greensboro, Winston-Salem, and Durham, North Carolina; Columbia, South Carolina, and Knoxville, Tennessee, the foreign born element in the population constituted one per cent or less.

Shifts in national origin.—Of the total foreign population of the United States in 1930, Great Britain and Ireland had contributed in excess of two million, with Italy, Germany, and Poland each contributing more than a million. The number residing here at the time varied radically in their national origin from the numbers then arriving from foreign lands. The decade 1921–1930 differed much in this respect from the preceding decade. Immigration streams once broad and deep had all but dried up while others flowed stronger with the passing of the years. The total immigration into this country was on the decline; its national origin was undergoing great changes.

VOLUME OF IMMIGRATION
1911–1930

Country	*1911–1920*	*1921–1930*
Austria-Hungary	896,342	63,548
Germany	143,945	412,202
Greece	184,201	51,084
Italy	1,109,524	455,315
Ireland	146,181	220,591
Canada	742,185	924,515
Mexico	219,004	459,515
Poland	4,813	227,734

Setting quotas.—The decision on the part of Congress and the President to restrict immigration came only after the notion had developed very generally among the people. For years organized labor had agitated for restriction but with little success; now it had strong backing of millions who sincerely believed that unless something was done to lessen the flow, the United States would in time lose its distinctive national characteristics. Added to these two groups was a third whose slogan was "America for Americans."

Congress attempted an important bit of legislation in 1913 by passing a bill requiring immigrants to pass literacy tests. This bill President Taft vetoed. Later, in 1917, President Wilson vetoed a similar bill, but it was passed over his veto by the constitutional majority (2/3) in each house. In vetoing this bill, President Wilson pointed out that a literacy test was no test of moral fitness. It might admit the worst while keeping out the best. The test itself was no great obstacle to those

desiring to enter the United States for the purpose of making their homes here; it did, however, point the way to effective regulation.

During the 1920's two Congressional Acts laid heavy restrictions on immigration. One of these acts is known as the Quota Law of 1921; the other, as the Quota Law of 1924.

In the first of these two Acts the condition was laid down that the maximum number of immigrants to be admitted for the year from any country should not exceed *three per cent of the foreign born from that country residing in the United States in 1910.* Protests followed. Well intentioned Americans pointed out the hardships that such a law might work on foreigners of ability and character, while steamship companies, fearful of losing a paying business, provided additional opposition. Congress did modify the application of the Act but without altering the principle by which it had been drawn.

The Act of 1924 went farther. It reduced the percentage from three to two and changed the basis of computation from 1910 to 1890. The reduction itself tended to lessen the immigration flow; the change in basis for determining national quotas altered the make up of the flow. Later (1927) a provision was made for admitting a maximum of 150,000 a year to be apportioned among the nations on the basis of their representation in the foreign population of the United States in 1920. This

OPERATION OF THE 1921 QUOTA LAW

Country of Origin	*Quota of 1921*	*Arrivals*	
		First Year Under 1921 Quota	Last Year Prior to Quota
Italy	42,057	42,149	222,260
Germany	67,607	19,053	6,803
Great Britain and Ireland	77,342	42,670	61,866
Greece	3,294	3,447	28,502
Poland	21,146	26,129	95,089

change reduced materially many of the maxima permitted under the 1921 law. Drastic cuts were: Greece from 3,294 to 100; Italy from 42,057 to 3,845; Poland from 31,146 to 5,982; Russia from 24,405 to 2,298.

The problem of Americanization.—The large volume of immigration into the United States brought with it a variety of social and economic problems demanding solution. The typical immigrant sought opportunities denied him in his home country. Whatever his point of view, he was at best a stranger. He spoke a foreign tongue, was habituated to the customs and manners of his old home, and in too many instances had no adequate notion of the responsibilities imposed by a free country

Wide World Photos

Just arrived

on its citizens. What he did, therefore, was but natural; he settled down among those whose ways of living were familiar to him.

Foreign elements tended to colonize whole sections of our larger cities. We had populous quarters designated Italian, Slavic, Polish. There could be found churches and stores and community centers distinctively foreign. The result was that an immigrant might never feel any great need of acquiring skill in the use of the generally accepted language of the country. Under such circumstances the process of transforming an adult

of foreign origin was difficult and in some instances impossible. To meet this situation—dangerous it appeared to many—volunteer groups set up and maintained a variety of agencies all designed to familiarize the stranger with American methods of living and to train him in the responsibilities of citizenship.

A strong factor in this movement was the public school system. The children of immigrants found here the influences that would in time make American citizens of them. Much of what they learned they carried home to their parents. In this dual capacity they served well—pupils in school; teachers in the home. Here was the fire that supplied heat to the great American melting pot.

113. Education for Business

Colleges and universities.—Following the close of the War in 1918, the demand for business education on the collegiate level became so insistent that many colleges and universities met it by setting up courses and curricula or by greatly expanding those already available. This movement continued until it became generally acceptable among the educators of the country. These schools and colleges played an important role; they very generally combined a cultural education and a technical training, their objective being to turn out men and women with a working knowledge of the fundamental principles that underlay business processes. Enrolled in these courses leading to business careers were tens of thousands of students each year.

Adult education.—The growth of the school spirit was not confined to the campus. Men and women, many of them far beyond school age, demanded opportunities that had been denied them in their youth. In some instances the colleges and universities themselves met this demand by making home study available. More important were the private agencies organized to do that very thing. They shifted their emphasis to business education, and in doing so they offered training in economics, salesmanship, marketing, accounting, and kindred subjects. Thus men and women already active in business affairs could, if they so desired, prepare themselves for more responsible positions in business.

By 1930 the radio was giving promise of what it was to become as a factor in adult education. Programs designed to instruct were being given a place alongside those intended to enter-

tain. The reason back of this offering was the desire on the part of adults to improve themselves.

Closely akin to adult education was that offered by the business college. This college was originally little more than a place for learning shorthand and typing. With the demand for business education, it introduced a wide variety of subjects of study designed to prepare students for business careers. Some of these colleges went far in this direction; the service they rendered was important and far-reaching in its effect.

No discussion of adult education would be complete without a word about the availability of reading material on business. The daily press of the time increased the space devoted to financial and other business activities. More attention was given to the economics of American life. Magazines, new as well as old, furnished a similar service. No one, therefore, who could read with understanding, and who had a desire to do so, was denied the opportunity to improve himself in his chosen business field.

Organized business groups.—This decade (1920–30) saw a rapid expansion in organizations designed to unite business men into various kinds of association. One such group of associations was confined to localities; the other to branches of business.

Some notice has already been had of the chamber of commerce and its normal functions, how it joined together the business men and others of a community in common enterprises such as expanding retail trade areas, getting new industries, and securing benefits for its members. The alert chamber of commerce of the 1920's did more than that, it studied taxation, insisted on sanitary and health regulations, supported local school programs, and did what it could to improve the community. Much of this work was educational.

Trade organizations devoted themselves to group problems. The Association of Ice Industries, to cite a single example, concentrated its efforts on that industry. It served as a clearing house for information, carried on research in the use of ice as a preservative, and did anything else it could to further the trade interests of its members. It managed national and regional conventions, arranged conferences, and issued a magazine. Hundreds of similar organizations did likewise. All of them did a good deal to stimulate their members to economic thinking.

Getting new points of view.—During the years that followed the close of the War, the people of this country gave increased attention to economics. What had once been a subject designed apparently for college class rooms was now taken over by school children and by their elders in the home. Prior to the War, economics as a high school subject of study was all but unknown. Ten years later it occupied a prominent place in such schools the country over. The people had spoken. They saw the need of knowing more intimately something of the basic principles on which their economic life rested. Without accepting in full the stigma often fastened on them that they were "economic illiterates," they recognized their lack of understanding, and demanded that something be done to correct an undesirable situation.

This new point of view reached far in its influences and went far to explain what happened then and later. It turned men's thoughts into new channels. Every year thousands of young men and women carried back home what they had learned in colleges and universities concerning economic processes. Other thousands of high school pupils did likewise. By 1930 the facility to think along economic lines had become fairly well established. No longer were Adam Smith and Alfred Marshall symbols of unproductive speculation; they had become real persons and their ideas understandable. As a mere classroom subject, economics was on a vacation.

114. Wealth and its Distribution

Amount and kind.—In wealth the United States of 1920–1929 towered far above any other nation. In 1922 it reached the amazing total of $353,000,000,000, which was in the neighborhood of ten or twelve thousand dollars for each family. This wealth consisted of many things. Real estate, with a value of about two hundred thirty billion dollars, ranked first.* A list of additional items of large value includes railroad machinery, live stock, motor vehicles, and power plants. Some of this wealth represented consumers' goods; most of it, however, was in the form of production facilities. The people had at the time vast amounts of goods ready to be used to satisfy their wants; more

* Selection 73 is from the report of the Federal Trade Commission on wealth in 1922.

important, they had means for producing even greater quantities for consumption.

Territorial distribution.—In aggregate wealth the three Middle Atlantic States—New York, New Jersey, and Pennsylvania—led all territorial divisions. In per capita wealth, however, the Division comprising Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas, stood at the top with $3,588 as compared with $2,918 for the whole country. First among the states was Nevada, followed in order by Wyoming, South Dakota, Iowa, Oregon, California, and Nebraska. Measured in the same fashion, the East South Central Division came last with per capita wealth of $1,437, approached closely by the West South Central Division. It is within these divisions that we find the states with the least spread of wealth. Mississippi had $1,216 per capita, and Alabama, $1,244. Considering only the white population of these and other Southern states, these figures would be much higher.

Sources of income.—The estimated income of the United States for a boom year of the period was $81,034,000,000. Of this amount manufacturers produced more than nineteen billion dollars, and trade a little less than eleven billion dollars. Other important sources of revenue were finance, transportation, agriculture, personal service, and mining. These huge sums reflect original earnings and are by no means net profits. Manufacturers, for example, had expenditures exceeding eighteen billion dollars, trade more than ten billion dollars, and agriculture more than six billion dollars.*

Distribution of wealth and income.—Aggregate wealth and income are one thing; their distribution among individuals and groups is a radically different matter. We speak of the per capita wealth of the country in 1922 as being approximately three thousand dollars. That statement is correct as far as it goes. It does not mean, however, that each person possesses that much, or even a major portion of it. We know from observation and experience that some men are millionaires while others beg from door to door, and that in between these extremes come a hundred million persons of widely varying economic stations. No account is complete, therefore, without some notice of the variation.

* Income during the period 1917-1923 is analyzed in Selection 74.

Since the adoption of the Sixteenth Amendment to the Constitution in 1913, and the passage of income tax laws following that adoption, we have been able to get a clearer view of wealth and income distribution than was possible prior to that time. We know from the tax returns made to the Federal Government that the number of persons making up the high income groups is comparatively small. We know also that the number making no returns is comparatively large. Between is a medium sized group whose members are neither rich nor poor.

In 1927, a little more than four million (4,101,547) persons made individual income tax returns to the Federal Government. Of that number 3,187,950 had incomes of $5,000 a year or less, 819,779 had more than $5,000 and less than $25,000, while 557 had incomes between $500,000 and $1,000,000 a year. At the very top were 290 individuals with incomes of a million dollars or more each. The situation may be viewed from another angle. In that same year the most numerous group making returns ($3,000 to $5,000 a year) earned according to their own returns a total of $4,700,816,000. The two groups at the top ($500,000 and more) had incomes of less than a billion dollars.

Taxing incomes.—Returns such as these do not reveal the whole story, for as incomes rise the tax follows them progressively. During the year under consideration, 1,209,345 incomes falling between $3,000 and $5,000 each, and aggregating in amount $4,700,816,000 were taxed a total of $6,508,000. The 847 incomes of $500,000 or more each, aggregating $978,805,000, paid taxes totaling $162,922,000. One group had its average income decreased less than six dollars per capita; the other group almost two hundred thousand dollars each.

A glance at the wealth and income situation during the period following the War opened the way to certain observations generally made by students of the subject. Both wealth and income in this country were at the time badly distributed. Some had more than they could possibly use; many more had little or nothing. Bad as was the situation, it might have been worse. The Federal Government led the way in taking from those who had much and giving to those who had little. The members of the low income brackets had, therefore, a greater income than their pay envelopes disclosed. They had schools, police

and fire protection, parks, playgrounds, and a multitude of similar services, all provided by organized government from taxes laid on those able to pay. This method of redistributing wealth

TAX RETURNS
1927

Size of Incomes	*Number of Returns*	*Net Income*	*Net Tax*	*Average Rate*
Under $1,000	126,745	$72,231,000	$40,000	.06
$1,000 to $2,000	996,098	1,645,576,000	1,234,000	.07
$2,000 to $3,000	855,762	2,062,275,000	3,970,000	.19
$3,000 to $5,000	1,209,345	4,700,816,000	6,508,000	.14
$5,000 to $10,000	567,700	3,895,759,000	20,665,000	.53
$10,000 to $25,000	252,079	3,748,058,000	72,226,000	1.98
$25,000 to $50,000	60,123	2,051,771,000	119,475,000	5.82
$50,000 to $100,000	22,573	1,535,387,000	156,675,000	10.20
$100,000 to $150,000	5,261	636,019,000	87,398,000	13.74
$150,000 to $300,000	3,873	787,270,000	123,776,000	15.72
$300,000 to $500,000	1,141	431,122,000	73,750,000	17.11
$500,000 to $1,000,000	557	378,167,000	64,265,000	16.09
$1,000,000 and over	290	600,641,000	98,657,000	16.42

and income through enforced levies was already under way prior to 1930. To ignore it in discussing distribution of wealth and income is to ignore an essential feature of modern life.

Chapter XXIX

TRENDS IN AGRICULTURE

THE ten years following the close of the World War saw significant and far-reaching changes in American agriculture. During these years the prices of many farm products remained relatively high, despite material declines from war years levels. That is, these prices, while they declined, did not decline on the whole faster than prices in general. Also, during these years crop volumes and crop incomes varied widely and sometimes with disastrous results. In 1921, for example, the corn crop of the country was valued at slightly over one and a quarter billion dollars. This contrasts sharply with almost four billion dollars in 1917 and more than two billion dollars in 1920. Similar variations characterized wheat, cotton, tobacco, and other farm crops for the years under consideration.

Of the many problems the farmers faced during these post-war years, none exceeded in its complexity the one involving debts. During the boom years, millions of acres of farm lands changed hands at high prices in which heavy mortgages played a leading role. In Iowa, to cite an extreme case, the average value per acre of farm land increased from $36.35 in 1900 to $82.58 in 1910, and to $199.52 in 1920. During the next five years this value declined to $119.28. No section of the country escaped this movement.

Behind this problem, and others equally difficult of solution, was the decline in foreign demand for American foodstuffs. Two years after the close of the World War (1920) we shipped abroad more than two billion dollars' worth of crude and manufactured foodstuffs. By 1923 this trade had declined to considerably less than a billion dollars, and this decline was, in some instances, in the face of rising prices.

Such was the agricultural situation after 1920. Later, when it became infinitely worse, farm leaders and others looked back on the post-war years with all their ups and downs as being fairly satisfactory.

115. Decline in Foreign Demands for Foodstuffs

Europe disarms.—With the War at an end, millions of soldiers returned home and to the work which they had put aside at the call to arms. Of these millions, many were farmers. From economic parasites demobilization had made them into producers. No longer would they be compelled to depend so largely for food on the farmers of the United States. Not less significant was the fact that with their return to civilian life they would require less food for maintenance and less would be wasted; war breeds excessive use of economic goods plus waste and destruction.

Rise of nationalism.—To carry on a successful war a nation must have unity of action. This unity carries over into the post-war years. Officials and other moulders of public opinion can see in retrospect the advantages of a well rounded and highly diversified economic program. Seeing this, they set themselves the task of building their nation up to the point in self-sufficiency where its dependence on others is reduced to a minimum. This is one aspect of nationalism, the economic aspect.

The close of the World War found among the nations of Europe a fervent spirit of nationalism. Each of them had poured out its treasuries in men and materials in what under the stress of the moment was a common cause. With this stress removed, old hatreds and old jealousies returned with old-time vigor. Between August, 1914, and November, 1918, the cry in Great Britain and France and Italy was to save democracy. Following the Armistice it took on nationalistic lines. It was Great Britain for the British, France for the French, Italy for the Italians. No nation, not even our own, escaped the transformation. The Allies now faced new problems. With a powerful enemy at their gate, they stood as one; with this enemy beaten back, each of them resumed old habits of thought.

This spirit of nationalism took forms in a variety of ways, only one of which concerns us here. Nations, seeing the need of encouraging industries essential to self-sufficiency, passed laws giving them preferential treatment over foreign competitors. Such treatment found expression in tariff laws designed to protect home industries, as well as to provide governmental revenues. Those industries, too, which had devoted their energies

to producing war materials, such as arms and ammunition, came in for special consideration. To them subsidies were granted in the form of money payments or of special concessions in the way of taxes or charges for governmental loans. Whatever the method adopted, the results were the same; each nation tried to increase its own self-sufficiency, sometimes in the face of overwhelming odds.

Mention has been made of the need for revenue. Obviously any nation, regardless of its size and wealth, finds, at the close of an armed conflict of any magnitude, the need for additional sources of revenues to take the place of the emergency borrowing. One such source is the tariff. Tariff laws among the Allied Nations accomplished two purposes. They gave an outlet to nationalistic impulses and feelings, and provided, at the same time, money for the public treasury.

Associated closely with the need for public revenue was the need for gold to be supplied by foreign countries. It could be had over a long period of time only in exchange for goods. In other words, the only way any one of these countries could hope to increase its gold supply was to sell more goods abroad than it bought abroad. Here then was another factor entering into the decline of our export market for farm products.

United States as a creditor nation.—Prior to the outbreak of the World War, the United States was a debtor nation to the amount of billions of dollars. Such debts carried in the form of interest millions of dollars a year annually. These earnings foreign creditors exchanged for goods, including foodstuffs, both raw and manufactured. The War, however, changed all this. We entered it a debtor nation; we emerged a creditor nation, with billions of dollars loaned abroad. This change in our credit status produced a change in the flow of our foreign trade. No longer was it necessary to export millions of dollars' worth of goods annually to pay interest on debts. Interest payments now ran in the opposite direction; so, also, must our foreign trade if we were to collect what was due us.

Having claims against foreign debtors entitled the United States to large quantities of goods every year as payment of interest. An individual so situated would have accepted these goods with eagerness; as a nation, however, we had developed the idea that exports, and not imports, reflected the state of

the country's prosperity. The tariff walls that had been erected while we were yet a debtor nation must remain strong and firm despite changed conditions. This idea, deep rooted and widespread, worked to discourage the exportation of agricultural products.

The case against agricultural exports.—Combining these factors, we find that the people of Europe, now returned home from the army, turned their attention once more, as of old, to feeding themselves. Had they preferred to do otherwise, they lacked purchasing power to command agricultural products from America. In all this they had the support of their respective governments, each of which felt the need of making itself as independent as possible of the rest of the world. This was the European point of view. How did this country view the situation? We believed firmly in the doctrine that we must, if we were to move ahead, export more goods than we imported. To this belief we gave reality by refusing to lower our own tariff walls in order to admit greater quantities of European-made goods. We preferred, in order to win, to stake the loser after each play. Much of our export trade during the post-war days was not trade at all; it consisted in giving away our man power and natural resources in following the will-o'-the-wisp of foreign trade—the blessing of the favorable balance.

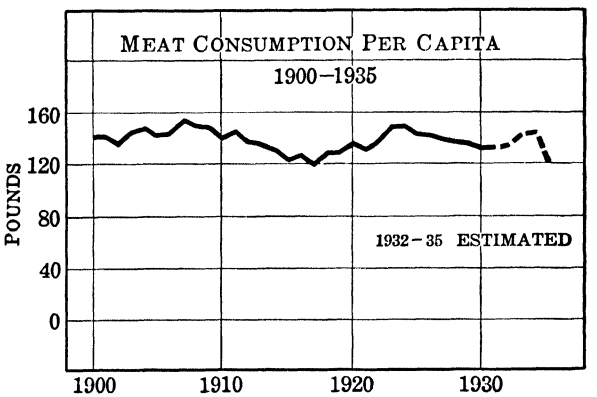
116. State of Domestic Markets

Loss of government patronage.—The chief purchaser of farm crops during the War years was the National Government. The various commissary departments of the Army and Navy made daily purchases of all kinds of foodstuffs. These purchases were usually in large amounts, and, in many instances, they absorbed all available supplies. So incessant did this demand become that the consumption by civilians of such staples as wheat and meat was curtailed; first consideration in this respect were the men in uniform.

With the ending of the War a decline in governmental needs began. Every discharged soldier meant one less mouth to feed at public expense. Gradually the men under arms returned to normal living, thereby transferring the demand for food from a public to a private basis. Henceforth they would feed themselves. How, it may be asked, did this shift affect the amount

of food consumed? That question already in a general way has been answered. A man as a soldier eats more than he does as a civilian. He lives much out-of-doors, exercises a great deal, and is influenced by those about him. Being aware of these factors, the Government saw to it during the World War that the men under arms were well and substantially fed. An added consideration was the waste involved. Army cooks are usually free from the budgetary restrictions under which the typical household of the country must operate.

Changes in consuming habits.—Highly important in their effects on the producers of foodstuffs are the constant shifts that have been going on for many years in the consuming habits of the



people. Owing to a variety of influences, these shifts were more pronounced during the decade following the close of the World War.

Of first importance was the shift in the need for food. Long hours of hard labor in the open is one thing; eight hours or less indoors is another story. The difference in the amount of food consumed under such varying conditions amounts in a year to hundreds of millions of tons. The heavy meals so characteristic of pioneer and later days were in large part gone forever. No longer was it necessary in countless instances to consume great quantities of food in order to keep the body at normal.

This shift was reflected in the demand for wheat, meat, and other foods. Between 1886 and 1910, to choose a period in which the production of wheat in the United States and the demand for it by foreign countries remained reasonably normal,

the acreage devoted to the growing of wheat increased by one-fourth, and the annual average crop by two-fifths. During the same quarter of a century, population increased more than sixty per cent with steady rises in the amount of wheat and flour shipped abroad. Measured in their influence on farm crop prices, exports were highly important. A small crop surplus bulks large in the price per unit to be had for the entire crop.

Mere changes in eating habits, in which the total quantity of food consumed is not materially affected, are often destructive in their effects on old-established processes. The substitution of fruits for meat, for example, works to the advantage of the growers of fruits, but to the disadvantage of corn farmers and hog raisers. Whatever the value of eating spinach, the cold fact remains that each mouthful displaces some other food.

Styles and fads played an important role during these years. With the disappearance of corsets as a device for controlling girths, came dieting on the part of those who would remain thin and waspy. Starchy foods, in particular, were eschewed. The result was a falling off of the demand for wheat and potatoes and other similar farm crops.

One aspect of the farm problem of the decade following the World War was a change in demand relative to the capacity to supply. In the face of a declining domestic consumption coupled with increases in acreage employed came the European conflict with its need for food. With this pressing need gone, forever, the farmers' greatest enemy, the surplus, returned with increased strength and vigor. The War had taught him how to produce on a large scale; its close in 1918 had destroyed his principal markets.

Farm crops other than food faced a new order. When the War began in 1914, we were a tobacco chewing nation; its close found us with a cigarette in our mouth. In 1913, for example, the plug tobacco manufacturers of the country consumed about one hundred sixty million pounds of leaf tobacco. Within ten years that figure had declined to a little more than one hundred million pounds. During the same decade the production of small cigarettes grew more than fourfold from 15,555,693,000 to 66,715,830,000. Cotton shared with tobacco a steady domestic demand. In 1913 the cotton manufacturers of the country con-

sumed a little more than five million bales of domestic production; the 1923 consumption was 6,322,000 bales.

Machinery on the farm.—Under the stress of war conditions —heavy demands for products and a depleted labor supply—the farmers of the country resorted to various methods to increase production. One such method was an increased use of machinery.* Grain farmers, for example, turned to the tractor more and more for power. In doing this they raised productive capacity with the same or less labor. This machinery took from the farm much of its inherent irksomeness, and because of that fact, those who employed it could see no reason for giving it up in favor of what to them had come to be out-moded practices.

The use of farm machinery complicated the problem in several different ways. It released man-power for other industries; stimulated certain manufactures, which in turn stimulated the production of coal, iron, lumber, gasoline and oils; lessened the demand for horse feed; and made possible the cultivation of a larger area under a single management. Men of middle age could in 1925 recall the time when in many communities the labor of the entire family was required to produce twenty acres of corn. To them it was a long way from their rapidly moving tractor drawing a two row cultivator back to the one horse single shovel of their boyhoods. Machinery on the farm was a well-established fact; the problem that arose from its use had yet to be established and solved.

Changes in urban and interurban transportation.—The development of motive power for getting about city streets and country roads affected agriculture in various ways. What it did, first of all, was to lessen and then all but destroy the city market for horse feed. The motor car raised the tempo of everyday life, and in doing so it displaced horse flesh as a means for getting about and transporting goods. The city stable gave way to the garage, the livery stable to the cab stand, the dray to the truck, and the feed store to the filling station. Our interest in this connection is the effect of these changes on agriculture. For years the well groomed carriage and ponderous dray horses of the city had consumed great quantities of corn, oats, and hay

* Not only did they resort to machinery to increase production, but they also shifted to more productive crops and animals, Selection 75.

every year, and, until the coming of motor driven vehicles, this quantity had been constantly rising.

With the return of peace in 1918, the makers of American motor cars could once more concentrate on peace-time needs. This they did, and the results were little short of spectacular. From a total of less than a million passenger cars turned out in 1918, the number rose to more than a million and a half in 1919, to almost two and a half million in 1922, and to more than three and a quarter million in 1924. Into these cars daily poured

AUTOMOBILE INDUSTRY
1908–1924

Year	*Total Number Produced*		*Value (000 Omitted)*	*Number Registered*
	Passenger Cars	Trucks		
1908	63,500	1,500	$137,800	197,500
1910	181,000	10,374	225,000	468,500
1912	356,000	22,000	378,000	944,000
1915	818,618	74,000	691,779	2,445,666
1918	926,388	227,250	1,236,107	6,146,617
1919	1,637,652	316,364	1,885,113	7,565,446
1920	1,883,158	322,039	2,232,928	9,231,941
1922	2,406,396	252,668	1,789,638	12,238,375
1924	3,243,285	374,317	2,011,038	17,591,981

gasoline amounting to millions of gallons; from Illinois and Iowa and other grain states, the source of motive power employed on the nation's streets and highways had shifted to the oil states south and west. This urban and interurban situation added to the grain farmer's trouble. He himself needed less of his own product; his old customers in the cities were diminishing daily and might in time all but vanish.

117. Prices and Price Levels

The general price level.—The high prices resulting from the war reached a peak in the spring of 1920 and then declined. Based on 1913 (calling prices of that year 100) prices advanced to 177 for 1917, to 194 for 1918, and to 226 for 1920. The next year saw them decline to 147. What all this means is simply that prices in general rose until they were more than twice as high as they had been in 1913, and that from this high point they dropped sharply and then began a gradual climb

upward. These changes concerned the general price level only. Most prices tended to move in the same direction, but not by any means at the same speed. At the high point in 1920 clothing and building materials stood above farm products and foods and housefurnishings. All of them, however, were far above what they had been a decade earlier.

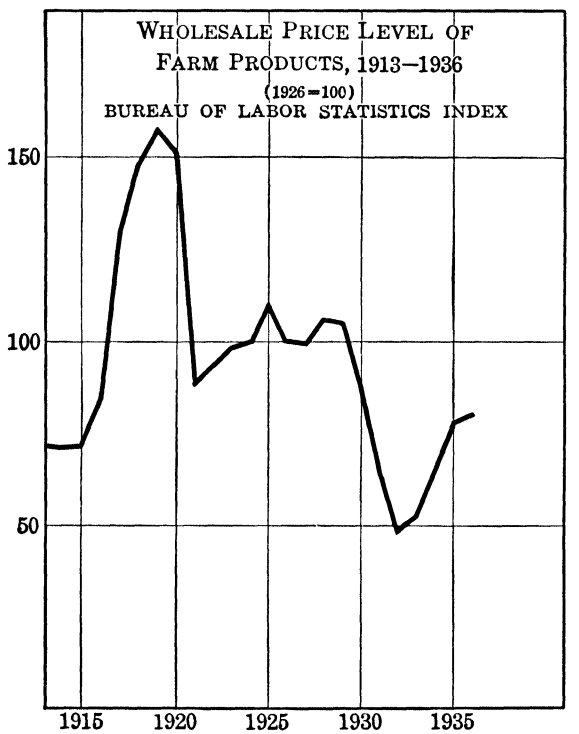
SOME PRICE SHIFTS
1917–1924
(1913 = 100)

Year	*General*	*Foods*	*Clothing*	*Fuel and Lighting*	*Building Materials*	*House Furnishings*	*Miscellaneous*
1917	177	167	275	169	157	125	148
1918	194	188	228	170	172	153	156
1919	206	207	253	181	201	184	175
1920	226	220	295	241	264	254	196
1921	147	144	180	199	165	195	128
1922	149	138	181	218	168	176	117
1923	154	144	200	185	189	183	132
1924	150	144	191	170	175	173	117

The measurement of changes in price levels merits passing attention. In studying these changes the choice of a year to be indicated by 100 is made more or less arbitrarily. One Department of the National Government may select one year; another Department, another year. The whole object is to establish comparison. In some studies attention is focussed on wholesale prices, while in other studies retail prices are chosen. In no instance, let it be said, does our comparison set up between any two years affect two persons exactly alike. In general, however, fairly accurate trends, interesting to all regardless of kinds and types of consumption habits, can be determined as to direction and their distances computed.

Prices of agricultural products.—Speaking generally, the farmers of the third decade of the twentieth century suffered no great hardships because of a disparity between the prices of the products they produced and the products they must buy for their own use. It is true, it must be said, that both farm prices and food prices tended to remain below general prices, although in doing so they did not by any means raise a general agricultural problem.

Prices during this period were characterized by radical changes. The price of corn, for example, dropped from $1.345 a bushel in 1919 to $0.423 a bushel in 1921. The wheat farmer experienced similar changes; his product dropped in price per bushel from $2.149 to $0.926. Even more radical changes overshadowed the cotton growing industry. In 1919 the price of raw cotton averaged during the year 35.6 cents a pound. Two years



later it was 13.9 cents a pound. Fortunately for American agriculture, prices of farm crops revived after 1921. Between that time and 1929 the high and low on wheat were $1.416 and $0.923 a bushel; on corn, $0.982 and $0.642 a bushel; on cotton 31 cents and 10.9 cents a pound.

Producing for a market.—The World War with its heavy demands for goods accelerated a movement that had been going on in agriculture for some time. What is meant is the shift in emphasis on the place of the farm in society and in industry. The pioneer grain farm was characterized by its self-sufficiency and its completeness. It combined life with a living. Much of

what was consumed by its operators they produced from its soil. With the growth of central markets and because of the loss of isolation on the part of the typical farm, came a greater urge to produce for sale. The corn farmer of Iowa, for instance, was merely following a practice long known among the planters of the South.

This shift in emphasis increased the importance of the price concept. The self-sufficient farmer of the frontier had little interest in farm prices; his interests were in what he could produce and in its consumption by his family. When, however, he carried a sack of wheat to the mill to be sold for money with which to make purchases at the general store, he did so much in the frame of mind of his neighbor to the south; he calculated its purchasing power. Those who followed him sold more and more what they produced, depending in turn on others to satisfy their wants. In time the practice among farmers the country over came into line with that which the grower of cotton, tobacco, and sugar cane had followed for decades.

The World War with its heavy demands for foodstuffs and raw materials stressed the importance of prices and markets. It stimulated excess production of staples by paying relatively high prices, and in doing so, it went far to destroy diversification and self-sufficiency. Having once produced for a market, the grower of grain and the raiser of live stock found himself more a business man than a farmer. Henceforth what he produced he would produce to sell and not to consume.

118. Problems of Operation

Fixed costs.—Among the items of expense involved in operating a business are those known as fixed costs. These costs do not vary with short run fluctuations in the price level. A farmer has especially high fixed costs, for much of the capital of his operation is invested in the land. Once this investment is made, it is made forever. He may refinance himself at a lower rate of interest and thereby reduce the cost of production; the original investment, however, is beyond recall.*

During the boom years of the War period, farm lands reached unprecedented heights in price. In 1900 the average value per

* Farm finance and farm expenditures are also discussed in Selections 77 and 78.

acre of all farm lands in the United States was $15.57. The same average was $32.40 in 1910 and $57.36 in 1920. This large increase meant that greater returns were being had and that whatever the returns the fixed charges had risen.

As might be expected, a great deal of land changed hands during the years of its rise in value.* Some of the exchanges involved full purchase price in cash; more of them, however, carried mortgages. All of these claims against the buyers of farms bore interest, and all of them carried maturity dates. Many of them required annual payments on principal. In addi-

FARM LAND PRICES
(avg. per acre)
1900–1925

States and Divisions	*Year*			
	1900	1910	1920	1925
Iowa	$36.35	$82.58	$199.52	$119.28
Illinois	46.17	95.02	164.20	111.49
East North Central	34.15	61.32	102.31	70.68
Alabama	4.84	10.46	21.24	18.44
Virginia	10.08	20.24	40.75	34.90
Arkansas	6.32	14.13	34.82	26.91
Texas	4.70	14.53	28.46	23.94
Minnesota	21.31	36.82	91.00	59.77
South Atlantic	8.63	18.15	40.92	33.65

tion, taxes had to be paid on high valuation. These items constituted the greater part of the fixed charges carried by the typical farm of the War and post-war years, and with any and every decline in crop volume or price level they would become heavier. With cotton, corn, or wheat production at war level prices, such fixed charges were bearable; a sharp decline in income would spell disaster.

The farmer of the decade following the close of the War found his fixed charge load heavy. He faced a declining income without being able to do anything about reducing his major expense items. In many instances he found himself burdened with a mortgage in excess of the then selling price of his farm. In other words, based on the lower prive level that followed the boom years of the War, he owed more on his farm than his farm

* There was an increase in farm tenancy, Selection 76.

was then worth. To put the matter in yet another way, his equity disappeared under the stress of declining land prices.

Marketing problems.—Other major problems of operation the American farmer attacked with vigor during the post-war years. He surrendered some of his traditional independence by joining with his fellows in seeking improved marketing methods. Through various types of associations he endeavored to refinance his debts at lower interest rates and to secure for himself some of the profits going to the middleman.*

In the solution of this particular problem the farmers of the country had the sympathetic support of various governmental agencies. The Federal Department of Agriculture extended a helping hand. So also did the states through their support of experimental farms. From these agencies came suggestions and advice covering a multitude of subjects. Those dealing with marketing were especially helpful; they pointed the way to additional farm income to be had through cooperative effort.

The farm surplus.—A major problem of the period was what was known as the farm surplus. Normally a small increase in the volume of any staple farm crop leads to price declines; a medium size increase may spell disaster. The typical farm crop follows year after year with market regularity. There, however, the regularity ceases. Usually crops move up and down between rather wide extremes. Bumper crops mean ridiculously low prices; shortage, famine prices. When the farmer has much to sell, he is likely to get little, if any more, for his labor than he would have got had he produced less. What rises to plague him is the effect produced by a temporary surplus in what he has to sell.

The Agricultural Marketing Law.—Soon after Herbert Hoover became President of the United States on March 4, 1929 he called a special session of Congress to consider among other measures those relating to the farming situation. In doing this he was attempting to make good one of the promises made during the preceding presidential campaign of the Republican party. The result was the legislation known as the Agricultural Marketing Law.

The law had as its chief purpose the encouragement of "pro-

* The cooperative method of handling farm problems became popular early in the twentieth century, Selection 79.

ducer-owned and producer-controlled" cooperative associations. Such associations were expected by the makers of the law to eliminate wastes in marketing farm products and in time to keep down the ever threatening surplus that from time to time threatened the very existence of the farmer as an operator. As a means of achieving the purpose, provision was made for a Farm Board of nine members, one of which would be the Secretary of Agriculture. Congress provided this Board with a revolving fund of a half billion dollars.

SELECTED FARM CROPS
1922–1929

Year	*Corn*		*Wheat*		*Cotton*	
	Bushels (*000 Omitted*)	Average Price	Bushels (*000 Omitted*)	Average Price	Bales	Average Price
1922	2,906,020	$0.658	867,598	$1.007	9,762,000	23.8¢
1923	3,053,557	0.726	797,394	0.923	10,140,000	31.0
1924	2,309,414	0.982	864,428	1.299	13,628,000	22.6
1925	2,916,106	0.674	676,765	1.416	16,104,000	18.2
1926	2,691,531	0.642	831,381	1.198	17,977,000	10.9
1927	2,763,093	0.723	878,374	1.115	12,956,000	19.6
1928	2,818,901	0.752	914,876	0.970	14,478,000	18.0
1929	2,622,189	0.781	806,508	1.043	14,828,000	16.4

This Board had at the outset adopted a policy of staying out of the markets. Later, however, under the stress of falling prices, the Government made huge purchases of cotton and wheat in an effort to "peg" prices. This plan failed with enormous public losses. In 1931, to run ahead a few years, the books of the Board showed that of the nearly four hundred million dollars advanced for making their purchases about one-half had been lost.

Chapter XXX

POST-WAR DEVELOPMENTS IN MANUFACTURES

MANUFACTURES shared with agriculture the necessity of making adjustments to conditions of peace. The War had stimulated the fabrication of commodities far beyond the needs the consuming public could hope to satisfy without radical changes in marketing methods. The Government had been the chief buyer of merchandise during the War, paying its bills in large part with borrowed money. Now all was changed; consumers, millions of them, would be forced back on their own resources in making purchases.

Like agriculture these industrial plants found their European market partially gone with the coming of peace, and like agriculture again they would have suffered even more from what appeared to be the loss of a profitable market had not public and private credit been extended liberally to the nations abroad. This was done through loans made by the Government to foreign countries and by private individuals to these same countries and to their citizens. These extensions of credit bulked large; they amounted in the aggregate to many billions of dollars.

A device resorted to by manufacturers in many lines was known as paying for consumers' goods on a deferred plan. This plan was nothing more nor less than exchanging merchandise for promises to pay at some time in the future, usually at stated times and in stated amounts. In adopting this method to stimulate sales the manufacturer anticipated future cash demands; in order to meet these demands they expanded their own plants, and, through the purchase of raw materials, encouraged expansion elsewhere. Here, as in loaning money abroad, a temporary market was created; in the end over-stimulation brought its own reward.

During the period under consideration certain industries developed beyond all expectations. Outstanding was the building of motor cars; another was the production of motion pictures. At the close of the War slightly over six million motor cars of

every kind and description rolled along our streets and highways; within a decade that number had grown to more than twenty-five million. During those ten years the automobile factories of the country turned out approximately forty million motor cars, valued at many billions of dollars. The motion picture industry made its contribution. Pictures, like automobiles, filled a new want, slight at first but in due time of major importance.

An increased use of machinery characterized the manufacturing industry during the years following the close of the War. With increases in wages paid workers, enterprisers substituted machines wherever possible, thereby creating unemployment and shifting returns from labor to capital.

119. Making Adjustments to Peace Conditions

A decline in production.—The close of the War brought two opposing forces face to face. One tended to raise production to a higher level; the other, to lower it. With the announcement of the Armistice in 1918 people gave way to rejoicing. Foremost in their minds was the knowledge that the last battle had been fought. Crowding just behind was the feeling, unconscious perhaps for many, that now they could once more give attention to their own needs. Hitherto they had shared with the Government the responsibility of conserving food and clothing and a great many other things. They had accepted wheatless days and heatless days as a matter of duty. In their own way they had been frugal; now they would be free to spend. Moreover, the giving up to the Government of billions of dollars of purchasing power appeared to be at an end; now they could buy that new car. With a restraint thus thrown off, they became a decided factor on the side of demand.

Opposed was the loss to the manufacturers of the public market, both at home and abroad. Many, if not all of them, had built new plants and enlarged old ones in an effort to aid a good cause, and incidentally, perhaps, to make an additional profit. Some of them had shifted from making peace time merchandise to munitions of war. Whatever the motive, they faced the loss of what had been a heavy demand. A government as strong and rich even as that at Washington could not go on forever buying food and clothing and munitions of war. One of its first acts, therefore, was to arrange to cancel old orders for merchandise

and to refrain from giving new ones. The result was quick and direct, and had not the frenzy for buying that came with peace made itself felt, the manufacturing establishments of the country would have suffered additional losses.

A factor of no small importance was the huge lending on the part of the Government of the United States and of individuals to foreign countries. In addition to billions of dollars of credit extended by our own government to foreign governments, American citizens bought foreign bonds amounting to still other billions of dollars. In the markets of this country, these bonds sold freely and for a time at or near face value. What foreign countries wanted was merchandise. Accordingly, they took the borrowed money and spent much of it in the United States. As a result our exports exceeded our imports by ten billion dollars during the three post-war years, 1919–1921.

The industrial recession in 1921.—Business during the year 1921 reached a low point measured from the heights gained during the War. This decline every type and kind of industry experienced, some of them with serious results. In manufactures the number of employees dropped from 10,419,000 in 1919 to 8,079,000 in 1921. Wages, salaries, amounts of raw materials consumed, and value of finished products followed this decline in employment. Salaries and wages dropped from more than thirteen billion to less than eleven billion dollars; cost of raw materials went from about thirty-seven billion to twenty-five billion dollars; value of output from $61,737,000,000 to $42,427,000,000.

This situation was reflected in businesses other than manufacturing. Banks, for example, suffered declines in loans, discounts, and deposits. They found their customers unwilling to expand operations in the face of a declining demand for goods, or even to continue on the high level where during the War they had carried on their business affairs. Exports, too, fell off and there was an increase in unemployment all over the country. The economic life of the United States faced the necessity of adjusting itself to peace time conditions. To use an expression current at the time, the country had a headache following its economic carousal incident to the World War and its unprecedented demands for goods of every sort and description.

As was to be expected, there was no end to the number and

variety of opinions advanced concerning the causes back of the situation and how it might be handled effectively and with a minimum of suffering among the people. Some advocated the adoption of one measure; some supported another. The one point on which all could agree was that business had bogged down. Never before had such an opportunity offered itself in this country to the business forecasters and the business analysts, who found customers for their wares among our confused industrialists. The balance sheet and the production chart had given way as business guides to trend curves based on statistical studies of similar situations in the past.

120. Manufactures Reach New Heights

Fundamental factors involved.—The recession in industry carried with it a challenge that could not be ignored; it called for a study of the fundamentals underlying the orderly conduct of business. Under the stress of necessity men cast about for better and more effective methods of carrying on their affairs. They gave attention to well established processes of marketing and producing goods, rearranged plant and office procedures, and sought out the leaks that had opened up during the days of easy profits. What they did, in short, was to return to a basis of business sanity.

This was all necessary in order that they might exist, for a radical decline of demand meant in many instances a cutthroat competition that would lead to bankruptcy. Measured in terms

STATE OF INDUSTRY
1919–1921

Year	*Exports (000 Omitted)*	*Price Level 1926 = 100*	*Production Value (000 Omitted)*		
			Manufactures	Corn	Cotton
1919	$7,920,426	138.6	$61,737,000	$3,780,597	$2,034.658
1920	8,228,016	154.4	. .	2,150,332	933,658
1921	4,485,031	97.6	42,427,000	1,297,213	643,933

of years, low prices were less important to the general welfare than was the return of industrial production to normal conditions. Fortunately manufacturers in an effort to help themselves, helped society by turning their backs on any further attempt, for the moment, to continue on a war time basis and by facing the

need for adjusting themselves to new conditions. This they did by writing off inventories, weeding out unprofitable processes, and by effecting savings in management and operation.

The decline in business following a high point reached soon after the close of the World War was reflected in a variety of ways—in commercial failure, in unemployment, and in reduced bank loans. In 1919, less than seven thousand concerns doing business in this country failed. The number the following year was 8,881; in 1921, it was 19,652. Manufactures gave direct employment in 1919 to almost ten and a half million persons. The number so employed in 1921 was a little more than eight million. Between 1919 and 1921 manufactures declined by one-fifth. Steel dropped forty per cent.

This recession of business forced out marginal workers and marginal business men; it retained those best fitted to serve. During the prosperity of the preceding years men who ordinarily would have been idle were employed; likewise, many businesses which under normal conditions would have failed, not only survived, but flourished. When, however, demand for goods fell off, profits declined. Then the least efficient workers were dismissed and the least efficient concerns forced to liquidate. What the recesssion did was to clean house industrially.

Shifts in prices.—Back of the 1921 recession were radical shifts in prices. Based on 1926 prices (calling that year 100) the level in 1919 was represented by 138.6, in 1920 by 154.4, and in 1921 by 97.6. Then, within a period of two years, prices rose to new heights and were followed by a drop of more than a third. What all this means is that over a few months the prices which the consumer could and was willing to pay declined thirty per cent and more.

Supply and demand operate through price. The manufacturer of 1921 stood behind certain supplies; consumers of all sorts constituted the demand. For reasons which need not concern us here, demand had declined. Manufacturers, in an effort to restore demand, lowered prices sometimes by reducing wages and other expenses of production. Purchasing power in time was curtailed. Thus the vicious circle was set up—price level and purchasing power moving side by side, neither completely an effect, neither a cause.

An important factor in this situation was the buyer. He had

endured much while the War was in progress and for a year or two following its close. Further increases he resisted by refusing to buy; he was on a strike. In taking this position regarding prices he refuted the threadworn idea that the producer, however monopolistic, can force consumers to buy his product.

Upward trends.—The recession of 1921 with its curtailment of manufacturing output and drop in prices paved the way to recovery and to developments that surpassed those of the war years. It stimulated manufacturers to improve their processes and gave retailers an opportunity to clear their shelves. Readjustment on a more permanent basis was the order of the day.

The eight-year period 1922–29 was marked by rapid and far distant advances in manufactures. Volume of output grew enormously; prices remained relatively stable; conditions of employment improved. All in all, this period was one of apparent prosperity. Standards of living rose to new heights, people consumed goods as never before, the future appeared assured. Men talked of the "New Era" in economic life.

SELECTED LIST OF MANUFACTURES
1929

Industry	*Number of Wage Earners*	*Wages Paid (000 Omitted)*	*Value of Product (000 Omitted)*
Food Products	937,931	$890,866	$11,606,368
Textiles	1,707,798	1,733,031	9,243,303
Iron and Steel	880,882	1,380,987	7,137,928
Machinery	1,101,053	1,647,347	7,103,864
Printing	357,988	636,371	3,170,140
Chemicals	279,198	351,984	3,702,672

Between 1921 and 1929 the number of men and women engaged in manufacturing increased from slightly more than eight million to 10,176,000, and the annual wages and salaries paid from $10,744,000,000 to $15,189,000,000. During the same period the value of raw materials consumed increased from twenty-five billion dollars to thirty-eight billion dollars and the value of output from $42,427,000,000 to $69,961,000,000. The heaviest contributors in this respect were the East North Central (Ohio, Indiana, Illinois, Michigan, Wisconsin) and the Middle Atlantic (New York, New Jersey, Pennsylvania) Divisions, with

a combined labor force of more than five million turning out products valued in excess of forty-two billion dollars* Measured by any known standard the manufacturing industry of the period towered far above anything like it the world has ever known. To all appearances the situation possessed elements of permanency. Certainly, few saw with any clarity just what was ahead.

The stock market crash.—With an increase in manufacturing output went the desire to participate in profits both present and prospective. So strong did this desire run that by the close of the period under consideration the notion was pretty well established that nothing could happen to upset what to appearances was a stable situation. Men of all ages and ranks speculated in the stocks of manufacturing concerns. Most of them made their purchases on margin. That is, they paid a small percentage of the market prices of the stocks they bought, leaving it to their brokers to borrow or they themselves supply the rest of the purchase obligations.

So wide this type of speculating became that in time it reached ridiculous limits. In almost any broker's office one could find during the hours of the day when trading was going on, housewives and other women and men of all sorts anxiously watching the board as prices were posted. Even the elevator boys in city office buildings and bootblacks across the street gave more attention to the ticker than to their work. This mania for buying stocks resembled in its motives and results the South Sea Bubble of the eighteenth century.

A casual examination of the prices of stocks, and their comparisons with earnings reveal the spirit of the time. In 1928 United States Steel paid a dividend of $7.00 a share on its common stock. Within the year following, the market price of this same stock reached $261.75 a share. Sharper yet were the contrasts in Allied Chemical. These, on the basis of annual earnings of $12.50 a share and dividends of $6.00 a share, rose to $354.75 a share. Another instance was the Du Pont concern, the common shares of which sold on the New York Stock Market as high as $503.00 in 1928 and $629.50 in 1929.

The crash came October 29, 1929. On that day the "big

* The extent of industrial growth and decline in different divisions and areas between 1899 and 1929 is discussed in Selection 81.

board," the New York Stock Exchange, traded in millions of shares, and so heavy were the transactions that quotation lagged far behind sales. Before the decline had run its course, billions of dollars had been lost. Some of this loss was paper profit; much more represented actual earnings of one kind or another. Many of those who had bought on margin permitted themselves to be sold out; others put up additional margins in the hope of recouping their losses. The loss was overwhelming in size.

Social point of view.—Few if any saw clearly what the financial outcome of this mania would be. Many, however, had deplored its effect on American life. They had preached against what they called a materialism that would ruin the country. They had cried out against the worship of the almighty dollar and had called on the people to turn back. No nation, they had pleaded, could hope to continue to lead with such influences at work. Some had even predicted in all sincerity that the only end possible was the destruction of right living and right thinking. In the stock market crash they saw the beginning of fulfillment of their prophesies.

121. New Industries and New Problems

Creating and supplying new wants.—An effective factor in economic recovery is the restoration of normal demands for goods. This restoration may be in demands for well known and widely used products; it comes quicker, however, when new and little used products are involved. To move back to normal through stimulating the purchase and use of hand power washing machines, for example, would require more time and greater effort than would be required with power machinery performing the same work. The typical purchaser has a hand machine and is in no need, therefore, of another one of the same general make; she is easily persuaded, however, to discard the old one for something better and more desirable. Herein lies the explanation, partly at least, of our rapid recovery from the business recession of 1921.

The automobile industry.—Measured by any standard, the automobile industry is of recent origin. Four thousand cars were turned out of the factories of the country in 1900. At that time the motor car was relatively costly to own and operate, inefficient in performance, and generally regarded as little more than an

extravagant plaything. During the next fifteen years, more than three million cars of various designs and sizes came from the hundreds of American factories. By 1920 production had reached an annual output of more than two million units. In that year we had in operation in this country more than eight million passenger cars in addition to a million trucks and tractors.

A mere enumeration of the number of cars built and operated

The automobile industry organized for large scale production

is wholly inadequate in explaining the influence of this new method of transportation on the rapid economic recovery following 1921; the operation of these cars involved in their upkeep and fuel supplies a vast army of mechanics and others necessary to keep them going. To these must be added hundreds of thousands of men and women who turned their attention to supplying the motoring public with food and lodging.

No one will ever know with any high degree of accuracy how rapidly these various groups grew and what sizes they attained year after year. We do know that with the improvement of highways, garages and eating houses and oil stations sprang up

along the way. Much of what they had to offer was comparatively new. Many an automobile repair man was nothing more than an idle farm hand or a clerk out of a job turned mechanic over night. What he knew about an automobile might be little indeed; it was more than the owner knew.

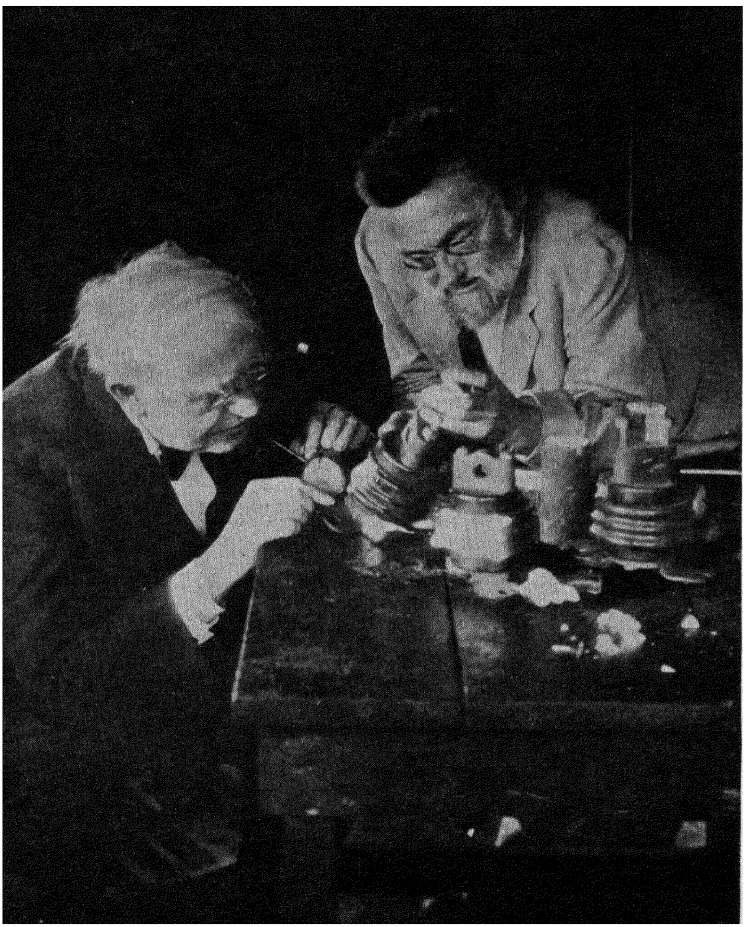
This influence of the automobile reached back beyond the making of the car and its maintenance, for it was little more than a combination of raw materials put together and fashioned by skilled workers. Into it had gone the products of mines and forests and tanneries. Glass works, too, the steel, textile, and the oil industry had made their contribution. Into its making had gone directly or indirectly the labor of millions. Astride the economic world was a new giant.

Other new industries.—The making and showing of motion pictures occupied a large place in the economic recovery following the recession of 1921. This industry, while comparatively young at the time, was growing rapidly. Pictures had caught and were holding the popular fancy. All over the country facilities for showing them grew with amazing rapidity. In the production of these pictures owners and directors employed many actors of varying abilities, together with thousands of extras and mechanics. A far greater number gave their time to showing them. These included owners of show houses, managers, machine men, musicians, ushers, janitors, and scrub women. Without this new industry, now growing rapidly, these men and women would have been engaged elsewhere, or, what was more likely in 1921, not employed at all. What happened was that the motion picture industry as an ally of the motor industry contributed materially to taking up the slack in business following the let down in 1921.

Two other industries merit mention in this connection. One was the manufacture and operation of airplanes; the other, the manufacture of chemicals.

The World War had demonstrated, if indeed any such demonstration was necessary, that as a means of transportation the airplane was practical. With the coming of peace men turned their attention from fighting to transport planes. In this they had the support of the National Government. As this industry developed it reached out in its influences in many directions. It stimulated the production of many things made of wood and

metal in addition to giving direct employment to hundreds of men. Its growth prompted the building of landing fields, both private and public, with their accommodations for freight and passengers. In all this activity men and women found employ-



EDISON AND STEINMETZ

Leaders in scientific and industrial progress

ment, men and women formerly engaged in other economic activities.

Various influences,—the War itself was of major importance —combined to give emphasis to the chemical industry. America had resolved to declare her independence of chemical manufactures abroad. In 1914, for example, the total value of the out-

puts of chemical plants in this country had approximated two hundred million dollars. Within two or three years following the close of the War that value had risen to more than four hundred fifty million dollars. In 1923 it was $708,372,000. During these same ten years (1914-1923) the number of wage earners increased from 32,311 to 74,897.

The promise given by these industries grew into fulfillment by 1929. In that year all of them—automobile, motion pictures, airplane, chemical—ranked high by any possible standard. Alongside them, young and virile, was the radio industry. They gave employment directly to millions of men and women, and other millions they supported through their demands for raw materials and for the service necessary to the consumption of their products. The America of 1929 with its hundreds of thousands of miles of improved highways, with its show house in every community, and with its airplanes over head, would have seemed strange indeed to anyone returning from the Antarctic regions after a stay of ten years.

Use of electric power.—In the development of these new industries, as well as in the expansion of old ones, resort was had more and more to the use of electric power for driving machinery. This type of power had two advantages over older forms. It could be carried over wires to points needed; it possessed greater reserves. No longer was it necessary to locate machines relative to a central pulley shaft. Now they could be placed where most needed. Nor was it longer necessary to make provision for maximum power loads; that the central generating plant could handle through pools of its own making, or in connection with other generating plants.

Installment buying.—The practice of buying consumers' goods on credit had its beginning in a large way during this period. Prior to this time such merchandise had been sold on the basis of small payments made at time of purchase and regular payments afterward until the full price had been paid; but the volume of such transactions had been relatively small.

Leaders in the expansion of the idea of buying on contract were the manufacturers of automobiles. They set up their own credit agencies alongside hundreds of smaller ones operating independently. Combined, these concerns transformed the buying habits of the people almost over night. They changed a

cash business into a credit business, thereby making available to purchasers of automobiles opportunities for ownership far in advance of what would have been possible under a system of requiring cash at the time of purchase. This they did by asking for a substantial down payment, title to pass only if and when the contract to make payments was completely fulfilled.

The increased importance of this method of selling merchandise created much discussion. Those who supported the idea took the ground that the people in general were honest and would meet their obligations as they came due. In this they missed the real point at issue.

The question went far beyond either honesty of purpose or ability to pay; it involved the manufacturing structure of the country. All this becomes apparent when we examine the situation as it then existed. The manufacturers of automobiles were "geared" to meet a certain normal demand based on long established methods of selling. In selling cars on credit they increased this demand. This they did by anticipating future cash markets. The consequence was that in order to supply this increased demand they expanded their plants thereby stimulating the expansion of every other plant furnishing them with raw materials.

Having once anticipated a market, they found it gone when they reached it. Let us suppose that the normal expectancy under the cash sale system was two million cars a year, and that by offering to sell cars on the installment plan manufacturers were able to increase this demand to three million cars the first year. Obviously, in order to supply this demand they would be compelled to enlarge their plants. What then is the situation when next year comes around? The answer is simple. The three million cars a year demand is not there; a portion of it has already been anticipated.

It was not, therefore, a question either of honesty on the part of the buyer or of his ability to pay. It had to do with an overexpansion that resulted in a maladjustment, which, in time, would claim its own reward in the way of hard times. That is exactly what happened.

Direct selling.—This period saw the manufacturer as never before going direct to the consumer in search of a customer. In many cases it was somewhat the other way around. Retailers, sensing the possibility of gaining for themselves the profits to

be made in fabricating finished goods, either acquired plants already operating or built new ones. In either instance it was an attempt to "by pass" well established steps in marketing.

One aspect of this direct selling was the development of national advertising. Manufacturers, in an attempt to make consumers aware of the goods they produced, undertook advertising programs covering the entire country. These programs extolled the virtues of articles varying from tooth paste to harvesting machines. They were to be found in newspapers and on bill boards, and they often came by mail. A visitor viewing the San Francisco water front from the Bay, could, from the nature of the advertisements to be seen there, well believe that he was nearing Milwaukee or Pittsburgh. Uneeda biscuits, Sinclair gasoline, and Spearmint chewing gum were as much at home in one place as in another.

Increasing the use of machinery.—The increasing demand for goods during this period, coupled with rising prices and rising wages, encouraged enterprisers to substitute machines for men wherever possible and profitable.* Thus, the standardization that had for years characterized American industry grew and expanded. Truly we were in a machine age. Much of what we had once paid out as wages now went out in the form of interest on investment. Purchasing power had been taken from the worker and given to the capitalist, who in many instances, had no further capacity to consume. We had one-man street cars, mechanical coal loaders, power lawn mowers. These, with similar labor-saving devices, conspired with other factors to produce an industrial malajustment on a scale never before known.

* Production, wages, and unemployment were increased between 1919 and 1929, Selection 80.

Chapter XXXI

LABOR AND THE COST OF LIVING

DURING the decade following the close of the World War, labor, unorganized as well as organized, made notable advancements. Labor itself, through its own efforts, brought about certain of this advancement; more important by far as a factor was the growing consciousness on the part of the public that the man who worked with his hands deserved better treatment than had formerly been accorded him. As a result, conditions of labor improved in a variety of ways.

This period saw increased attention given to measures designed to safeguard life and health. Employers improved the sanitary conditions of their plants, equipped dangerous machinery with guards, and carried on educational campaigns against carelessness. This they did either because of a wholesome desire to improve conditions or because of statutory requirement. Whatever the reason, the typical worker of 1929 spent his productive hours under pleasanter surroundings and freer from accidents and death than had the worker carrying on the same process in the plant ten years earlier.

Advancement went beyond mere improvement in physical surroundings while working. Employers grew in their appreciation of the part played by their workers in making their enterprises successful. They encouraged home building, shared profits with their employees, and provided for aid and assistance during periods of illness. Here and there merchants and manufacturers broke new ground in an effort to unify their interests and the interests of those who worked for them.

All was not peace. Organized labor continued its warfare against what it regarded as unfair and uneconomical. To do this its leaders found it necessary to resort to the strike as a weapon for forcing demands. Several such strikes occurred during these years with indifferent success. The country was too big and, on the surface, too prosperous to be more than slowed down in its progress industrially. Those who cried out for the

rights of labor found their voices lost in the scramble for bigger and better times.

Americans of all grades and conditions contrived to enjoy standards of living far above similar groups elsewhere the world over. Poverty, and much of it, cast a shadow across American life and indicated a system that made possible its existence in the midst of plenty, a poverty that might have been tolerable under different conditions and in other lands. As a people we bought lavishly and wasted much. What we threw away would have been meat and drink in the hands of a less fortunate people.

122. Significant Trends

Wages.—Measured merely in money and not in their power in exchange for economic goods, the hourly wages of labor increased during the period 1920–1929. At the beginning, union wages were approximately twice as high as they had been in 1913. By 1929 this level was a third higher. The years under consideration may be compared by the use of index numbers. With 1913 being represented by 100, we find that in 1920 the number was 199; in 1921, 205; in 1922, 193; in 1923, 211; in 1924, 228; in 1925, 238; in 1926, 250; in 1927, 260; in 1928, 261; and in 1929, 262. Such increases may or may not have reflected increased welfare among those receiving them. Whether a worker could buy as much with each $2.62 he earned as he had been able to buy with $1.99 in 1920 was, of course, a matter to be determined by increases in the prices of commodities. To put the matter in another way, a change in money wages may or may not be a change in real wages. In other words, real wages can decline in the face of advances in money wages.* The movement might very well be in the opposite direction.

HOURLY WAGES

1929

Bricklayers	$1.657	Plumbers	$1.450
Carpenters	1.339	Stonemasons	1.627
Glaziers	1.358	Stonecutters	1.472
Lathers	1.484	Bookbinders	1.002
Painters	1.369		

* This is a point often not recognized by advocates of minimum wage laws. Such laws were on the statute books of some States, Selection 83.

Some notion can be had of the hourly wage in 1929 by referring to the schedules then in force. The average rate per hour for bakers in May of that year was 97.9 cents. Practically all other skilled workers enjoyed higher wages, the differences in many instances being determined by the inability of some workers to be employed because of inclement weather. This variation tended roughly to even annual income, those having steadier employment receiving less wages per hour.

The working day.—The length of the working day declined somewhat during the decade but not to any great extent. Measured from the 1913 standard the average working day in 1920 was down between six and seven per cent. The next ten years saw it decline another two per cent. What really happened was that the eight-hour day in many instances had already established itself among workers. Agitation for five-day weeks and six-hour days came later.

The number of hours in the working day varied somewhat widely. In 1924, for example, spinners and weavers worked a little more than fifty hours a week; and rollers in tin plate mills slightly more than forty hours a week. In garment making and other industries similarly organized the week was intolerably long. Especially fortunate in this respect were the workers in the building trades. They worked something like eight hours a day for five and a half or six days a week.

Weekly income.—Wage increases outran the falling off in hours. The result was a higher weekly money income. The worker of 1929, therefore, had more money to spend than he had had a decade earlier. He paid as much or more for what he bought. The important consideration in this connection was, therefore, that with an increase in income came the feeling that times were good. Regardless of trends and movements, it was the same old story again of the stimulation that comes with rising prices and rising incomes.

Safety measures.—Influenced by a curious mixture of selfishness and altruism the typical employer of the time gave increased attention to the lessening, if not the elimination, of hazards incident to industry. He instituted and carried on campaigns against accident of every kind and sort. To that end he equipped moving machine parts with guards, placarded his plant with

plainly worded admonitions, and provided first aid services. His chief reliance was on his educational programs among his workers. Day in and day out he dinned in their ears the idea that safety came first and always.

The prevention of accidents was in itself not enough. Our typical employer cleaned up his plant, provided better lighting and ventilation as well as a plentiful supply of pure drinking water, and, in many instances, provided facilities for emergency medical attention. Here and there he erected and equipped hospitals, paid the salaries of doctors and nurses, and encouraged systematic recreation. All of this he did with a single purpose in mind and that was to maintain an efficient working force. Behind this purpose were motives both mixed and conflicting.

Shop committees.—A factor in the situation was the shop committee. This group was composed of workers selected by their fellow workers. They assumed the responsibility of familiarizing themselves with working conditions, of formulating requests for improvement, and of presenting these requests to the management. To it the workers could carry their grievances with the assurance that they would be heard with a sympathetic understanding. Such an arrangement gave the men of the plant concerned a voice in the regulation of what was immediately about them. It served as an outlet and at the same time provided a medium through which interests might be expressed.

The shop committee met opposition in many quarters. Many employers looked on it as a device fostered by labor for dictating policies and determining procedure. Unfortunately, such a contention appeared valid in many instances. Shop committees sometimes made impossible demands on the management—demands that could not be met with any reasonable degree of expectancy. Often, too, they were unimportant from the point of view of the welfare of labor and even trivial. Protests against the acts of a tyrannical foreman could be justified; contrasting sharply was the insistance on the reemployment of a discharged worker whose services were no longer needed.

Workmen's compensation.—One consideration in this respect merits attention. For centuries employees faced the hazards of injury without being able to protect their rights. An injured workman might sue his employer for damages, but in too many

instances he failed in his purpose because of the general notion that his fellow workers, and not his employer, were chiefly responsible for his injury. Gradually, however, a new notion came to the front, and that was that employers were responsible for injuries incurred by their employees. With the new notion developed facilities for insuring employers against such damages, that is, to compensate injured workmen through companies organized for that purpose. All this means that employers, then as well as now, escaped what might prove to be a catastrophe to them by securing for their employees insurance policies providing benefits in case of injury and loss of wages resulting from the injury.*

Women in industry.—War demands for labor had brought many women into industry; peace found them permanently established. Literally hundreds of trades and professions once regarded as belonging largely, if not exclusively, to men now included in the aggregate millions of women, with the number growing.** In 1910, approximately six hundred thousand women filled clerical positions in this country. During the next decade the number rose to almost one and a half million. In 1930 it was 1,986,830. The professions claimed comparable increases. So also did trade and, to a less extent, manufacturing.

WOMEN IN SELECTED TRADES AND PROFESSIONS
1910–1930

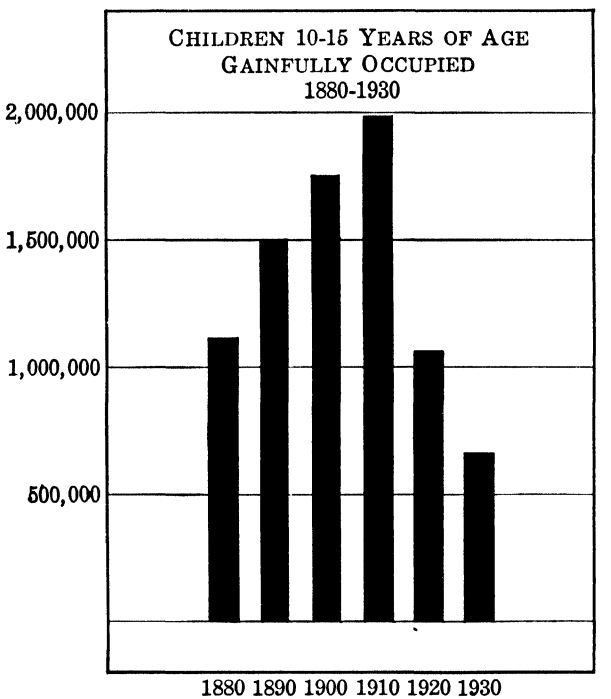
	1910	*1920*	*1930*
Clerical	593,224	1,421,925	1,986,830
Domestic service	2,531,221	2,186,628	3,180,251
Agriculture	1,807,501	1,083,146	909,939
Professional	733,891	1,017,030	1,526,234
Trade	468,088	671,983	962,680
Manufacturing	1,820,570	1,930,352	1,886,307

Curiously, the number of women engaged in agriculture and allied activities and in domestic service declined absolutely as well as relatively after 1910; opportunities in more desirable fields called them from the tasks to which they had been accustomed for centuries. During the decade of the twenties this

* The provisions of the various State laws are discussed in Selection 85.
** This was not without opposition by men, Selection 84.

trend continued in agriculture; in domestic service, it took an opposite course rising sharply more than forty per cent.

Child labor.—Of all workers gainfully occupied in 1920, more than a million were fifteen years of age or younger. This number constituted about one-twelfth of all children between ten and fifteen years of age and about two and one-half per cent of the entire working force of the country. To put the matter in another way, one child out of twelve over nine years of age and



not yet sixteen worked at some gainful occupation; also, of each one hundred workers of all ages and all occupations between two and three were children not half way through their teens. During the decade that followed 1920 the number of such children dropped both relatively and absolutely. In 1930 it had reached 667,118, which represents less than one out of twenty of the children of the same age. That is, of all the children ten to fifteen years of age, the number working dropped between 1920 and 1930 from one out of twelve to one out of twenty.

There is much to be said against the employment of young children in industry and the opposition has often taken form in

regulatory statutes. Twice Congress has passed laws setting limitations on child labor, but in both instances such laws the Supreme Court of the United States declared unconstitutional. The reply was a proposed constitutional amendment designed to permit legislation regulating child labor. That amendment had the approval of Congress two decades and more ago; it lacks, however, the approval of the necessary number of states to make it an integral part of the Constitution of the United States.

The states themselves have done much to regulate child labor. Some have minimum age limits; some, restrictions on the length of the working day; some, prohibitions against night work. Whatever the limitation, restriction, or prohibition, the object is generally the same—the elimination of child workers wherever possible. Behind this feeling is the well grounded belief that children should be permitted to enjoy their childhoods, that their health and strength should not be endangered by being permitted to work too early in life, and that they should be in school doing what they can to equip themselves for life as well as for making a living.

Radicalism.—Organized labor continued throughout this period its customary indifference to radical doctrines. Small groups like the I.W.W. kept up their agitation for revolutionary changes in industry, but without marked results. The people, including skilled workers, were too busy enjoying what for a better name went for prosperity, to bother themselves with what they generally regarded as alien agitation. Even Senator La Follette's bid for support in 1924, while it attracted the attention of many thinking people, fell short of immediate accomplishment.

123. Labor Relations

The laborer and his job.—The old concept of labor was that it resembled a commodity in that it was brought to the market and there bought and sold under conditions of supply and demand. For centuries this concept had held with slight change. It glorified the employer at the expense of the employee, giving him an advantage in bargaining for the labor of others. He held the whip hand. The employment of one more man meant but a slight increase in his net income; employment meant to the man offering his services for sale the difference between economic

sufficiency and self-respect and what might easily be deprivation and want. By 1920, a change was coming over the thinking of people in all walks of life; they were beginning to grasp the important idea that a man and his labor cannot be separated. He must sell his labor in order to live, and this sale might mean slavery for him and his family. Back of this idea was the notion that human rights were paramount in business dealings.

The greatest threat to labor was and is insecurity. Against accident and illness the worker could, by exercising judgment and discretion, guard himself with some assurance; his job was in the hands of his employer. A recession in business, old age, incapacitation, any one of these and many other disabilities dogged his steps.* He had no guarantee that he would have a pay envelope next week or next month. At best his situation was precarious.

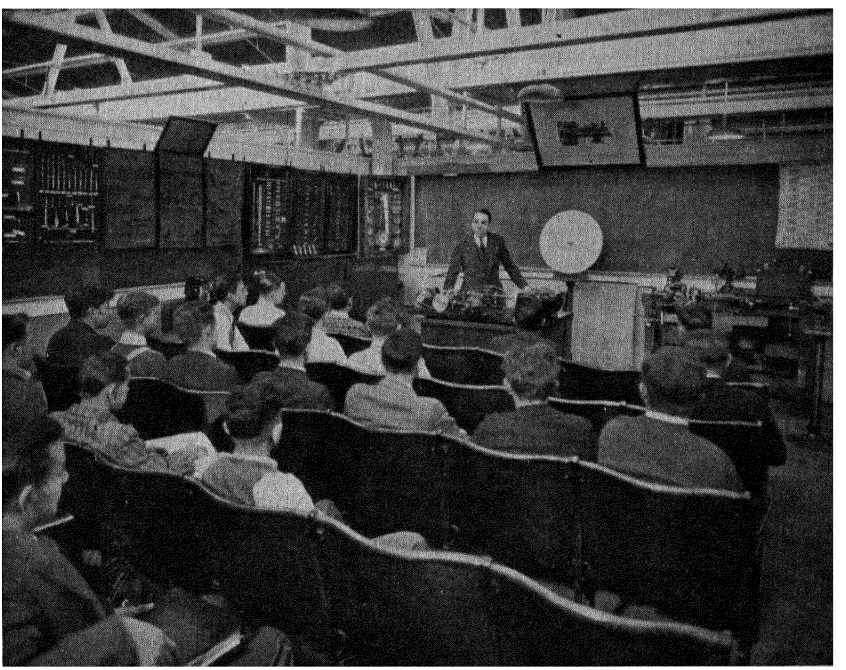
Development of personnel.—Employers themselves, fully aware of this situation, set about in many instances to do something in the way of selecting workers more carefully and of assisting them to become more proficient in their work. Aside from whatever selfishness might have been involved, this move was in the right direction. It looked toward increased efficiency and, what is more important in this connection, to greater permanency. In doing this employers had the assistance of men and women genuinely interested in the welfare of their fellow workers. They saw to it that employer-employe relations went beyond a hard, cold contract calling for so many hours or so much product at a stipulated cost per hour or per piece.

One of the reasons back of the necessity of giving more attention on the part of employers to the study of individual employe needs was the loss of personal contact that had gone when the corporate form of industry displaced the individual enterpriser and the partnership as an employer of labor. The time had been when, like Miles Standish, the factory owner knew all his men by name. Some of this contact carried over after the coming of the corporation. By 1920 it had all but disappeared except in the smaller establishments. With this bond gone the cleavage between master and man deepened and widened until the two groups were well separated. Then it was that far-sighted

* Some unions carried on benefit activities to protect members against some of these contingencies, Selection 86.

employers set about to elevate the machine worker above his machinery. This he did through a study of the needs of his workers and a sincere attempt to meet these needs in a way that would not lower the self-confidence of those helped.

Sharing with the workers.—Many practical efforts in the direction of aiding workers to share more fully in what they produced pushed forward during the years following the close



Training America's labor

of the World War to a point once considered impossible. Employers had caught the spirit of helpfulness; they were coming to realize also that a further enlightenment of what had once been regarded as a necessary selfishness in conducting successful business affairs might in the long run be profitable.

An ambitious undertaking in different industries and in different sections of the country was what generally goes under the term profit sharing. Such schemes were not unknown in the years prior to the war, for, according to a comprehensive investigation made by the Bureau of Labor Statistics in 1916, sixty companies were sharing their profits with their employes through

a variety of sharing schemes. Four years later, of the forty-one companies carrying on *bona fide* profit sharing, five had been in operation twenty years or more, eight others more than ten years, while eighteen were yet in the experimental stage. In 1928 a group qualified to study the situation reported that of the more than four thousand establishments studied in the eight leading industrial states, 197, or slightly more than four per cent, had in operation some form of profit sharing, mercantile establishments leading with 12.7 per cent so organized, the rubber industry bringing up the rear with 1.9 per cent.

What was the general attitude of labor itself toward such plans designed to aid and assist its members? Stripped of a variety of qualifications the answer was NO. Labor leaders, when consulted, were inclined to take the position that the men and women expecting to be benefited preferred higher wages, with the privilege of looking after their own affairs.

The housing problem.—In many industries the age-long housing problem pressed for solution. This problem the more enlightened employers attacked from several angles. Some gave attention to improving company-built houses, making provisions for better sanitation and increased recreational facilities. Under their direction houses were transformed into homes, and much of the drab and dreariness that had come to be associated with mill towns eliminated. A few employers built model towns for their workers. This they did by going into the country, and there, with a factory as the chief industrial unit, they formed a social group largely independent of other groups. Here and there plant owners helped their employes organize banks and Building and Loan Associations, the one to serve as a custodian of funds and a source of borrowing, the other as a means for aiding the workers to own their houses either by having them built or through purchase from some one else.

124. Labor Unrest

General view.—During the earlier years of the decade under consideration, as well as later, strife marked the relationship of employer to employe.* One used the lockout and the blacklist as offensive weapons, the other, the strike. Of the eighteen or nineteen thousand strikes called over a twelve years period,

* Arbitration was used to settle some of their disputes, Selection 82.

more than one-half fell within the three years 1919–1921. In other words the number of strikes declined three-fourths within a dozen years. Many are the reasons that have been advanced to explain this trend. Some attribute it to constantly advancing

INDUSTRIAL STRIKES
1919–1930

Years	*Causes*					*Total*
	Wages	Hours	Union Recognition	Sympathetic	All Others	
1919–21	5,037	538	1,486	211	2,154	9,426
1922–24	1,728	83	583	86	1,434	3,914
1925–27	1,305	70	461	91	1,143	3,070
1928–30	970	67	564	40	544	2,185
Total	9,040	758	3,094	428	5,275	18,595

money wage levels; others, to changes in organized labor's personnel and policies; still others, to what they call employer domination.

Strike demands.—During the twelve years following the close of the War differences of opinions regarding wages produced by far the greatest number of strikes—almost one-half the total. Next in importance came the question of union recognition. Of the total number of strikes less than three per cent were called as an aid to strikes already in progress, and a little more than four per cent over the question of hours. Union recognition involved employer-employe relationships rather than conditions of labor; it had to do with the attempts of groups of organized workers to force their employers to recognize them as bargaining groups. In the soft coal industry, for example, the United Mine Workers succeeded in the organized areas in strengthening this recognition by requiring operators to withhold union dues from employes and to pay them directly to the locals.

The strikes themselves.—Few of the strikes called during this period had more than local significance. Some did, however, attain nation-wide prominence. In 1919, what was regarded as the first general strike in the United States took place in Seattle. There labor as such, and not particular groups, stopped work in an effort to enforce demands on employers. Later in San Francisco, a similar kind of strike was attempted but without

success. At one time the building trade put an end to construction. Aided by other employes, contractors joined in a common cause against their employers. In Chicago the whole matter was gone into with care by Judge Kenesaw M. Landis. His decisions regarding wages and other conditions of employment were called the Landis Award. Similar procedures in an effort to establish peace in the building trade were followed in other cities.

During this time efforts were redoubled to organize the miners in the southern coal fields. Representatives of the union went among them but without any marked success. They found apathy as well as opposition—apathy on the part of those whom they had in mind to help and opposition on the part of the operators. Organized society in those sections very generally upheld the employers in their fight to prevent unionism, and on occasions were charged with contributing to the defeat of organization plans.

In the South also strenuous efforts were made to organize the textile workers. For many years prior to this time the movement of the textile industry had been southward. Especially in North Carolina had spinning and weaving come to be of prime importance. Some of the factors influential in this movement irked the leaders of organized labor, who felt that back of it was the desire of operators to secure a cheap labor supply made up in the main of men and women little accustomed to cooperative efforts in their own behalf.

Curiously enough two different groups attempted to organize the textile workers. One was the United Textile Union; the other, the communists. Here no doubt is one reason why the people generally opposed these attempts. They were conservative to a fault, and being so they could not bring themselves to countenance, much less support, a movement that smacked of radicalism. Out of these strikes came charges and counter charges concerning the activities of police and other officials, and it may readily be believed that somewhere between a disregard for civil rights on the one hand, and brutality on the other, the truth could have been found by impartial observers.

Two other strikes merit attention. One was carried on by the employes of the leading packing plants in Chicago; the other, by the printers' organization.

In Chicago (in 1921) the packers announced their intention to cancel the contract they had had with their employes since war days. Eight months later the men went out on a strike, but this the packers ignored. Picket lines were formed, followed by injunction suits and the militia. The union had no war chest of any great amount, and for that reason it failed in its efforts to enforce its demands.

The printers carried on their struggle more successfully. Late in 1920, certain influential employers in the book and job printing industry began a movement to have set aside the agreement made the year previously in which a forty-four hour week was accepted by both sides as being satisfactory. Both sides were strong and both determined. The union finally won, but not until it had paid out something like sixteen million dollars in strike benefits. Intelligent leadership and ample funds gave it a marked advantage in its dealings with owners and managers.

125. Costs of Living

American standards of living.—Measured in material things the American standard of living has for many years been proverbially high. Following the close of the War, streams of consumers' goods flowed broad and deep into the markets of the country. Every production agency enjoyed a capacity of output that made possible a profusion of commodities and services unknown prior to the War. European observers marveled at the command which the rank and file had in respect to wealth. They saw workmen, unskilled as well as skilled, tradesmen, farmers, and professional men in the lower income brackets, enjoying luxuries denied to people of other lands except to a favored and select few. According to their calculations America, with no more than one fifteenth of the people of the world, possessed a large share of the precious metals and more than a half of all the automobiles in operation. Added to these was an abundance of food and clothing and other means of securing material comforts. In the words of one of these observers, the American workman was a king, and his family wasted more than enough to maintain in comfort a European family of the same general social and economic status.

Price levels.—The decade opened with prices relatively high. In 1920 they were double what they had been in 1913. From

that point they declined rapidly until they reached the low point in 1922. From there the tendency was for them to rise, the high point being reached in 1926. We can say, generally speaking, that for the decade ending in 1929 prices remained unusually level. Food prices, to cite but one commodity group, fluctuated

FOOD PRICES, 1919–1930
(1923–25 = 100)

Year	*Price Level*	*Year*	*Price Level*	*Year*	*Price Level*
1919	124.0	1923	97.6	1927	103.7
1920	136.0	1924	97.4	1928	103.0
1921	102.0	1925	105.0	1929	104.6
1922	95.0	1926	107.2	1930	98.2

roughly thirty to forty per cent above the 1913 level. Using the average of the years 1923–1925 as a standard, the level varied from 102 in 1921 as a high to 95 in 1922 as a low. In 1926 it reached 107.2.

Real and money wages.—The difference between what appears to be a wage and what that wage may really be, insofar as its power over goods, merits our further consideration. During the period under consideration, both wages and prices varied over a range of about ten per cent. Measured in terms of labor the variation was a day in two weeks; in terms of food, an ounce and a half to the pound. What the worker received in the way of money for his work can be compared from year to year to show how he fared and what he was required to spend on himself and family.

Between 1922 and 1929 money wages advanced with variations about ten per cent. Over the same period the general price level, with similar variations, remained about the same. From the point of view of general welfare, therefore, the worker of

REAL INCOMES, 1919–1930
(1923–25 = 100)

Year	*Wage Level*	*Year*	*Wage Level*	*Year*	*Wage Level*
1919	82.0	1923	98.2	1927	102.5
1920	90.7	1924	101.2	1928	105.0
1921	94.8	1925	99.9	1929	105.7
1922	96.4	1926	100.4	1930	106.4

1929 was better off than he had been a decade earlier. His wages were higher than they had been during the earlier years, and with any one of his dollars he could buy more than the same dollar would have once bought. In other words, his real income had increased.

Looking backward.—The decade following the close of the World War was characterized in the field of labor by what someone has called the domination of the employer. Workers appeared fairly well satisfied, the strike weapon was little used, real wages advanced. All about was a florid prosperity more apparent than real. Standards of living continued to rise, and more and more the people gave their attention to the acquisition and consumption of economic goods. Louder became the warnings of keen observers that a day of reckoning was at hand; the populace mocked them, calling them prophets of gloom.

Chapter XXXII

ADVANCES IN TRANSPORTATION AND COMMUNICATION

IN THE many and varied industrial changes that took place during the ten to twelve years following the close of the World War, transportation and communication facilities experienced their full share. Old methods of moving about and of communicating made notable advancements alongside newer ones, some of which were in their first stages of progress.

The Federal Government turned back the railroads to their owners, and in doing so provided for their management and operation along certain definite lines. Especially interested were the lawmakers in some plan that would provide for amicable relations between the roads and their employes and in assuring a fair return to ownership without the possibility of excessive returns on investment.

A war inheritance was a fleet of government owned merchantmen on the sea and a barge service on the Mississippi and the inland streams. The one the Government practically abandoned but not without making some provision to encourage private building and private operation; the other, it enlarged and extended.

Growing like a young giant during these years was motor transportation along the highways. The decade saw tens of thousands of miles of concrete or other hard-surfaced highways built, and upon these long, ribbon-like stretches millions of motor vehicles of every conceivable kind and description moved. There busses and trucks shared lanes of travel with pleasure cars.

Profiting by the lessons taught in the War, private enterprise turned its attention to air transportation. Cities and towns aided by building public airports. In time the sight of a monster air machine no longer attracted attention. They carried mail and passengers, and even express and freight. Each day flying became safer. With Colonel Lindbergh's landing in Paris in

1927 came the realization that air transportation was an assured fact.

Improvements in communication made notable showings. During this period of ten years millions of people came to know the convenience of a device that put them into instant touch with their neighbors and with friends in far away places. Telephones multiplied, service improved, rates dropped. More spectacular was the development of the radio. In the early 20's the radio was little more than a plaything; by 1930 it had become a household necessity. No longer was space a factor in the dissemination of information. The sheep herder of the Western plains shared with the city dweller the best in music. On this new device he depended for the correct time, for the movement of the markets, and for available information concerning weather conditions. For the first time in the history of civilization an expensive service was to be had for the taking.

126. Railway Adjustments

Transportation Act of 1920.—With war pressure removed, the Federal Government set about making plans to restore the railroads of the country to their owners. This was accomplished under what is generally known as the Transportation Act of 1920. Thus there came to an end government control and operation, regarded in some quarters as revolutionary and even dangerous; in others, as a normal step in ultimate public ownership as well as operation. At any rate, government control and operation was at an end for the time being.

An important provision in this Law concerned the establishing of a Railway Labor Board. What Congress and the President had in mind was to prevent labor disputes reaching the point where the men would quit working. The people might get along for a time with a portion or all of their coal mines idle; railway transportation was a more serious matter. The stopping of our railroad trains for only a day would mean severe economic disorder. This Board was authorized to handle disputes of various kinds, particularly those involving wages, rules, and conditions of labor. Our interest in this connection is in the criteria to be considered in settling wage disputes which were as given on the next page.

(1) Scale of wages paid for similar kinds of work in other industries.
(2) Relations between wages and cost of living.
(3) Hazards of the employment.
(4) Training and skill required.
(5) Degree of responsibility.
(6) Character and regularity of employment.
(7) Inequalities arising from previous wage adjustments.

A second provision dealt with railroad profits. All net earnings above six per cent were to be divided equally between a reserve fund of the individual road and a general railway contingent fund controlled by the Interstate Commerce Commission. This is known as recapturing. This scheme its authors advanced with much enthusiasm. Curiously, while intended merely to aid in meeting the strong-and-weak-road problem, it led many people to believe erroneously that the Government was guaranteeing a six per cent return.

One provision that promised much and accomplished little had to do with regional consolidation of railroad lines. The Government's experience in operating the transportation facilities of the country led the supporters of the consolidation idea to believe that what the country needed most in this respect was consolidation. They spoke glowingly of a relatively few gigantic systems each serving an empire in wealth and population.

Later legislation.—Other bits of legislation followed the Transportation Act of 1920: one in 1925 known as the Hoch-Smith Resolution; the other, the Railway Labor Act of 1926. The first dealt with rates, the second with wages and conditions of labor. The Railway Labor Act displaced those provisions in the Transportation Act of 1920 dealing with labor, and it looked toward more efficient handling of labor relations. This Act provided several agencies for settling labor disputes. There were to be (1) conferences, (2) boards of adjustment, (3) national mediation boards, (4) arbitration, and (5) emergency boards.

Completion of physical valuation.—A task involving an enormous amount of work was completed in 1928 after fifteen years of unremitting labor. During that time groups of men had determined through careful examination the value of the railroads of the country. This they had done in a painstaking

manner. The object was to find a value on which fair and adequate rates might be based. The figures thus assembled totaled billions of dollars.

Trends in volume.—During the decade ending in 1929 American railroads earned between forty and fifty billion dollars on a basis of a little more than a cent per ton per mile. These roads hauled more than two billion tons in 1920. To put the matter in another way, they hauled, in that year, one ton an equivalent of more than four hundred billion miles at a cent a mile, their freight revenues being approximately four billion dollars. The

FREIGHT TRAFFIC
1920–1929

Year	*Tonnage (Millions)*	*Revenue (Millions)*	*Year*	*Tonnage (Millions)*	*Revenue (Millions)*
1920	2,427	$4,420	1925	2,463	$4,664
1921	1,808	4,004	1926	2,627	4,905
1922	1,974	4,085	1927	2,510	4,728
1923	2,503	4,712	1928	2,504	4,771
1924	2,331	4,437	1929	2,584	4,899

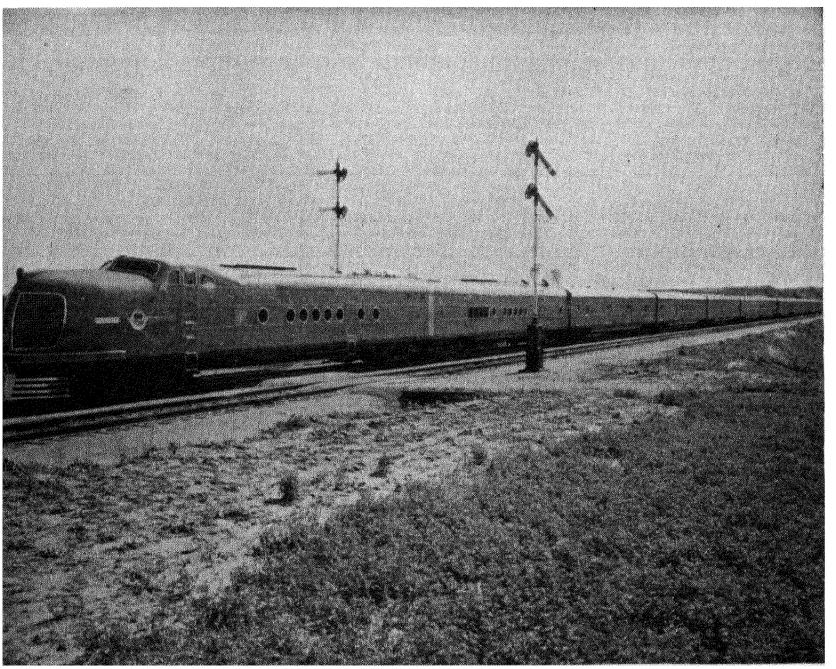
high point in this respect was reached in 1929, when the railroads of the country earned and collected about five billion dollars for hauling freight.

The crest in passenger service was reached in 1920. In that year the number of passengers carried was one and a quarter billion. At that point a decline set in that carried this number to less than eight hundred million in 1929. Within a decade, therefore, the passenger service of our railroads declined forty per cent. Also, passenger receipts declined. In 1920 they were $1,304,815,000; ten years later they were $875,929,000. Of chief interest to the traveling public was what it paid to ride. In 1920 it was 2.78 cents per mile, in 1924, 2.51 cents, and in 1929, 2.18 cents. There was a tendency throughout the period for the number of passengers per train to decline and the average number of miles traveled to increase. Forces were at work that eventually took away more than half of the passenger traffic of the railroads and threatened the rest of it.

Some economic aspects of railroading.—In evaluating the importance of our railroad systems, attention can well afford to go beyond the hauling of freight and the carrying of passengers.

Railroads spend vast sums annually for supplies and bear an appreciable share of the tax load.

In 1926, to cite a typical year, they consumed more than a hundred million tons of coal, two and a half billion gallons of fuel oil, and a hundred thousand cords of wood. In addition, they laid almost four million tons of new rails at a cost of approximately one hundred forty million dollars. These two



A new age in transportation

items—fuel and rails—fall far short of exhausting the demands for railroad supplies. A complete list would include iron, steel, lumber, leather, cloth, oil, grease, packing, boiler compound, and a great many more requirements for keeping a railroad decently effective.

During the decade the railroads carried their share of the tax burden. In 1928, for example, they paid into the Federal and local treasuries a total of $414,909,245. Of this amount the Class I roads paid $289,993,000, a little less than one-fourth going to the United States Government. A better view of the situation is to be had by examining the tax per mile. In 1920

it averaged $1,262. The next five years saw this figure rise to $1,603. Three years later it was $1,711.

Railroad revenues and the national income.—The ten years following the close of the War were relatively prosperous ones. Our national income ranged high, with a tendency to rise even higher. During 1929 the total income of the United States has been estimated to be in excess of eighty billion dollars. Of this amount transportation (carried on largely by the railroads) accounted for more than seven billion dollars. This, it should be noted in passing, exceeded the agricultural income of the country for the same year by more than fifty million dollars.

127. River Transportation

On the Mississippi River.—The frenzy of the War carried the Government into river traffic on a scale which at the time promised to become of major importance. After the War, Congress set up the Inland Waterway Corporation (1924) with authority to acquire from the Secretary of War "all government owned inland waterway equipment, . . . which he held under the terms of the Transportation Act of 1920 and which had been acquired . . . and received from his predecessor, the United States Railroad Administration, which operated the 'Mississippi-Warrior Service' from September, 1918." This step was definitely in the direction of a government owned and government operated water transportation system.*

The Corporation recognized three divisions: the Upper Mississippi, the Lower Mississippi, the Warrior. The first named included the Mississippi River from St. Louis to Minneapolis-St. Paul; the second, from St. Louis to New Orleans; the third, from New Orleans through the Industrial Canal, the Mississippi Sound, Mobile River, and Warrior River to Birmingham. The Corporation also operated on the Illinois River below Peoria, on the Missouri River, and on the Ohio River. Altogether the combined lengths of navigable waters (of a depth three feet and more) in the system was in excess of twelve thousand miles.

Other systems.—River transportation was not confined to the Mississippi System. Along the Atlantic Coast certain rivers offered facilities comparable to those to be found further inland.

* In spite of all the activity, inland water transportation does not seem to have made much gain on rail transportation, Selections 87 and 88.

INLAND WATERWAYS
1925

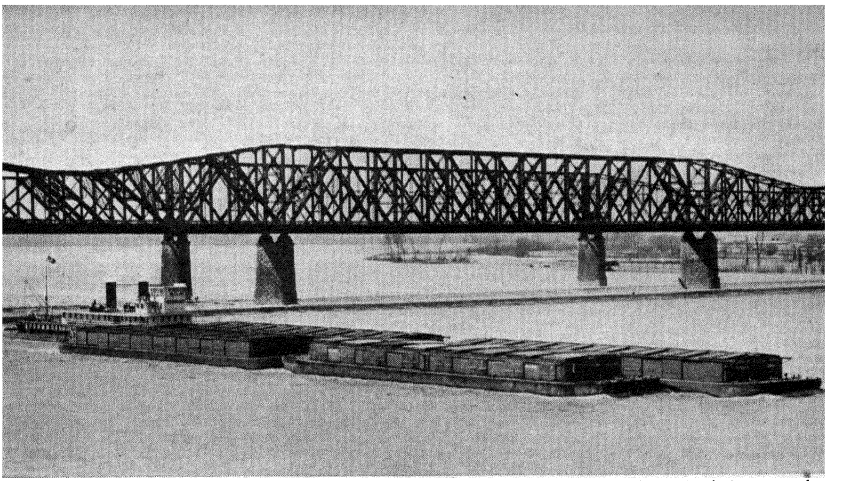
Groups	*Navigable Length in Miles at Different Depths in Feet*					
	Less than 3 Feet	3 to 6 Feet	6 to 9 Feet	9 to 12 Feet	12 Feet and Over	Total
Atlantic Coast Rivers ...	1,024	1,239	699	422	1,106	4,491
Mississippi System... .	5,625	2,296	1,987	2,740	260	12,911
Gulf Coast Rivers	1,327	1,342	967	148	97	3,883
Pacific Coast Rivers... .	656	439	454	97	236	1,884

The depths of many of them, in fact, made possible the use of coastal vessels and even those employed in foreign trade. The same general condition prevailed along the Gulf Coast and in the Pacific region.

Place of river transportation.—Back of the decision of the Federal Government to enter the transportation field as owner and operator was the conviction that one of the nation's natural resources should again be utilized so as to contribute to national wealth. Such convictions, however, stopped short of expecting river traffic to displace railroad traffic. What was intended was that the two should work hand in hand in a common task. Railroad leaders, threatened by this new development, generally held the view that river transportation was a step backward, that it was slow and uncertain, and that without public subsidy it could not exist. Here and there opposing views found expression. What would benefit the territory served, would, in the opinion of this view, benefit the railroads forced to compete with the waterways in question. To express the matter in another way, the railroads, even though they might be forced to share their business with a competitor, would in the long run prosper through a general increase in the need for transportation facilities.

The question of developing river transportation during the 20's was one that attracted much attention. Zealous advocates painted in bright colors the benefits to be had from it. They appealed to the emotions in this advocacy and sometimes showed little tolerance for those who dared express doubts. River communities caught the spirit, and soon along the Mississippi and its tributaries there sprang up projects of various kinds. One city built at public expense facilities for loading and unloading

boats; another, wider and smoother streets to landings. What is important in this connection is not the success or failure of such enterprises but rather the rebirth of a feeling, long dormant, that the glories of the river might be recaptured. This feeling,



The world's largest diesel towboat, the *Herbert Hoover,* moving freight on the Mississippi

it should be said, found expression in the main in those communities likely to be benefited.

128. Highway Transportation

Extending the road system.—With the War at an end the extension of the hard-surfaced road systems of the country was resumed with renewed energy. States laid taxes and borrowed money with which to build these roads. The Federal Government aided in this respect. State aid for country roads dated from 1891, when New Jersey made the start. The next year Massachusetts joined New Jersey. Three years later Connecticut and California took similar action. By 1921 every state in the Union was engaged in road building. In that year they spent almost four hundred million dollars on thousands of miles of hard-surfaced roadways. Leading was Pennsylvania with an expenditure of $49,012,000, followed by New York with $36,855,000, and Iowa with $18,276,000. Next in rank were Oregon, Texas, Michigan, Illinois, New Jersey, and North Carolina. Ten years later the amount spent annually on such roads ex-

ceeded a billion dollars. The four ranking states in this respect in 1930 were Pennsylvania ($95,589,000), New York ($73,233,000), Tennessee ($53,278,000), and Iowa ($50,607,000).

Trucking.—With the growth of the hard road system went a corresponding growth in truck traffic. Operators of motor driven vehicles found very quickly that they could compete to advantage with already established facilities for moving freight. They offered shippers a flexibility in operation denied to the railroads. They could with no great difficulty load at one warehouse door and unload at another. Unlike the railroads they could and did go wherever wheeled traffic was possible. The result was that they took from the railroads much of their most profitable traffic. Thousands of these trucks were employed in business concerns moving their own products; other thousands offered their services to the public.

Motorbus operation.—The use of the motorbus as a means of getting from one place to another became an accomplished fact during the decade following the close of the War. Mile after mile of street railway gave way to the motorbus, first as feeder lines and finally as the main, if not the sole, medium of city transportation. What many traction magnates had looked on as a passing fad was now an accomplished fact. Also, the motorbus made its way as a means of transportation from one community to another. By 1930 it had become a serious contender for the passenger business of the country.

In 1930 the number of operating companies in the United States totaled 5,875, operating 44,650 motorbusses. Of this number, motor carriers operated 31,064, the electric railways, 11,827, and the railroads, 1,759. They may also be classified as follows: city, 13,350; inter-city, 28,550; sightseeing and irregular, 2,750. In other words, more than thirteen thousand city busses carried 1,350,000,000 passengers, while inter-city and sight-seeing busses carried an additional 434,000,000.

No account of the radical changes that took place in city transportation would be complete without a mention of the taxicab industry. With the coming of the automobile as a pleasure car came the same automobile as a vehicle for hire. Enterprising individuals first offered to carry passengers in the ordinary automobile; then factories turned their attention to the production of cars particularly adapted to such service. The

result was the taxicab. One group of enterprising business men organized companies, bought cabs, and hired drivers; another joined independent drivers together under an arrangement in which all of them could serve a common purpose. The result was the beginnings of the taxicab industry as we know it today.

Demands for regulation.—The use of motor vehicles for hauling freight and carrying passengers raised the question of their regulation in the interest of the public welfare.* For years the Federal Government and many of the states had imposed on the railroads a variety of restrictions. Many privileges, if not rights, had been and were denied them. They saw a competitor carrying on its business almost, if not wholly, without restraint. Seeing this, they complained of discrimination on the part of the national and state governments.

A second demand for regulation involved the use of publicly built roads used by private industry. The railroads argued that they were compelled to provide their own roadbeds, to maintain them, and to pay taxes on them. Trucks and busses, they pointed out, carried none of these burdens. Instead, they utilized a facility provided at public expense primarily for pleasure cars, and paid in the form of taxes and license fees less than the cost of the wear and tear which they caused. The result was a movement toward regulation coupled with requirements requiring higher and higher license fees. Then and later much of this inequality was removed by gasoline taxes.

129. Air Transportation

War and post-war aviation.—The War taught many valuable lessons in the science and art of heavier-than-air flying. Under the severe necessities of the battle front, pilots and mechanics grew in their understanding of the fundamental principles underlying aviation. They experimented often at the cost of injury and even of life itself, every step taken in an effort to increase safety and efficiency. Everything they learned they brought back with them when the War came to an end. Capital, seeking investment, was combined with mechanical and operating skill to take up where war laid down and to push forward in developing peace-time services in the field of air navigation.**

* Part of the argument for regulation is presented in Selection 89.

** Organized air transport dates from about 1926, Selection 90.

The man on the street had a keen interest in air travel. His imagination had been stirred by the daring of the fighting aces on both sides during the War, and it was easy for him, therefore, to give attention to each new advance and to understand its significance in its relation to transportation. The result of all this was that communities did their part by building airports consisting in the main of cleared level areas improved with hangars built more or less permanently. Gradually, also, the public,

Wide World Photos

A new kind of port

aided by a combination of publicity and propaganda, began to become air-minded.

During these early days of the industry, improvements moved along four lines: speed, safety, comfort, and economy. To these ends public spirited men arranged contests of various kinds and offered prizes in the form of money or emblems for excellence. A tournament of national races was instituted in 1921, and under the joint auspices of the National Aeronautical Association of the United States and the Aeronautical Chamber of Commerce of America, the tournament was continued throughout the period under consideration. In 1930, to cite but a single year, the tournament attracted the best talent in the industry. Many prizes were offered ranging up to $7,500, the highest of which was won by Wiley Post in a non-stop derby from Los Angeles to Chicago. The total value of all prizes was $100,000.

Not all the efforts thus expended added to the knowledge of air transportation. Much was spent in stunting in one form or another. Notoriety seekers went aloft for days, while others risked their lives in attempting sea flying with inadequate equipment. Fortunately the general public sensed what was going on; otherwise failures doomed at the outset might have raised doubts as to the practicability of air transportation. Colonel Lindbergh had demonstrated what attention to detail, coupled with courage and flying ability, could do under the most serious trial.

Government regulation.—Because of its peculiar nature, the airplane industry was not permitted to develop uncontrolled. Very early the Federal Government had shown its interest by setting up regulations concerning the operation of "ships." Such regulations included the licensing of operators (pilots) and the inspection of machinery, going far beyond merely saying what might or might not be done. What the Government did was to cooperate with the industry so that air navigation might be made as safe as was humanly possible. To that end departments at Washington set up reasonable standards of plane performance, arranged for passing on the qualifications of those who wished to be pilots, and made available information concerning weather conditions along established lines of travel.

The situation in 1930.—So great was the progress of this infant industry that by 1930 it included approximately one hundred producers of planes carrying on a keen competition for business. The annual commercial production at about that time included more than five thousand machines valued in excess of thirty million dollars. To these figures must be added at least fifty million dollars for engines and spare parts, and other millions representing the value of machines and materials in the hands of the Government. Viewed from any angle, in 1930 the

CIVIL AERONAUTICS

	1928	*1930*
Number of services	63	122
Miles in operation	16,667	49,549
Personnel { Pilots	308	675
Personnel { Others	1,188	2,800
Number of passengers carried	49,713	417,505
Mail carried, pounds	4,063,000	8,514,000
Express and freight carried, pounds	217,000	469,000

aviation industry—manufacture, sale, operation—gave promise of developing into one of major importance. It had the support of the general public, it challenged the capabilities of the American business men, and it enjoyed the cooperation of the Federal Government.

130. The Telephone and Telegraph

America becomes telephone conscious.—The decade following the close of the World War saw rapid expansion in the telephone industry. What had once been a toy for an emperor had become a necessity for the common man. Isolated farm homes and squalid tenement houses might lack running water, central heating plants, and other simple conveniences; the telephone, however, had come to be all but indispensable. In 1922, the telephone companies reported twenty-five billion calls for the year. During the following decade, that number increased more than twenty per cent. That in itself is not the whole story, for the relative increases in miles of wire, number of employees, and in capital invested, ranged much higher.

Significant in this connection was the extension of long distance facilities for telephoning. The first of such facilities dates from 1876, when a conversation was carried on over a wire stretched from Boston to Cambridge, a distance of about ten miles. Eight years later Boston and New York were "hooked up," and in 1892 long distance reached Chicago. In 1915 the first transcontinental line between New York and San Francisco was established. In 1923 a second line by the way of New Orleans reached Los Angeles. Two others followed during the 20's, one in the north through Minneapolis and to Seattle, and a second from St. Louis to Los Angeles. By 1930 the whole country, with exceptions here and there, had facilities for carrying on conversations with places far away and sometimes off the beaten paths of trade and commerce. London was reached in 1927.

State of the industry.—The dominant figure in the industry was the American Telephone and Telegraph Company. In addition to owning the major operating companies of the country, it carried on most of the long distance business. With its subsidiaries (the Western Electric Company and the Bell Telephone Laboratories) it employed more than a quarter of a million men and women, to whom it paid in wages and salaries almost a half

billion dollars a year. This concern had a capital of approximately two billion dollars divided into about twenty million shares. Thousands of independent systems shared in the telephone business. Most of them were local in character, and for their long distance calling they usually resorted to the facilities

THE TELEPHONE INDUSTRY
1922–1927

	1922	*1927*
Miles of wire	37,266,000	63,836,000
Number of telephones	14,347,000	18,523,000
Number of calls	24,648,000,000	31,614,000,000
Number of employes	312,015	372,272
Wages and salaries	$352,926,000	$486,597,000

of the American Telephone and Telegraph Company. Together they constituted a major industry.

During this decade the automatic telephone came into its own. Originated as an independent enterprise and permitted to struggle along for years, it was taken over and perfected by the so-called Bell system and made available to subscribers. City after city was "switched over" from the manual to the automatic "phone," until by 1930, the demand for this new type of calling was greater than could be met.

As might be expected, the facilities for telephoning varied from one section of the country to another. Considering the country as a whole, the number of telephones per thousand population was 130 in 1922; ten years later it was 139. The District of Columbia (Washington city) led in this respect. Next came the Pacific States (California, Oregon, and Washington) with almost two hundred, followed by the West North Central States, the East North Central States, the New England States, and the Middle Atlantic States. Bringing up the rear were the East South Central States with less than sixty. The leading states in this respect were California and New York, where there were less than five persons for each telephone.

The electric telegraph industry, while it continued to improve as a medium of communication, made no growth comparable to that of the telephone industry. During the decade under consideration, it increased and improved its facilities in keeping with

growths of population and expansion of business. Between 1922 and 1929 the Western Union increased its wire mileage from 1,534,009 to 1,934,020; its receipts from $107,116,306 to $148,449,854; its net income from $13,205,352 to $15,577,039. Much of this increase in business may be attributed to the increasing ease with which senders of telegrams could use the telephone rather than carrying their messages to the telegraph offices.

It should be said in this connection that following the close of the War came the discovery of the telegraph by millions of people who, prior to that time, had used its facilities only rarely, if at all. Gone for many of them was the day when a telegram meant death or worse. They were beginning to regard the uniformed messenger boy with the same unconcern as they had always shown toward the uniformed mail man. Both carried general information.

131. Wireless Communication

Beginnings.—When the third decade of the twentieth century opened, the use of radio as a medium of communication was confined, on the whole, to the transmission of messages on the order of the telegraph. Radio was yet in an experimental stage. Leading in enthusiasm, if not results, were thousands of amateur broadcasters, set builders, and listeners. Factories sprang up to supply parts; stores of every kind encouraged experimenters by furnishing free such information as was available concerning how to build equipment for sending and receiving.

Our interest in this connection is in the use of the air for sending messages. As early as 1895 an Italian inventor, Guglielmo Marconi, had demonstrated in a practical way the use of the air as a medium of communication. The next year he had gone to London, where in June he took out the first patent ever granted for wireless telegraphy based on the use of electrical waves. From this point wireless progressed, the first message being sent from Europe to America on December 12, 1901.

The radio added the voice to code sounds; it made possible two way conversation; it opened up opportunities for transmitting messages that transcended the wildest tales of a Verne. With it no community, however remote, would be beyond the influence of centers of population and wealth. Far-sighted men

could see the day when the king of a mighty empire might speak to his millions of subjects, and when the children of men who fought in the Battle of New Orleans weeks after a treaty had been signed between the two countries involved might hear the measured strokes of Big Ben as it ushered in the New Year. Of all the economic developments of this decade, none compared in importance with that of the radio industry.

Chapter XXXIII

PUBLIC AND PRIVATE FINANCE

THIS chapter deals with financial matters both public and private. During this period of our history the Federal Government reduced its indebtedness materially, while states and other smaller units increased theirs. The Government attempted to settle the so-called War debts on a reasonable basis, and, in spite of inflation of the currency in Europe and elsewhere, kept the monetary system on a gold basis.

During these years taxes varied with income and with the demands for public services. Federal receipts reached a high point in 1920 with $6,694,565,000. From that point they declined until in 1925, they reached $3,780,149,000. Then they began to climb upward only to drop back again after 1930. Local taxation showed no such variation; it increased steadily under the stress of meeting demands for local services. With the steady increase went an increase in the debts incurred by state and local spending groups.

Banking in all its phases continued as a major economic activity. The operation of the Federal Reserve System characterized the banking operations of the period. With a background gained from actual experience, Congress and the President strengthened the system and extended its service. State banks shared with national banks the favor of the public.

The banks faced competition in many lines. Corporations turned to the practice of borrowing funds from individuals or other corporations not in the banking business, giving their notes secured in a variety of ways, by mortgages on land or inventories, by accounts receivable, and by pledging of stocks and bonds. In such instances no bank was a party to the transaction.

Other important factors in finance were investment trusts, insurance companies, building and loan associations, and the Government itself. Investment trusts made available to small investors the security to be had in diversification of investment. Insurance companies expanded their operations beyond reason-

able expectations, with the result that they had large sums of money available for borrowing. Likewise, the building and loans, having encouraged investment by paying a relatively high rate of return, shared with other leading agencies the prosperity of the time. All the while the Federal Government paid interest on postal savings and used public funds to encourage the use of surplus funds for acquiring fair mortgages. The country had no lack of opportunities for lending.

132. Federal and Local Finances

Federal receipts (ordinary).—The total receipts of the Federal Government in 1920 were in excess of six billion dollars. Of this enormous sum collected from the people about five per cent represented customs duties; sixty per cent, income and profits taxes; twenty-two per cent, other forms of internal revenue; fifteen per cent, miscellaneous receipts including postal revenues. Significant are the relative sizes of customs duties and income and profits taxes. The former was one-twelfth of the latter and but one-twentieth of the total amount collected. Ten years earlier custom duties had made up more than one-half of the entire revenue of the Federal Government. Thus, within a decade, a source of income once regarded as the mainstay of Federal finances had declined in importance until for all practical purposes it was non-existent; and with this decline went much

SELECTED SOURCES OF INCOME
1910–1920

Year	*Customs*	*Per Cent of Total*	*Income and Profits Tax*	*Per Cent of Total*	*Miscellaneous Internal Revenue*	*Per Cent of Total*	*Total Federal Taxes*
1910	$336,683,000	49	$20,952,000	3	$268,982,000	39	$675,512,000
1920	322,903,000	5	3,944,949,000	60	1,460,082,000	22	6,694,565,000

of the force of the argument usually advanced in support of a protective tariff under the guise of raising needed revenues.

During these ten years (1920–1929), the Federal Government collected in various forms a sum of money aggregating forty-five billion dollars. This it collected from the citizens of the country, for it had no other worth-while source of revenue.

Spread over the population the collections amounted to about forty-five dollars per capita each year or four hundred fifty dollars for the decade. This exceeded the combined receipts of the government from 1789 to 1917—a period of more than a hundred twenty-five years.

Federal expenditures (ordinary).—During every year of this decade, the ordinary receipts of the Federal Government exceeded ordinary expenditures by several hundred million dollars. What became of the difference? Some extraordinary expenses were incurred; the public debt was reduced. Using 1925 as a typical year, we find the largest single items of expense to have been (1) civil and miscellaneous, including many of the executive departments, and (2) pensions and various other compensations to former soldiers or their families. In that year two-thirds of a billion dollars were spent for the former and three-quarters of a billion for the latter.

The Federal debt.—The pre-war American hated public debts; he never seemed to be able to get the point of view of the British consol or the French rente. His notion was that a debt in perpetuity was something to be avoided as he would a pestilence. Following that notion he began soon after the close of the Civil War to reduce the national debt. Fifteen years later it was below two billion dollars. From that point it declined, until in 1892 it dropped below the billion mark, and with slight fluctuations it remained in that neighborhood until the outbreak of the World War. The War left a legacy of Federal debt amounting to approximately twenty-five billion dollars. Again the people set about to discharge this obligation. During the decade following the War it was reduced something like nine billion dollars.*

As has been mentioned, much of this debt represented loans made to various foreign countries during and following the War. By 1922 this debt amounted to approximately ten billion dollars, plus a billion and a half of unpaid interest. A year later the American Government entered into an agreement with Great Britain whereby that nation agreed to pay four billion dollars in lieu of what they owed us, payment to continue for sixty-two years. Other settlements followed, all of them at less than the

* The methods of reducing it are pointed out in Selection 91.

actual amount previously loaned.* These settlements contemplated the liquidation of the British debt at eighty cents on the dollar, France at fifty per cent, and Italy at about twenty-five per cent. In nearly all cases the period of payment was so long and the interest so low that the settlements involved payments at the value of from one-quarter to three-quarters of the original advances by the United States.

Local financing.—The trend of state, city, and other local public expenditure was, during the decade under consideration, upward with long strides. The states alone increased their spendings from a little less than two-thirds of a billion dollars in 1919 to more than two and a quarter billion dollars in 1930. During the earlier year the per capita cost of state government in this country was $6.43; in 1930, it was $18.39. Far ahead of the states in this respect ran the large cities of the country.

RECEIPTS PER CAPITA OF SELECTED MUNICIPALITIES
1915–1930

City	*1915*	*1923*	*1930*
New York	$38.67	$69.54	$93.42
Chicago	33.63	58.19	77.55
Detroit	32.15	87.74	109.11
Milwaukee	30.10	62.36	76.30
Jersey City	23.15	62.40	101.62
Louisville	24.86	36.39	47.98
Birmingham	16.52	26.04	40.13
Fort Worth	17.93	29.07	32.51
Duluth	34.50	56.77	63.30

Here expenditures kept pace with increased revenues and often outran them. These cities collected and disbursed billions of dollars. Measured in services performed, men employed, or money spent, the city of New York alone rivaled many European nations.

Significant was the growth in the public debts of states and cities and other local units. In the days of restricted governmental operations the combined debts of all local units was comparatively small. In 1912 they totaled $3,821,897,000, which was about forty dollars for each person then residing in the country. During the decade that followed, these debts grew

* Germany was to make reparation payments according to the Dawes and Young plans, Selection 92.

to be more than eight billion dollars; in 1932 they aggregated $17,576,839,000. In other words during the twenty years following 1912, the public debts of the country, exclusive of the national debt, increased almost four fold, the per capita average rising from $39.37 to $141.17.

What was back of this borrowing of money by governmental bodies? The answer is many sided. Demands for new services and improvements and expansion of old ones required more and more money. Hard-surfaced roads demanded, as we have seen in another place, the expenditure by the states and counties of billions of dollars. Of these enormous funds a portion was raised through license fees and taxes on motor fuel, most of the rest by borrowing. Cities on their part built and equipped airports, expanded their park and other recreational facilities, and spent public money lavishly on streets and alleys, on sewage systems, and on other municipal projects.

MUNICIPAL DEBTS
1915–1927

City	*1915*	*1922*	*1927*
New York	$921,754,000	$1,067,021,000	$1,394,467,000
Chicago	65,911,000	131,341,000	241,700,000
Philadelphia	101,864,000	195,846,000	381,583,000
Detroit	18,377,000	122,587,000	116,089,000
Cleveland	57,075,000	116,089,000	134,273,000

The part that borrowed money played in the increased expenditures of states and cities is revealed by examinations of the debt loads. In 1927, for example, the net indebtedness of the American states fell only a little short of one and a half billion dollars. Leading in this respect was New York with approximately a quarter of a billion dollars, followed by North Carolina, Illinois, and California. In per capita debt, North Carolina held first place, with $51.44. Next came Oregon with $40.76, Delaware with $36.84, and West Virginia with $30.62. At the far extremes were Texas—81 cents, Wisconsin—57 cents, and Indiana—52 cents. By combining all local governments (states, counties, cities, towns, townships, school districts, etc.), it is found that the total local public debt approximated ten billion dollars. Altogether then the people of the country were at one time (say 1922) in debt for public expenditures more than thirty

billion dollars. This was equivalent to more than a thousand dollars for each family.

133. Developments in Banking

Significant shifts.—In actual number of banking houses there was a marked decline during the decade under consideration. In 1920, for example, the country could boast of having more than thirty thousand such institutions in operation. By 1929 it had fallen to a little more than twenty-five thousand. Thus within the space of ten years banking facilities measured solely by vaults, banking houses, and other outward evidences had declined almost a sixth.

Measured by any other standard they had grown tremendously. Those elements that make up the banking function—capital, deposits, loans, and discounts—expanded with growth

NATIONAL AND STATE BANKS
1920–1929

Year	*Number*	*Resources*	*Capital and Surplus*	*Individual Deposits*
1920	26,225	$37,421,100,000	$3,657,800,000	$24,498,900,000
1929	21,793	44,264,500,000	5,066,700,000	31,637,900,000
Change	−4,432	+$6,843,400,000	+$1,408,900,000	+$7,139,000,000
	16.8%	18.3%	38.5%	29.1%

in population and business operations. The capital funds devoted to banking moved forward with growing demands as reflected on deposits; one, almost forty per cent, the other, only a little short of thirty per cent.

Banking in 1925.—An account of banking during the period under consideration requires some notion of six different kinds of institutions—(1) national banks, (2) state commercial banks, (3) loan and trust companies, (4) private banks, (5) mutual savings banks, and (6) stock savings banks. Combining the simple facts concerning their operations, we find that in 1925 there were 28,841 such institutions. These banks had combined resources of $62,056,900,000. Their capital and surplus totaled $6,343,200,000, and they held deposits of individuals amounting to $46,715,300,000. The significance of these figures is had by comparing them with figures of a quarter of a century earlier,

when the total resources of the little more than ten thousand banks of the country barely exceeded ten billion dollars, when the combined capital and surplus was $1,673,300,000, and when deposits fell short of seven and a quarter billion dollars.

Despite the drop in the number of operating banks after 1920, the United States had at the time fewer people per bank than any other nation. That is, there was one bank for each five thousand inhabitants. At the far extreme were England and Wales with something like twenty-five banks with their branches, being one bank for approximately two million persons. The United States continued to be a single bank country. Here and there advocates of branch banking urged their claims, but not with any great success. The people generally held the view long held by their parents and their parents before them that absentee ownership in the banking business was something to be studiously avoided. Viewed from the opposite direction, it was one of those economic activities that should be kept as local as possible. The practical results were, as events proved, that far too many such institutions competed in many communities for patronage that was not there.

Between 1921 and 1930 approximately seven thousand banks found it necessary to close their doors.* Of these, less than one-seventh were members of the Federal Reserve System. Some idea may be had of the stabilizing influence of the System from an examination of what happened to member and non-member banks. In 1926, to cite but a single year, 976 banks of all kinds and varying sizes failed. Of these, 123 were national banks and members, of course, of the Federal Reserve System, and 35 were state banks, also members of the System. That is, eight hundred eighteen of the nine hundred seventy-six failing banks did not belong to the System. Fortunately, many of the non-member banks were relatively small and, as a result, the effects of their failure were correspondingly small. The total deposits of the one group (158 in number) were $67,364,000; of the other (818 in number), $192,914,000. The first had average deposits of less than one-half million dollars; the second, of about half that much.

* The views of the Comptroller of the Currency on bank failures and concentration are given in Selection 94.

The Federal Reserve System.—As was to be expected, the Federal Reserve System continued during the decade following the War to be the stabilizing force in American banking. It gave direction to banking operation, provided a source of funds for its member banks, and aided business transactions in providing credit for manufacturers, merchants, and others engaged in the production and marketing of economic goods. Of its many functions, that of providing a currency elastic enough to meet normal business needs was the most important. It made available money when needed, and when that need ceased it withdrew surplus funds from circulation. From time to time, Congress modified the original act establishing the System, but always without changing the original reasons for its establishment.

The money stock.—During the decade under consideration the amount of money in circulation varied slightly with the tendency downward. In kinds, however, the variety was relatively large and at times significant. In 1920 the circulating medium of the country approximated five and a half billion dollars. A low point was reached in 1922 with $4,463,200,000. Seven

MONEY IN CIRCULATION
1920–1929

Year	*In Millions of Dollars*							
	Gold Coin	Gold Certificates	Silver Dollars	Federal Reserve Notes	Federal Reserve Bank Notes	Greenbacks	All Others*	Total
1920	474.8	259.0	76.6	3,064.7	185.4	278.1	1,128.9	5,467.0
1921	447.3	200.6	65.9	2,599.6	129.9	259.2	1,208.5	4,911.0
1924	393.3	801.4	54.0	1,843.1	10.1	297.8	1,449.6	4,849.3
1927	385.0	1,007.1	48.7	1,702.8	4.6	292.2	1,410.9	4,851.3
1929	368.5	935.0	43.7	1,692.7	3.6	262.2	1,440.6	4,746.3

* Silver certificates, Treasury notes, subsidiary silver, minor coins, and National Bank notes.

years later it was $4,746,300,000. Those ten years saw declines of varying sizes in the use of gold coins, silver dollars, Greenbacks, and Federal reserve notes as money. Gold certificates in the banks of the people varied in amounts from a little more than a quarter of a billion dollars in 1920 to a high point of more than a billion dollars in 1926 and back to $939,000,000 in 1930.

It should be noted that the chief item in the money stock of the times consisted of Federal Reserve notes. In 1920, for ex-

ample, they constituted almost sixty per cent of the total amount of money in circulation. In sharp contrast was the situation prior to the War. In 1916 they held a minor position, being only a little more than two per cent of the total. The same facts may be stated in another way. In 1916 one dollar out of each forty was in the form of a Federal Reserve note; a few years later such notes accounted for three dollars in every five in circulation. Generally speaking these notes had not displaced other forms of money. They were, on the whole, an addition to a stock of money that had remained rather stable in amount for many years —a stock consisting, in the main, of gold and silver coins, gold and silver certificates, United States Notes (Greenbacks), and national bank notes. These last named forms of circulating media constituted what was described in an earlier chapter as highly inelastic currency.

The clearing house.—A device for facilitating the use of checks in making purchases and settling debts is the clearing house. This institution is of many years' standing. During the decade following the War it grew to proportions, and an examination of its operations in the different sections of the country reveals the relative importance of the sections as centers of trade and commerce.

New York City is and was then the leading city in bank clearance. In fact, it cleared more checks during the 20's than all other cities in the country combined. In 1929, for example, the total value represented by checks passing through the various clearing houses exceeded seven hundred billion dollars. Of this vast sum the New York Clearing House handled more than one-half. Contrasted with other centers, it outranked the South twenty to one, the Middle West five to one, the West seventy to one, and the Pacific Coast fifteen to one.

The magnitude of the operations reflected the volume of business carried on without the use of money as a medium of exchange and explains how the business transactions of the country grew and expanded independent of corresponding expansion in the amount of money in circulation. Between 1900 and 1929 money available for buying and selling increased from about two and one-third billion dollars to about eight and one-half billion dollars. The same generation saw the volume of bank clearances grow eightfold. Thus, while the supply of money in circulation

multiplied itself by four, bank clearances in 1929 were about nine times as much as they had been in 1900. The whole country had become bank check conscious.

134. Other Forms of Financing

Real estate bonds.—The years 1922–1929 were, in the main, prosperous years for city people. They spent lavishly and invested widely. Already we have noted how the crash in the market came in 1929, with millions of equity owners suffering losses. Much of this investment—some prefer to call it speculation—rested on borrowed money.* Anyone desiring to buy securities could easily arrange to secure it "on margin." That is, he paid a portion of the purchase price, borrowing the rest from the banks or from someone else through his broker. Gradually trading increased with corresponding increases in brokers' loans. Corporations with huge surpluses not employed came into the stock market as lenders to buyers on margin. With the crash in 1929 came a feverish haste to get out of the market. The result was financial chaos. Millions of shares a day changed hands, the trading being so heavy at times that sales were delayed in being reported on the tape.

Not all such investment was in the stock market. Enterprising financiers promoted a wide variety of building projects, including theatres, hotels, and apartment houses. They had prepared appealing prospectuses, sent out glib salesmen, and resorted to various high pressure tactics to sell real estate bonds. Some of these bonds had a substantial property value back of them; more, however, were, to express it modestly, speculative and not worth their face value. One such bond house—there may have been others—paid for the land to be used, hired architects, built the building out of the proceeds of bond sales after taking for itself a fat commission. At the bottom of all this was the constant reiteration that the wealth of the country was in land. The extent to which such forms of investment was carried is indicated by the fact that in one Middle Western state alone the people paid more than a billion dollars for real estate bonds.

Building and loan associations.—These associations shared in the prosperity of the times, and in doing so they underwent marked changes from the original purpose for which they were

* The activity in the capital market during 1928–29 is described in Selection 93.

organized. They were intended originally to encourage home ownership by loaning funds to be repaid in small installments. Their chief problem was to find members with spare funds to invest, and as an inducement they promised and paid a relatively high rate of interest—dividends strictly speaking—on these funds. During the boom years of the 20's, investors became conscious of this high rate, and they made in the aggregate large investments.

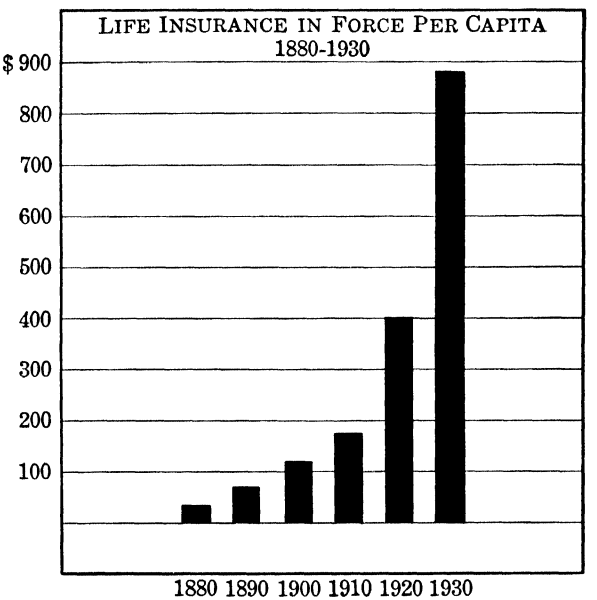
The crest of this flood was reached about 1929 when the more than twelve thousand associations of the country reported a membership in excess of twelve million and total assets of twelve billion dollars. This huge sum was far greater than all the money in circulation at the time and equal to one-half the total assets of all the national banks then operating. It exceeded the combined assets of all savings banks, mutual as well as stock, and was almost twice the total capital and surplus invested in the banking business. These organizations had become a major factor in American finance.

The investment trust.—The desire to profit from the appreciation in value of stock took form in what were known as investment trusts. These trusts consisted of little more than a portfolio in which were stock certificates of different kinds. "Different kinds" explain the success of these undertakings. Many persons realized the degree of safety to be had by investing in a variety of shares. They knew that diversity gave a certain degree of security. Those of large means could make their own investment over a wide range of stocks. Small investors, however, were denied that privilege. Enterprising men, realizing this situation, organized investment trusts and sold shares in them to small investors on the basis of portfolios either already secured or about to be secured. Investment trust A, for example, might have in its portfolio twenty-five gilt edged stocks, that is, stocks of concerns with satisfactory dividend earnings extending over a relatively long period of time.

The investment trust played a leading role in making the people conscious of corporation stocks and the stock market. They stressed the gains to be made by owning equities, and minimized the risk of such ownership as long as it gave proper attention to the principle of diversification. Its method of organization and operation made possible the selling of its shares to the

man with a few extra dollars. His investment stood on a par with his fellow shareholders whatever the number they held. By indirection he was a partner in some of the largest concerns in the land.

Life insurance and annuities.—The life insurance business grew during this period at a startling rate. When the War broke out in 1917, less than forty million policies were in force in this country. Thirteen years later the number was almost two hundred million. During the same time the amount of in-



surance in force increased from about twenty-seven billion dollars to more than a hundred billion dollars. These millions of policies carrying billions of dollars of insurance were widely held. At one extreme a rich man had his life insured for many hundred thousand dollars; at the other was the widow at the wash tub paying a few cents a week against being buried in a potter's field.

In addition to buying life insurance as an investment as well as a guarantee against financial catastrophe, men of some means invested their funds with insurance and other concerns in the form of annuities. This they did in order to provide a son or daughter with a college education or to protect themselves against poverty and want after the productive years were behind them.

One significant aspect of this enormous investment with the life insurance companies had to do with these same companies as lenders of money. Policy and annuity payments were based on the assumption that insurance funds could be made to earn interest. In order to earn this interest these funds must be loaned. They invested in bonds—also, in high grade stocks—and mortgages. Particularly was it in lending money on farm mortgages that the life insurance companies developed during the years a business mounting into billions of dollars. It was a period of relatively high land values with an attractive interest rate. In this phase of national financing these companies took the lead.

Construction work.—The investor of the period had yet another outlet for his surplus funds; he could build a house for his personal use or for rent. If he chose to finance a building to be rented he had a wide choice. Some financed the erection of dwelling houses, some furnished funds for apartment buildings, and others invested in hotels or theatres. In any instance it was an investment that promised to pay a return. In 1928, these investors erected two hundred thousand buildings at a total cost of more than five and three-fourths billion dollars. Significant in this connection was the fact that residences led both in number and in value. In other words, the people in a single year built approximately one hundred forty thousand houses at a cost of almost three billion dollars. When it is considered that many of these residential buildings were large apartment houses, some costing a million dollars each, it becomes apparent that tens of thousands of them were small and belonged to persons of modest means.

135. Public Funds in Private Financing

Postal savings.—These years of comparative prosperity saw the postal savings business decline. During five of the ten years, withdrawals outran deposits. In 1920 the total deposits credited to a half million depositors was $157,276,322; nine years later a little more than four hundred thousand depositors had several million dollars less. What happened was that with growth of confidence in real estate bonds and other securities, many former depositors with the Government either shifted these savings, or, what was more likely, invested their surplus

earnings in private securities rather than in postal savings. This type of savings was remarkably sensitive to economic conditions. After the industrial recession of 1921 the volume of deposits tended downward. With the beginning of the depression in 1929–30, to run ahead in our account, they began climbing. In 1929, for example, 416,584 depositors had $153,644,529 in postal savings. Six years later these figures were 2,562,082 depositors with $1,204,862,940. Thus within a few hard years the number of depositors grew five fold and their deposits seven fold. These funds the Government deposited in approved banks, where they were available for private enterprise.

Federal Land Banks.—These banks, twelve in number, had been organized in 1916 with the National Government advancing the original capital. By 1921, they had developed to the point where their balance sheet stood at about a half billion dollars of assets and liabilities. They held farm mortgages to the value of over four hundred million dollars. During the decade following, this value grew to almost a billion dollars in 1924 and to $1,301,138,000 in 1929. Back of this entry of the Government into the investment field was the desire to provide funds for farmers at a reasonably low rate of interest on a long time loan. It was thought that such lending would encourage land ownership on the part of operators and go far to make such ownership possible.

Joint Stock Land Banks.—These banks dated from 1917. Their funds for financing farm loans were secured from the sale of debentures. The Government did authorize them, but it provided no capital. Its interest in the project, however, misled many investors, who looked on any project fostered by the Government at Washington as part and parcel of the Government itself. During the year 1921 these banks made approximately ten thousand loans aggregating many millions of dollars. In 1924 (December 31), they had combined assets of about a half billion dollars, of which the chief item was loans in the amount of $446,420,000.

Thus, both directly and indirectly the Federal Government attempted to meet a need in farm financing, a need which private lending agencies could not or would not meet. The results were mixed. Farmers were helped, but sometimes at the expense of investors. Debentures and other obligations of the Banks fell

in value, some of them far below their par value. In a few instances they sold on the open market at but a fraction of their original cost. Later, provision was made for the liquidation of these banks.

Chapter XXXIV

FOREIGN AND DOMESTIC COMMERCE

THE prosperity that characterized this period was reflected in the volume of our foreign and domestic trade. We exchanged billions of dollars' worth of merchandise with foreign countries. The figures rose to unprecedented heights for periods of peace. Higher yet was the volume of our domestic trade. The world in all its history had never seen an exchange of goods of such magnitude, and the opinion which people of other nations had formed over the years concerning our material wealth was more than confirmed.

Our exports exceeded our imports by many billions of dollars. In return for the differences we accepted services in various forms and promises to pay in the future. Gold and silver, too, entered into the trade; also, the exchange of services of one kind or another. All such items, some visible, some invisible, had a place in our foreign commerce.

Our shipping facilities came in for attention. Public as well as private capital was made available for building and operating seagoing vessels. The result was that we recaptured a portion of the business that had once been ours. On the whole, however, we depended more on foreign ships to haul our goods than we did on our own. Among these foreign nations Great Britain played the leading role.

Of chief interest were the changes that took place in domestic merchandising. Of them the most significant was the change in marketing methods. Even the independent merchant, the backbone of the retail trade since early Colonial days, refined his old methods as never before and adopted new ones. This he did in order to overcome the advantages accruing to his larger competitors. The result was that the retail store of 1929 differed materially from the retail store of the War years.

Incident to meeting new competition was the stimulation that came to various methods of cooperation. Retailers joined together for the purpose of buying in large quantities and for creat-

ing good will for their industry. Nor did they overlook the advantages to be had by planning and carrying out cooperative enterprises in sales days and other stock reducing projects.

136. Volume and Nature of Our Foreign Trade

Exports.—Already something has been said of the leading part played by agriculture in our export trade during the decade following the close of the War. Something remains, however, to be said concerning the whole outward movement of economic goods. During those ten years the people of the country shipped abroad commodities valued at more than forty billion dollars. This represents approximately ten per cent of such goods produced, ninety per cent entering into domestic trade. The per capita value of exports rose from $33.75 in 1922 to $41.31 in 1925 and to $41.77 in 1929. Choosing 1926 as a typical year, we find that of the almost five billion dollars of exports, crude materials constituted thirty per cent; crude foodstuffs, six and one-half per cent; manufactured foodstuffs, twelve per cent; semi-manufactures, thirteen and three-quarters per cent; finished manufactured goods, thirty-eight and one-quarter per cent. As in the past, Europe continued to be our best customer, taking more than half our exports, and the countries of North America holding second place by taking about one-quarter. The remaining quarter went to South America, Asia, Africa, and Oceania.

A great deal of our exports to Europe consisted of crude materials and crude foodstuffs. Those two groups comprised more than half of the total in 1921. To North America, South America, Africa, and Oceania, however, finished manufactures made up the bulk of our exports. What this means is that from the point of view of European industry we were yet a source of raw materials; from that of the rest of the outside world, we were a manufacturing nation. The significance of the situation is that the United Sates was rich in both raw materials and finished goods, and that as a result the producers of the country had the whole world as a market for their goods.

In 1924, for example, the combined values of domestic merchandise exported to foreign countries stood at $4,497,649,000. Of this about one-fourth represented textiles—raw cotton, cotton cloth, knit goods, cordage, raw and manufactured wool, manufactured silk, linoleum, artificial leather, hats, suspenders,

garters, and braces, etc., etc. Next in importance came food and allied products valued at $636,375,000. Non-metallic minerals held third place, followed by animals and animal products (wool and hair excepted) valued at $452,469,000.

The origin of these exports differed widely. The lower South furnished the bulk of the raw cotton; Virginia and Kentucky, the tobacco; the Mississippi Valley, the grain and meat products; Pennsylvania, West Virginia, and Illinois the coal; New England, the Central States, and North Carolina, the finished textiles; Illinois, the farming implements; Illinois and Michigan, the furniture; South Carolina, Texas, Louisiana, and Oklahoma, the oil; and Louisiana the sugar cane. The important consideration in this connection is that practically every section of the country had a surplus of some product or products wanted by other nations. No section was left out of the picture. Texas sent her raw cotton to Europe and North Carolina her cotton cloth to Africa. Neither was the more important; both commanded goods in return. This export flow, therefore, resembled a mighty river with its tributaries pouring in their waters brought down from vast areas far in the hinterland.

During the first half of this decade the exportation of gold was at a low ebb contrasted with a similar movement from 1914, the year the World War broke out in Europe. In that year we shipped abroad more than a hundred million dollars' worth of gold. In 1919 the figure stood at $368,185,000. Two years later it was but $23,891,000. After 1925, the flow abroad increased, the annual average for the years 1926–1930 being in excess of two hundred million dollars.

Imports.—The value of the goods brought into this country during the decade lagged behind that of exports by about ten billion dollars. That is, we sent abroad ten thousand million dollars' worth of goods more than we received in return. What we did get in large measure were promises to pay. Europe, as always, continued to be the chief source of supply of goods, although year in and year out she was being crowded for first place by the countries of North America and Asia. In 1920 Europe ranked third in this respect; the next year she again took the lead and held it (except for 1925 and 1926), sometimes by the narrowest of margins. What had once been neglected fields

were now being cultivated intensely by the importers of the United States.

The chief single item included in our imports was sugar; its value per year ran between three and four hundred million dollars. Next in importance, and not far behind, was raw silk. These two commodities, together with cocoa and chocolate, accounted for approximately one-third of all our imports. Their combined value approximated a billion dollars a year. Here is

IMPORTS BY CONTINENTS
1920–1930

Year or Yearly Average	*Europe*	*North America*	*Asia*
1920	$1,227,843,000	$1,662,663,000	$1,396,677,000
1921	764,942,000	754,849,000	617,862,000
1922	991,203,000	822,454,000	826,886,000
1921–1925	1,049,500,000	910,900,000	996,900,000
1926–1930	1,210,500,000	940,200,000	1,192,600,000

revealed the high places occupied by North America and Asia. From Cuba came much of our sugar, and from China and Japan raw silk. Other important import items were crude rubber, paper and paper stock, copper, and chemicals.

The place of gold as a commodity of import must not be overlooked. Except for 1925 and 1928, the flow of gold was into the United States. During the four years 1921–1924, our gold imports exceeded our exports by ten to one. The value of the metal going out was $151,057,000; coming in, $1,608,855,000. One explanation for this movement is that returns on American investments were relatively high; another that many Europeans preferred to have their money in this country because of threats of inflation and instability at home; and another the war debts owed the United States.

Balance of trade.—As has already been noted, the balance of trade during the period was highly favorable. That is, exports exceeded imports. Much of this excess was exchanged for promises to pay; some of it for gold and silver, some for stocks and bonds, some for services rendered by foreign ship owners and foreign insurance companies, some for dividends and interest payable by American concerns to foreign owners. Of considerable importance in this connection was the item of immigrants'

remittances. Many of foreign birth—some naturalized, some not—sent money abroad from time to time to be used for a variety of purposes. It might be for the support of aged parents or for the education of a favorite nephew. Whatever the reason back of the remittance, it operated to increase our export trade. Drafts drawn on foreign banks payable abroad were paid with bills of exchange arising from purchases made in this country.

Tariff legislation.—In 1921 declining prices brought a demand to do something for agriculture. As a result a tariff act was passed which protected various farm products. This act was superseded the next year by the Fordney-McCumber Act. It was very comprehensive in its application and established the general level of duties at about thirty-three per cent. A new feature in tariff legislation was introduced by this act. The President was given the power, upon the advice of the Tariff Commission, to increase or decrease the various rates whenever the rate did not equalize the difference in the cost of production in the United States and the chief competing country. This caused the tariff to be referred to as a flexible tariff.

Revision of the tariff was brought before Congress again in 1929, and the next year the Hawley-Smoot Act was passed. The rates on about twenty-five per cent of the items were increased but the rates on over two thousand items were left unchanged. The average rate of duties established by this act was about forty per cent.

137. American Shipping

The merchant marine.—The pressing need for transporting men and supplies during the World War forced the Government into the ship building industry and stimulated the use of private capital to build ocean going craft. At the outbreak of the War the merchant marine of the United States comprised a few more than twenty-six thousand vessels of varying size having a combined tonnage of almost nine million. Many of them were small, most of them in fact being less than five hundred tons each. Slightly more than a third of them were sailing vessels, canal boats, and barges. Measured in tonnage alone a little less than a third was engaged in foreign trade and about twice as much in coastwise and internal trade. Six thousand tons were devoted to whale and thirty-two thousand to cod and mackerel fisheries.

Prior to the War the ship building industry remained stationary with a tendency upward both in numbers and in tonnage. The year 1918 saw a large increase followed by greater increases through 1919 and 1920. After 1921 it dropped back to a point below where it had been a decade earlier. A variety of reasons have been advanced as explanation for this decline. The first is that through the combined efforts of public and private enterprise the matter had been overdone. Another is that American laws regarding ship operations work to the disadvantage of American ships engaged in competition with foreign shipping. A third involves comparative returns on invested capital. Standards of living and interest rates were at the time higher here than abroad. Investors, therefore, in seeking their economic advantage, preferred other industries.

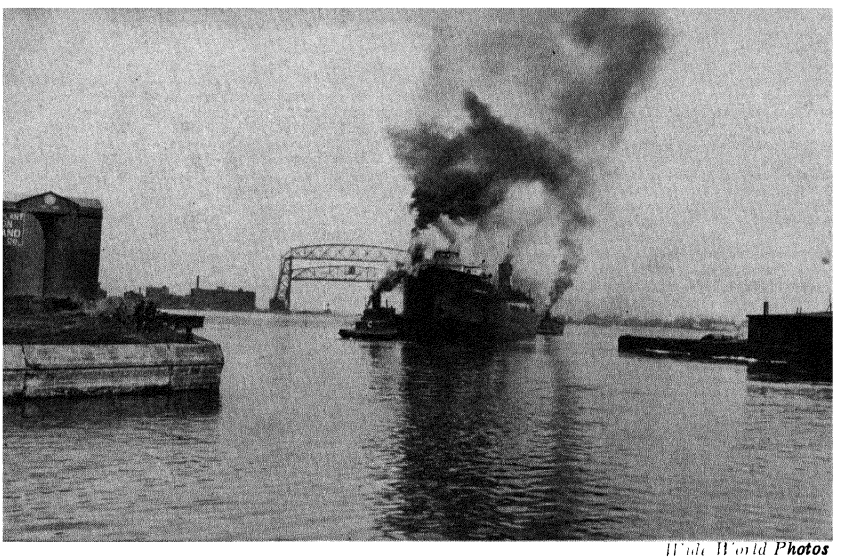
In 1928 the domestic exports of this country were valued at more than five billion dollars. Of these exports American vessels carried about twenty-nine per cent and British vessels about twenty-six per cent. Other important ocean-going carriers were German, Norwegian, Japanese and Dutch vessels. What is really significant in this connection is the fact that less than a third of our products was carried in our own vessels. Generally speaking the same situation characterized our import trade. Our vessels led, but only slightly over Great Britain. In third place came Japan.

The American-owned vessels of the time fell into one of two groups. They were either owned by the Shipping Board, an organization authorized to operate the vessels belonging to the Government, or owned privately. The vessels of the former group averaged large, most of them being a thousand gross tons or more. Several were propelled by electrically driven screws. Considering the two groups as a whole, we had in 1921 a few over thirty-seven hundred vessels of 500 gross tons or over. By 1929 this number had shrunk to 2,581. Especially was the decline drastic in the smaller and medium sized vessels; those of seven thousand tons and more enjoyed an increase.

How did the American merchant marine compare with the merchant marines of other nations? In 1895 we had less than ten per cent of the total. Twenty years later this percentage was slightly above ten; in 1920 it exceeded twenty. That was the high point. From there it declined until in 1929 the com-

bined merchant marine of the rest of the world outranked us five to one. In the face of all was an enormous expenditure of public funds. By the middle of the year 1929 the Government had spent more than three and a half billion dollars on ocean going vessels. Some they had sold to private owners, some they operated, and some rusted in out-of-the-way places.

Traffic on the Great Lakes.—Measured in tonnage the Great Lakes commerce of the time was an important item in the economic life of the people. Over these lakes millions of tons of iron ore, coal, wheat, and paper passed into the channels of the



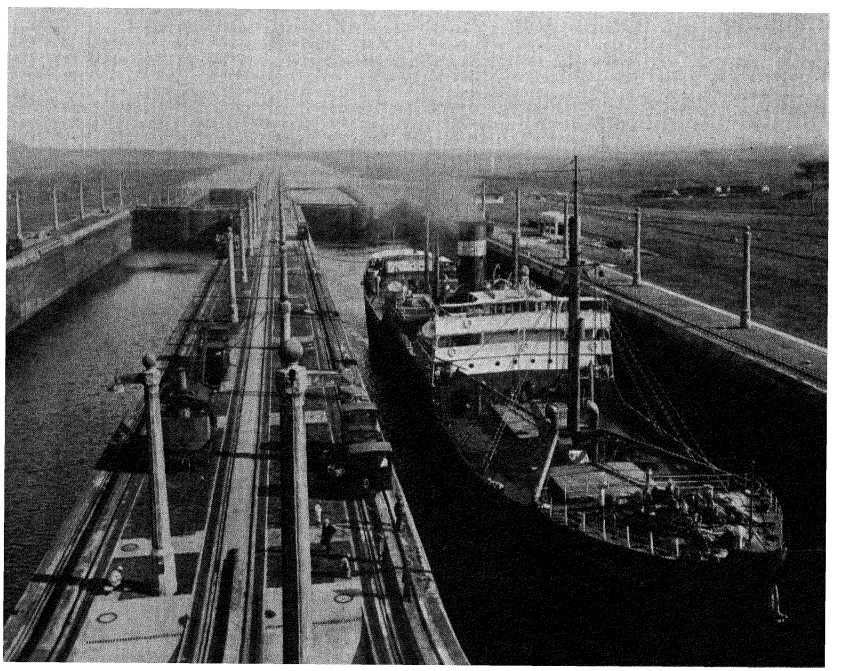
Wide World Photos

Arriving in the harbor at Duluth

world's commerce. The Duluth-Superior port led all others in shipments and ranked high in receipts. From there the iron ore of the rich Mesaba Range was sent to the steel mills in South Chicago, Gary, and other places. To the head of the lakes the ore boats returned with coal in millions of tons. Other important lake ports were Ashtabula, Buffalo, Chicago, Cleveland, Detroit, Milwaukee, and Toledo. Much of the lake traffic was domestic; some of it, however, was foreign, finding its way out through the St. Lawrence River.

The Panama Canal.—In its inception, the Panama Canal reaches back many years; as a canal, however, it is relatively new. The earliest Spanish explorers recognized the possibility

of such a waterway. The first definite proposal for a canal came from Lopez de Gomarfa in 1551; in 1843 the first survey was made. Actual work was begun in 1881 under the direction of Count de Lesseps, builder of the Suez Canal. By 1894 the project had failed. Then the United States began to give the project the attention it deserved. In 1914 this country opened the canal to navigation.



Underwood-Stratton

In the Gatun locks of the Panama Canal

The construction of the canal shortened the water distance from New York to San Francisco by many weeks, and in doing so gave an impetus to the trade and commerce of the American coasts. In 1929, the cargo tonnage passing through the canal aggregated more than thirty-one millions, of which about two-thirds was west-east traffic moving through the canal from the Pacific Ocean to the Atlantic. Much of this traffic represented American commerce; some, the commerce of foreign nations.

In shortening the time required in getting by water from one coast to the other, the Government raised a storm of protests in the Middle West. Manufacturers and others of that region saw,

or thought they saw, advantages to be gained by their Atlantic Seaboard competitors in being able to ship goods to the Pacific Coast at a rate denied to them. Especially opposed were these objectors to making the canal free of tolls. That, they argued, would be subsidizing Eastern industry. This battle of ideas continued for years and still rages.

138. Domestic Trade

Census of market distribution.—The 15th Census (1930) gave us for the first time some adequate notion of American markets. Government enumerators had been instructed to make careful inquiry concerning the movement of goods in domestic trade and commerce.* From this census of distribution we learned something definite about sales volumes and about the consuming habits of different sections of the country. The various avenues along which merchandise moves were studied. Wholesalers came in for attention. So also did retailers, jobbers, commodity brokers, and chain stores.

Back of this attempt to study markets was the desire on the part of public officials and others to learn something of the movement of goods from the hands of the producer to the hands of the consumer. Our information on the subject up to that time had been fragmentary to say the least. Much of it was based on assumption, if not on prejudice.

According to this census more than a million and a half establishments handled merchandise. Some of these establishments were wholesalers; by far the greater number sold to the retail trade. All of them combined handled goods valued at many billions of dollars and gave employment to more than six million men and women. As might be expected, between two-fifths and one-half of these stores of various kinds were small in size. Among the retailers almost seven hundred thousand had annual sales of less than ten thousand dollars each; at the other extreme slightly over two thousand had annual sales in excess of a million dollars each. The same general situation prevailed among the wholesalers.

This census revealed some interesting situations. Most important of all was the fact that the country's domestic trade

*For a discussion of the movement of goods in the wholesale market see Selection 95.

exceeded by many times its foreign trade. It awakened the people to the realization that the home markets were to be preferred over those in foreign countries. It revealed also that despite the growth of merchandising units, the retail business of the country was essentially a small business. Of the total number of such establishments more than nine out of ten had sales of less than a hundred thousand dollars a year; they did about sixty per cent of the retail business.

Considering the kinds of businesses carried on by retailers in 1929, we find that the group dealing in food products led, followed closely by the automotive group. The clothing group occupied third place. Considering the type of operation, by far the greater number of retailers were independents. Their sales, too, exceeded all the other types combined. In that year the retail sales of the country approximated fifty billion dollars, of which the independents had almost eighty per cent and the chain stores less than twenty per cent. The remainder, something like two per cent, was divided among direct selling by producers, mail order houses, company stores, and utility operated stores.

Shifts in selling methods.—No especially keen discernment is required to see the radical changes that came after 1900 in the marketing of merchandise. Selling methods, displays, deliveries, extension of credit, collections, all these and many other aspects of merchandising shifted until they would have appeared as strange to a modern Rip Van Winkle, as did the liberty cap to Rip himself. Methods once regarded as fixed and unalterable no longer sufficed. The old package, the old display, the old method of making deliveries, were giving way to something better.

The mail order house, which had its substantial beginning in the early 70's when A. Montgomery Ward issued his first catalog, expanded in various directions following the close of the War. It continued to rely on the catalog as a medium of getting trade, but not to the exclusion of making contact with customers. Ward, Sears, and others opened retail stores and carried on expensive advertising campaigns for business. What they really did was to combine two methods of merchandising. Customers of their retail stores found it convenient to order from catalogs such goods as might not be carried in stock.

More spectacular was the development of the chain store idea. Woolworth pioneered the field on a large scale. Others—thousands of them—followed, adapting their methods of merchandising to fit conditions peculiar to different kinds of businesses. Nothing of wide use escaped their attention. We had, to mention but a few, chain grocery, drug, hardware, shoe, hat, furniture, and clothing stores. We ate our lunch at a chain restaurant. Then with a screw driver bought at a chain variety store, we attached to our car an accessory from the chain store handling automotive parts.

Along with the development of the drug chain went a complete transformation in that business. There the prescription case gave way to a fountain and the long rows of nostrums to newspapers, magazines, cigarettes, candy, chewing gum, and safety razor blades. In many instances the drug store came to be an eating place where ice cream and lunches were to be had at all hours of the day and long into the night. In thousands of old-time drug stores, the pharmacist had become, or was on the verge of becoming, a cook and the clerk a waiter.

Some concerns, notably the manufacturers of automobile tires, moved into the retail field. They opened stores in which, in addition to merchandising their own product, they specialized in their servicing and handled closely related lines of goods. Such a shop, for example, might carry in stock car batteries, anti-freeze materials, headlights, windshield wipers, oil, gasoline, greases, and polish. What was important in this connection was the desire on the part of producers to move as closely as possible to the users of their products.

A few concerns developed the idea of going directly into the homes of prospective customers. This they did through salesmen carrying samples of the goods to be sold. Leading in this movement were the manufacturers of brushes and hosiery. Such methods—called peddling by established merchants—met the opposition of a considerable number of local business men. They supported this opposition by pointing out what to them was the unfairness of permitting any industry to carry on its operations in a community in which it paid no taxes and was no part of the community life. In this opposition, they had in general the support of the typical local Chamber of Commerce, which, during the period under consideration, left nothing undone to support

the independent merchants of its area against the competition of chain stores and house to house canvassers.

The decade saw startling innovations in marketing, particularly in the retailing of foodstuffs. Enterprising men, willing to risk much in an effort to secure the favor of the buying public, resorted to all sorts of experiments. They established stores in which customers made choices with a minimum of assistance on the part of clerks, sold for cash only, and made no delivery of purchases. Buyers paid cash and carried away what they bought. Others went a step farther; they installed automatic vending machines designed to sell with no cost whatever in the form of clerk hire. Back of these and many other experiments of a like nature was the desire to lower the cost of goods by reducing the expenses of marketing. What had once been spent in "waiting on the trade," in making charge entries in day books and ledgers, and in delivering purchases, could, under the new method, be passed along to the customers through lower prices.

The traveling store made its appearance in a new form during this period. What had once been the province of the rural huckster with his assortment of staples to be exchanged for poultry and eggs was now invaded by the trim motor driven vehicle carrying neatly arranged stocks of foods and other supplies. The farm wife had a grocery establishment at her elbow. From her traveling store she could get bread, soap, thread, ice, ginger ale, and stationery.

Changes in retail marketing were not confined to organization changes. Packaging came in for attention. Pound cartons replaced butter tubs, and coffee came in tin cans, cheese in tin foil, and pickles in bottles. Changes came in the goods themselves. Chewing tobacco was giving way to cigarettes, cove oysters to hamburger sandwiches, and hard caramels to candy bars. The groceryman of 1900 would have felt himself a stranger in the place.

139. Creating and Selling Services

Defining terms.—Strictly speaking services are economic goods. The railroad station red-cap has goods for sale just as truly as does the merchant who supplies him with food. Economic goods, therefore, combine two things (1) commodities, and (2) services. No complete account of a nation's economic

life can omit the satisfactions that come from consuming services. Among the more personal service establishments are barber shops, beauty parlors, cleaning, dyeing, and pressing plants, funeral homes, photographic studios, and hand laundries. Less personal are advertising agencies, storage warehouses, plumbing and heating plants, employment agencies, billiard parlors, skating rinks, theatres, and hotels. The power, gas, and water utilities render an invaluable service.

Selected types of service.—From a long list of service agencies can be selected one or two of outstanding importance. The showing of motion pictures came to be a major industry during the decade following the close of the War. Ten thousand of them served the American public at a yearly cost of hundreds of millions of dollars. No community of any size was without its theatre showing the best pictures being made. The large cities might boast of their opera and of their legitimate plays, but in the matter of pictures, they held no advantage whatever over the county seat towns of the farming areas. The common man shared with those in high places the pleasure of viewing nightly his favorite screen actors.

Hotels rendered a service of great importance. More than twenty-five thousand catered to the wants of the American public. Ninety per cent of them remained open the year round, while the rest operated on a seasonal basis. These hotels provided services for every taste and every purse. Some of them were little more than cheap boarding houses. At the far extreme were those situated in the hearts of metropolitan centers and along the sea shore. Whatever the size and whatever the service rendered, the American hotels of the period earned hundreds of millions of dollars a year serving those who had need of their facilities.

Utility service.—Already in another connection the railroad, the telephone, and the telegraph have been discussed. There remains the utilities serving directly the people in their homes. Of these the three most important are power, gas, and water.

When the decade opened (1921) the annual production of electric power was about forty-one billion kilowatt-hours. By 1929 it had risen to almost a hundred billion kilowatt-hours. This enormous power load provided energy for manufacturing

plants, motive power for street railways, light and heat for stores, office buildings, and residences, and lights for streets.

About one-third of the total amount of energy represented water power, two-thirds fuel power. Significant in this connection was the gradual increase in efficiency in the use of coal. In 1920 three pounds of coal were required to produce one kilowatt-hour. By 1925 the amount had dropped to 2.1 pounds; in 1929, it was 1.69 pounds. Thus within a period of ten years the coal cost of generating electric power had declined about one-half.

By far the greatest amount of such power was produced in central stations, and sold by them to their customers. Using 1927 as a typical year, we find that of the power thus generated the Middle Atlantic States led with almost twenty billion kilowatt-hours followed closely by the East North Central States with more than eighteen billion kilowatt-hours. The Pacific States came third.

PRODUCTION OF ELECTRIC POWER
1921–1929

Year	*Millions of Kilowatt Hours*		*Coal Consumption*	
	Water Power	Fuel Power	Thousands of Tons	Pounds per Kilowatt-hour
1921	14,970	26,005	35,240	2.70
1925	22,356	43,514	44,780	2.10
1929	34,629	62,723	52,574	1.69

Significant in this connection was the development during the period of transmission lines. Central plants in various localities pooled their outputs by connecting them with wires. Thus the power generated at the Keokuk dam on the Mississippi River was available in many different places at the same time, to be drawn on as needed. Such pooling of power built up enormous reserves and went far to smooth the load peaks that came at certain hours of the day.

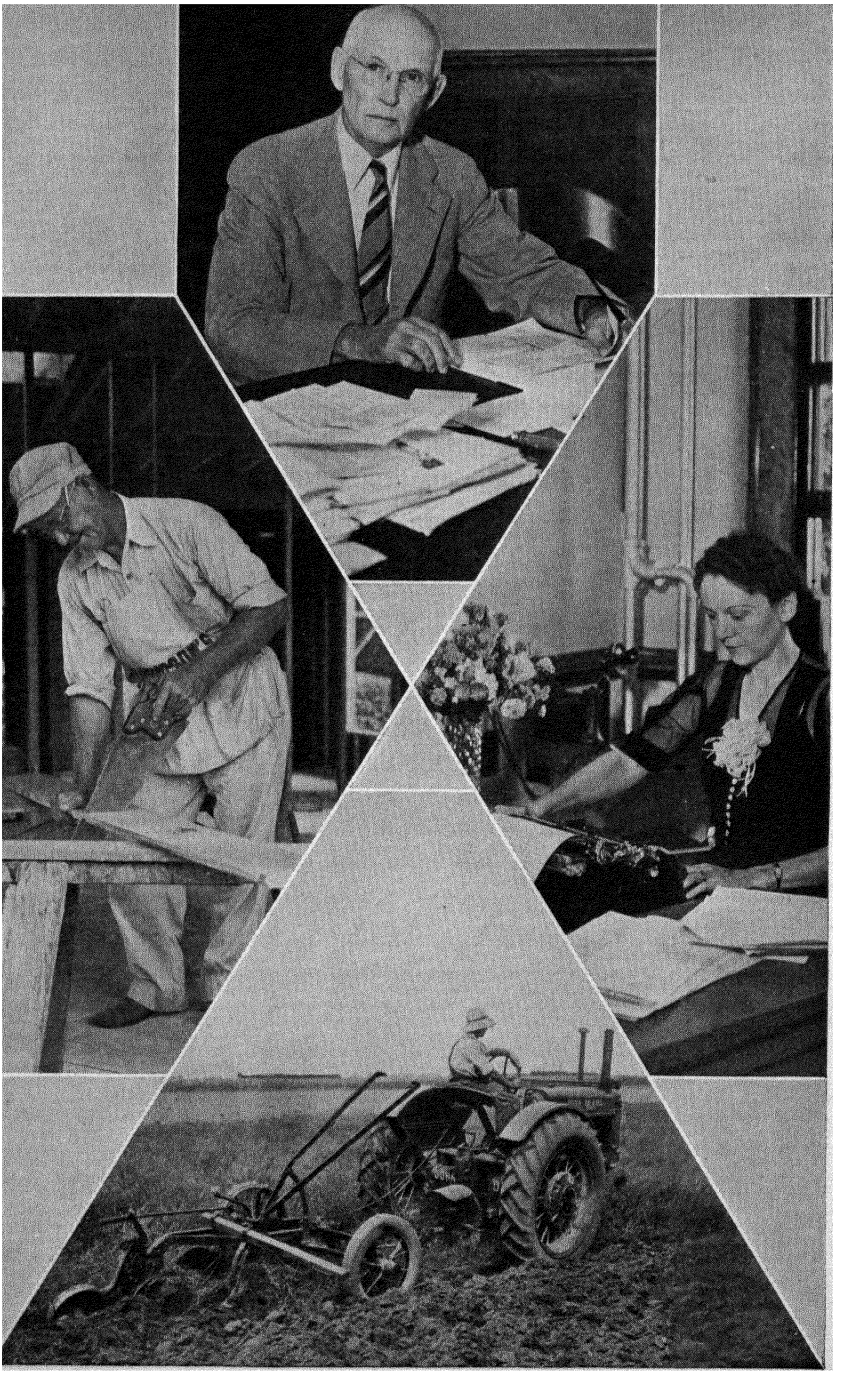
Manufacturers of gas provided services over a wide field. In 1929 the industry served almost fifty million persons. They distributed in that year about four hundred billion cubic feet of gas at a cost of about half a billion dollars. Added to this supply was an enormous quantity of natural gas used either as it came from the well or after being mixed with manufactured gas.

These two combined to form a major industry dealing in a service used in large measure by the consumer for his own pleasure and convenience. Commercial consumers might regard it as a commodity much in the same light they regarded raw materials; the housewife, however, held it a service as indispensable as was the electric power that turned her washing machine and heated her toaster.

A third service demanding a wide city appeal was water. By 1920 the local water service, whether publicly or privately owned, was looked on as a necessary one in the preservation of health and bodily comfort. Like gas the householder bought water more as a service than as a commodity. What he consumed directly was a small part indeed. Indirectly it played a prominent part in the economy of the homes.

Along with the sale of services went in many instances the sale of appliances designed to utilize such services. A power and light plant, for example, might provide its customers with all sorts of electrical devices such as washers, ironers, toasters, hair curlers, pads, corn poppers, carpet sweepers, and clocks. In doing this, it competed with stores and electric shops of the neighborhood and with mail order houses. Thus an industry established previously for the purpose of supplying services directly to users, found it profitable in a variety of ways to market service appliances. On the one hand was the profit to be made as merchants; more important was the profit to be had through increased sale of service. The first was merely incidental to the second.

RECESSION AND RECOVERY
1929–1939



The problem of recovery was theirs

Chapter XXXV

EARLY YEARS OF THE RECESSION

THE year 1929 saw what went under the name of prosperity rise to unprecedented heights, followed by a drop that has had no equal in the history of mankind. Throughout the summer and early autumn of that year industry to the casual observer was moving swiftly upward with increasing output, increasing prices, and increasing demands for labor. Everywhere men of affairs were proclaiming that industrial recession had gone from America forever.

Appearances were deceiving; the business structure of the nation rested insecurely. In October the stock markets of the country began to give signs of distress. On the 29th the break came. Owners dumped on the market millions of shares having market values amounting to billions of dollars. There was a hurried frenzy to sell in order to avoid loss. After a time the market righted itself, and from that point on the drop in prices was more orderly.

The stock market break was merely an outward sign of an inward trouble. Confidence in the ability of American industrialists declined with their inability to recover lost ground. Unemployment increased, taxes fell off, relief rolls grew, special interests clamored for government help. Suggestions for recovery came from every conceivable quarter. Everyone wished to do something to bring about a restoration of the good times of the past decade, but no two were in complete agreement. Along with suggestions based on solid ground went crack-pot notions which under more normal conditions would have appeared to be the schemes of a person mentally unbalanced.

The situation became worse and worse. People in all walks of life found their savings gone and with no means of replenishing them. More and more they turned to the Government for help. Then confidence was thoroughly shaken. Especially devastating to morale was the constantly growing list of banks being forced to close their doors. Late in the fall of 1932, the situation

became critical. By March 1, 1933, it was apparent that drastic measures alone could save the financial structure of the country from complete collapse.

Men in high positions attacked the problem in desperation. State after state ordered the closing of banks in an effort to put an end to withdrawals. In Michigan, where some of the largest banks in the country did business, all such institutions were closed by the simple device of calling a holiday. Nor did New York escape the blight that had fallen on the land. There the Governor ordered all banks closed. Federal action came as a fitting climax. Within a day or two after his inauguration President Roosevelt ordered the National Banks of the country to close. Thus the breakdown was complete. The people stood helpless in the face of a situation such as the country had never before experienced.

140. The New Era

Reaching economic and industrial heights.—It was in 1929 that the developments in industry that began following the recession of 1921 reached their crest. Those were years of bigger and better things. Each new achievement led to another of great significance. The people in general worshipped size, and out of this worship came the rather fixed notion that nothing else was of any great importance. One tall office building overtopped another, hotels covering acres of land gave way as the world's largest to other hotels covering more acres, and ocean liners became longer and wider. The race went merrily on, as champions of bigness fell and others took their places. It was the spirit of the times; a new era had come to America.

Manufactures and banking provide illustrative material. In 1921, for example, the manufacturing establishments of the country had on their pay rolls an average of a little less than seven million men and women, who received for their labor about eleven billion dollars annually. By 1929 these figures had grown to almost nine million workers and to more than fifteen billion dollars in the form of wages and salaries. The total value of all goods manufactured in 1921 was forty-three billion dollars; in 1929, it was almost seventy billion dollars. Thus within a period of less than a decade, manufacturers increased their man-power by more than a fourth and the value of their output more than

one-half. Similar growths characterized the banking business. Between 1921 and 1929 the total assets of these institutions grew from less than fifty billion dollars to more than seventy-two billion dollars. In the earlier of these ten years the people had on deposit in these banks approximately thirty-five billion dollars; such deposits in 1929 exceeded fifty-three billion dollars.

Signs of warning.—Despite general signs to the contrary, men here and there had misgivings regarding the permanency of conditions. They pointed out, but with little immediate effect, that the investment situation was unsound, the production level unnatural, and the price structure without a firm foundation. These same critics also called attention to the over stimulation of industry brought about by a rapidly growing custom of selling consumers' goods on credit.

Economically the era was a glamorous one. Surface conditions hid the true state of affairs. To a casual observer everyone seemed to be busy industrially. Money was plentiful and credit easy and prices were rising.* It is little wonder, then, that those who dared question the future were cried down and held up as a horrible example of dispensers of gloom. The slogan heard all about was, "get while the getting is good."

141. The Stock Market Crash

Trading on the big board.—The spirit of the time was reflected in the trading on the floors of the various stock exchanges of the country, particularly on that of the New York Stock Exchange. There for months, as has been already noted, the prices of stocks rose day after day to new heights. It was the South Sea Bubble all over again and on a much larger scale. General Electric, Du Pont, Steel, and A. T. & T. soared in prices if not in value. These and other shares were traded in daily by people of all kinds and conditions. At one extreme were the wealthy dreaming of more wealth; at the other, working people—newsboys, bootblacks, elevator operators, unskilled laborers—living perilously near the edge of necessity. No group escaped what at the time seemed to be a promise of something for nothing. At one time during the summer of 1929 it was said that more than three hundred million shares were being carried on margin.

* The collapse of credit that came with the stock market crash is reported by the Federal Reserve Board, Selection 96.

That is, buyers had borrowed a portion—sometimes as much as ninety per cent—of the funds with which they had made purchases.

These new heights in gambling as well as in prices were reached in September, 1929, when here and there signs of recession could be observed. At that time General Electric stood at 396½; Du Pont, 217½; Steel, 261½; Delaware and Hudson, 224¾; Radio, 505. These are but typical. The next month and more showed declines but not of a magnitude to cause alarm. The optimism of the country, however, overcame in most instances any general feeling that conditions were not as they

STOCK PRICES, 1925 AND 1929
(Closing)

Stock	*1925*				*1929*			
	July 1	Sept. 1	Sept. 10	Sept. 20	Sept. 30	Oct. 10	Oct. 29	Nov. 10
Allied Chemical	90⅞	354	334½	326	315	319	210	202
American Can	197	181	169⅝	176¾	168½	181	120	102
A. T. & T.	140⅜	302½	289	301½	293⅝	302	204	209
General Electric	287	391	370¼	367¼	358¼	373½	222	193
Montgomery Ward	56⅞	134⅜	127	127	117	114	53¾	57⅞
National Biscuit	74¼	212	202	203	218½	234	165	158
U. S. Steel	115½	257⅝	238½	234¾	222⅜	230½	174	159½
Western Union	133½	234	224	220	209¾	243¼	190	175
Westinghouse	71½	285⅞	260⅛	255	231	240	126	118⅛

appeared to be on the surface. The argument was that such movements downward were but forerunners of yet higher levels.

October 29, 1929.—This day marks the beginning of a crash without parallel in the history of the stock exchanges. Into the stock markets had gone for speculation billions of dollars of savings that might have been used for other purposes and used to better advantage. Putting these funds into the market was simple compared to getting them out intact. They had gone in gradually and under conditions of orderliness; sudden withdrawal meant ruin.

On the day in question the number of shares bought and sold exceeded sixteen million. With the close of the day's trading the market value of the stocks listed was billions of dollars less than it had been at the opening. Compared with the value a few weeks earlier it was many more billions less. Uncertainty pre-

vailed. Thousands of buyers sold their holdings and pocketed their losses. Other thousands held on hoping for an upturn in the market. Most pathetic were the members of the large group of buyers of stocks on margin. With every drop in price they heard their brokers call for money. Many were out of funds; their only recourse was to lose everything they had invested. Others met such calls, and as matters turned out they suffered in the main greater losses than they would have suffered had they permitted themselves to be sold out.

The closing of the markets gave observers an opportunity to study what had happened. They could see that the crash had been inevitable. Stocks in general had for months been out of line with their earning powers. Whatever increases in value they might have acquired in the future through increased earnings had already been anticipated. Moreover, the financing on which many of them rested had been conceived in doubt and carried out along unsound lines. The mystery was that it had not happened earlier.

First waves of reaction.—The October stock market crash was but the beginning of a recession in values that carried the best securities to the point where they sold at but a fraction of their highest. The first shock dampened the optimism of the people but did not destroy it. Men thought they saw chances to recoup yesterday's losses. They purchased at prices that seemed relatively low thus providing a market support necessary to keep prices from diving to new lows. Thus supported, recession moved along with a semblance of order—downward movements followed by raising but with the trend downward. United States Steel common may be taken as illustrative. On October 26 it opened at $204.50 a share. On November 13 it closed at $151.50.

Settling down to a steady decline.—The stock market crash was but an outward sign of an internal malady. Clearly the country had become over-built—too much productive capacity, more office building than really needed, an over abundance of food. Slowly the people came to the realization that time alone could cure the situation. Having come to this realization they reconciled themselves to waiting. A popular pastime of the period was for public speakers to read to their audiences what appeared to be descriptions of the prevailing situation but which

applied to previous depressions. One such—it was popular everywhere—deplored unemployment and predicted the end of the competitive system. It applied not to 1929 and afterward but to the period just preceding the Civil War.

Despite their losses of billions of dollars in stocks and bonds, the citizens of the country by and large had some surplus on which for a while they could draw support. Savings accounts, building and loan stocks, insurance policies carrying loan privileges, these and other assets served for a time to postpone the day of utter collapse. The typical householder curtailed expenditure, made his dollars go farther than formerly, and did what he could to add to his income. No one could read the future with any degree of assurance; uncertainty pervaded all ranks.

142. From Bad to Worse

Growth of unemployment.—The stock market crash of October, 1929, was a warning to business that all was not well. Everywhere employers reduced inventories. They curtailed on the one hand their purchases of raw materials, and on the other hand they endeavored to dispose of as rapidly as possible their supplies of finished products. The result was a nation-wide shift in the employment situation, with the unemployed time lengthening day by day.

Just what this situation was at any particular time no one can say with assurance. We do know, however, that it soon became serious. No sections of the country and few industries escaped what in the end came to be an economic blight. The morning paper carried stories of smokeless stacks, restricted outputs, and the destruction of buying power. Whatever the symptom that might be absent for the time being, the deep seated disease was the same—maladjustment of industry brought about by over-building, over-buying, and over-expansion of promises to pay money for goods already destroyed in the processes of consumption.

Fortunately for the time being people accepted rather philosophically what had come on them and did what they could to adjust themselves to new conditions. Tens of thousands of men skilled in particular trades and industries turned their hands to new enterprises. Other tens of thousands moved into cheaper living quarters, did odd jobs, kept cows, grew gardens, and did

whatever else that promised to supplement their incomes. This was the beginning of an era which brought an increase in untrained salesmen. As a last resort hundreds of thousands of men and women took up merchandising in all its phases. They opened their homes to the tourist trade, operated eating places, serviced automobiles, peddled from house to house, and solicited subscriptions to newspapers and magazines. The idea seemed to be that society might save itself industrially through salesmanship.

All such actions were at best stop gaps. They gave no promise of permanency and threatened for a time to destroy the product of a civilization that had been in the making for centuries. The result was that with the passing of time conditions grew worse. One savings account after another melted away under the stress of all outgo and no income. For literally millions of persons the day finally came when they could retrench no farther; they had reached the minimum below which physical existence cannot go and maintain itself.

The industrial situation.—The state of industry in general was reflected in unemployment, in prices, in volume of output, and in the flow of raw materials and finished goods. Prices continued to decline. Those having fixed incomes enjoyed a constantly increasing advantage. What they found was that their dollars would buy more and more goods. In 1933, for example, the dollar was worth in terms of merchandise a half more than it had been late in 1929.

Declining prices meant less to the general run of mankind, for incomes had fallen even lower than prices. Thus the industrial worker, while his money would buy more than it had bought earlier, had less money to spend. Falling prices tended on the whole to discourage purchases. Those with money, seeing prices decline, waited for further declines. All this created a vicious circle; instead of bargains bringing buyers into the market they tended to keep them out in the expectation that they would become even greater bargains. Such a tendency ran counter to generally accepted notions concerning the relation between prices and volume of trade.

As prices declined in response to a declining demand for goods, the volume of output of such goods declined in the same general way. Producers could feel sales resistance all along the line, and

PRICE MOVEMENTS, 1928–1933
(1926 = 100)

	1928	*1929*	*1930*	*1931*	*1932*	*1933*
All commodities	96.7	95.3	86.4	73.0	64.8	65.9
Farm Products	105.9	104.9	88.3	64.8	48.2	51.4
Building Materials	97.0	100.5	92.1	84.5	80.2	79.8
Textiles	95.5	90.4	80.3	66.3	54.9	64.8
Raw Materials	99.1	97.5	84.3	65.6	55.1	56.5
Semi-manufactured	94.5	93.9	81.8	69.0	59.3	65.4
Finished Products	95.9	94.5	88.0	77.0	70.3	70.5
Producers' goods (1929 = 100)	101.6	100.0	88.5	73.2	64.9	68.4
Consumers' goods (1929 = 100)	100.8	100.0	93.3	80.7	70.8	71.2

feeling it they curtailed output. Any other policy would have been suicidal, for goods produced on a declining market are likely to be produced at a loss. The curtailment in the flow of finished goods made itself felt all along the production line. One less automobile meant a slowing down in the production of iron and steel, leather, cloth, paint, glass, rubber, and of oil and gasoline. A reduction of a million automobiles along the production lines was a major factor in the situation. Other products similarly affected underwent the same experience. Thus without the loss of a single item that went into the production of goods, the industries of the country had broken down. Labor, materials, and capital remained as before; lacking was the adjustment necessary to bring them together in a common enterprise.

Particularly distressing was the situation of the farmer. His crops commanded low prices, lower even than the prices he must pay for what he could not produce. Wheat declined until it sold in the markets of the world at a price below thirty cents a bushel; corn brought as little as fifteen and twenty cents a bushel; hogs sold freely at less than three dollars a hundred pounds. Producers of cotton, tobacco, sugar, and fruits underwent similar hardships. Over against these ridiculously low prices stood farm debts contracted under more normal conditions. Interest charges in many cases exceeded the gross income of the farmer. It was during these years that American agriculture reached a low point in its operation as a business enterprise.

143. Reaching the Bottom

Differences of opinion.—No agreement was to be had concerning the time when conditions reached their worst stage. One

opinion held and loudly expressed was that the bottom of the depression came in the summer of 1932; at wide divergence was that which would place it along in 1933. Whatever the exact time, the bald fact remains that there was a bottom far lower than anyone suspected when the depression began. In general these ideas are based on loose thinking and are shaped by political considerations. New Dealers, so-called, hold the view that conditions were getting worse as late as the inauguration of President Roosevelt in March, 1933; their opponents argue that the lowest point was reached during the summer of 1932, and that at the time of the election in November of that year affairs were on the mend. Supporting data are to be had on both sides of the question.

General discontent.—Three years after the stock market crash came a national election. During these years the people had been told repeatedly that good times were just around the corner. By the time of the election, however, their patience had been pretty well exhausted. Whatever the cause of their troubles, and however much they must in the end be held accountable for them, they laid the blame for the crash, as well as the failure to rally from it, on those in high places governmentally as well as industrially. They took the attitude that a change in the Administration in Washington could do no harm and it might do some good. Accordingly, at the November election (1932) they reversed their position of four years earlier and elected a Democratic President as well as a Democratic Congress.

The banking situation.—Especially irritating was the banking situation. Following the collapse of the stock market, hundreds of banks, national as well as state, found themselves in financial difficulties. In many instances they had loaned their funds unwisely; in some, downright dishonesty was the cause of failure. Whatever the reason, the confidence which such institutions must have in order to operate normally gradually decreased all along the line, disappearing altogether so far as certain banks were concerned. The result was that the most conservative banking houses in the country found themselves under suspicion, and unable, therefore, to carry on such functions as were theirs.

Between January 1, 1930, and March, 1933, a period of little more than three years, more than five thousand American banks found it necessary to close their doors. In these banks depositors

had in excess of two and a half billion dollars. Whatever the ultimate outcome, this enormous sum of money was for the time being withheld from its rightful owners. Such withholding caused hardships and created a feeling of distrust. The man on the street began to have doubts, particularly so when he saw bankers convicted of sharp practices and even fraud. His immediate loss of funds was serious; more serious socially was his loss of confidence in the banking establishments of the country.

Fortunate was it that several years previously the Government at Washington had created the Reconstruction Finance Corporation for the purpose, among others, of aiding sound banking institutions hard pressed for ready cash. Fortunate, also, was it that the Federal Reserve System was in a position to render aid to member banks. To these agencies fell the responsibility of seeing that banks should not be closed merely because of lack of ready cash. During these years the Reconstruction Finance Corporation loaned hundreds of millions of dollars to banks, while the Federal Reserve System exchanged money for sound securities.

The four months between the election in November, 1932, and the inauguration of a new President in March, 1933, were months of the greatest uncertainty. One administration was coming to a close; another was about to begin. The outgoing President could easily see the futility of further planning; the incoming one was yet without legal authority. The result was the marking of time at Washington and general consternation elsewhere. What of the policies of the new Administration? That question most people asked, but no one could give any adequate answer. Time alone could tell.

The opening of March, 1933, saw a situation as grave as it was baffling. During the preceding few weeks many banks had been forced to close their doors against disastrous runs. Already a number of states, notably Michigan, had declared a banking moratorium. The hoarder was abroad; between April 27 and March 4 more than a billion dollars had been drawn from legitimate channels of trade by such hoarders and hidden away in all sorts of places.

Money is said to be the life blood of industry; a sound banking system, therefore, is the heart that pumps this blood. What the people in general really wished was not their money as such, but

rather the assurance that it would be forthcoming when needed. It is clear then that the shaking of credit makes itself felt throughout the entire industrial field. That is exactly what happened during the hectic days of 1933. Bewildered by swiftly moving events and mindful of the past few years, the typical bank depositor adopted the policy of placing his own interests above the interests of society. The result was a collapse of our banking system.

The climax to a bad situation came when, on the morning of March 4, Governor Lehman of New York ordered the banks of the state to remain closed. No longer could the wildest optimist believe that heroic measures would not be necessary, for within a few hours every bank in the country was closed. The steps in the progress were as follows:

February 14—eight-day banking holiday declared in Michigan
24—Governor of Maryland declared three-day bank holiday
25—Indianapolis banks limited withdrawal to five per cent
27—three states (Penn., Ohio, and Del.) authorized banks to limit withdrawals
March 1—five additional states declared bank holidays
2—seven more states take similar action
3—New York Federal Reserve Bank raises rediscount rates
4—New York and Illinois close banks, stock markets, and commodity exchanges

The recently inaugurated President entered the picture in a way that soon brought assurance to a distracted people. After an all-night conference he issued a proclamation closing the banks of the country for a period of four days. At the same time he called Congress into extraordinary session to convene on March 9.

On the afternoon of the first day of this extraordinary session Congress without a roll call in the House and with but seven dissenting votes in the Senate, passed an emergency bill dealing with banking. This bill—it became a law when signed by the President—gave to the Secretary of the Treasury authority to

appoint conservators for all national banks in the country and to reopen them when and if he should decide they were in good financial condition. The result was startling. With confidence partially restored, deposits began to flow into the banks. One by one the sounder banks were reopened and permitted to resume normal operations. Many, however, because of their weakened condition, were never permitted to reopen; in time they were liquidated.

We have here the spectacle of the richest nation known to civilization breaking down industrially, largely because of lack of confidence in our banking institutions. The situation furnished an object lesson that should never be forgotten. It showed, as nothing else could, that business operations rely in the main on a sound banking policy properly applied and administered. At its root was confidence.

Chapter XXXVI

GOVERNMENT CONTROL OF ECONOMIC DEVELOPMENT

THE complete collapse of the banking system during the early days of March, 1933, opened the door to Government control of business on a scale never before tried in modern times. No aspect of our economic life escaped this influence. Banks and banking received first attention. Then came the railroads, economies in public expenditures, prohibition, agriculture, unemployment, security exchanges, and private debt.

Politically the new President was in complete control. In both houses of Congress his party, the Democratic, had substantial majorities, and among those making up these majorities scores owed their election to the popularity of the Chief Executive. Thus they were tied to him personally as well as politically.

Those—there were many of them—who believed, or pretended to believe, that President Roosevelt lacked firmness under the stress of emergency were confounded by his positive control of affairs. He accepted his election by the people as a mandate to adopt whatever measures might be necessary in order to restore the country to sound economic living. Accordingly, he devoted his time and energies to formulating plans and proposals deemed indispensable in a recovery program.

Despite his complete control of both Houses of Congress, the President met various obstacles in efforts to right conditions. He was charged with promoting reform under the cloak of recovery. His critics professed to be in sympathy with him in the one but not in the other. "Let us have recovery first," they argued. "After that we can discover more intelligently the need for reform." Whatever his motive, the President pushed forward at times far in advance of the majority of the leaders in his party.

Much of what was done during these years can be lumped under the general head "New Deal." The ardent supporters of the Administration became known as New Dealers. In their

ranks were many so-called academic men on leave from their colleges and universities. They were called, more or less in derision, members of the brain trust. This term was meant to discredit, for neither then nor later did its members claim, or even show, any particular superiority in reasoning over many so-called practical men of affairs, some of whom enjoyed no formal education beyond the elementary schools. Neither group had a monopoly either on brains or on stupidity. Both made notable contributions to economic thinking; both erred grievously at times in their judgments.

144. Significant Beginnings in Reform

The situation.—The declaration of a general banking moratorium early in March, 1933, and the introduction of legislation looking to the immediate restoration of confidence in our private finances, marked the beginnings of radical changes in the relation of government to business. The President had definite notions concerning a great variety of economic questions; apparently he had come into his high office determined to give substance to these notions. Accordingly he laid before a friendly Congress one measure after another, all of which it was hoped would improve American economic life.

During the first month of his term President Roosevelt placed the weight of the Administration squarely behind a series of changes. These changes had to do with railroads, economies in public expenditures, enforcement of the Volstead Act, farm relief, unemployment relief, the marketing of securities, and the farm debt.

In submitting these various proposals to Congress, the President was firmly convinced that the American economic system needed revamping. What he proposed he referred to as the New Deal. What he had in mind was to bring about a more equitable distribution in the output of American industry. As a result the thinking of the people along economic lines underwent a change. Almost over night they began discussing such subjects as the purchasing power of money, the natural rate of interest, sub-marginal farm lands, reciprocal trade treaties, processing taxes.

Granting of extraordinary powers to the President.—Because of the emergency that existed, Congress acted very much

as it would have acted had the country faced an invading foe; it delegated extraordinary powers to the Chief Executive. Fourteen such powers may be summarized as follows:

1. Federal control of industry designed to set maximum hours of work and minimum wages; to regulate production; to promote fair competition.
2. Authority for a system of Federal licenses for business.
3. Authority for a $3,300,000,000 public works program.
4. Setting aside of $500,000,000, provided from the Reconstruction Finance Corporation, for relief of the destitute.
5. Revival of presidential powers of the World War period for regulation of transactions in gold, silver, credit, currency, even to the embargo of gold for foreign exchange, and for fixing restrictions on the banking business of the Federal Reserve System, irrespective of the Federal Reserve Board.
6. Authority for a new veterans' pension system with broad powers in the hands of the President for fixing compensations and allowances.
7. Authority to reduce salaries of Federal employees, not to exceed 15 per cent, reductions to be in line with reductions in cost of living.
8. Authority to reorganize the executive departments and bureaus by transfers, consolidations, and eliminations.
9. Authority to stop collection of certain new taxes voted in the Industrial Recovery Act, upon showing of restoration of business or in event of repeal of the Eighteenth Amendment.
10. Authority, under such rules and regulations as the President prescribed, to inform the public of income-tax returns.
11. Provision for expansion of the currency, through open market operations in Federal securities, through devaluation of the gold content of the dollar not to exceed 50 per cent, through issuance of United States notes up to $3,000,000,000, or through acceptances up to $200,000,000 in silver in payment of Allied war debts.
12. Enlargement of reforestation operations by the Federal Government so that 250,000 men might be employed.
13. Authority to appoint a coordinator of railroads to effect economies among the carriers and increase public service.

14. Tennessee Valley Authority was authorized as a means of providing employment, with power to develop the natural resources of the Tennessee River, including completion of the Muscle Shoals project.

145. Some Major Legislative Innovations

The Agricultural Adjustment Administration.—Early in his Administration the President gave serious attention to the plight in which agriculture had found itself for years. He could see that no half way measures would solve the farmers' problems. Accordingly, he secured the support of Congress in passing an Act designed to give, in the language of the farmers themselves, a parity to agriculture. What was meant was that the farmers of the country should have their purchasing power restored to a basis considered equitable by men who had studied such matters. This legislation came to be popularly designated by the term "triple A."

The AAA in its broad outlines provided that compensation should be paid farm owners and operators for complying with certain regulations designed to be helpful to agriculture. The one regulation that attracted the most attention, and caused the greatest criticism, concerned the restriction of output. In certain instances fields already planted in cotton were plowed up and left fallow. Similar regulations applied to wheat and corn. Live stock, too, came in for consideration. In an effort to reduce the supply of pork and to keep the supply relatively low for a period of years tens of thousands of sows and small pigs were slaughtered. As a result owners received higher prices for their hogs.*

This program was financed by taxing processes. Thus the packers, to cite a single instance, paid the Government a certain sum of money for each pound of pork they packed. Such taxes the processors passed on to those who bought their goods. In time they rested squarely on the consuming public. What a farmer received as a reward for curtailing his hog output he and others paid in the form of higher prices for pork products. This law was declared unconstitutional January 6, 1936.

National Industrial Recovery Act.—Another forward step was an attempt on the part of the Administration to stabilize

* The yearly average price of all farm products advanced 66 per cent during the period 1932 to 1935. Drought played a part, Selection 98.

industry on a generally higher price level. To that end a law known as the NRA undertook to organize each industrial group under a code. Thus, for instance, those engaged in the ice business were authorized, and in effect compelled, to reach common understandings in operating their various plants. In some instances the codes did in essence what the anti-trust statutes of the time expressly forbade. They permitted, under regulations, the fixing of prices.

The NRA was hailed by capital and labor alike as a solution of many of the perplexing problems of business. They saw shorter hours, higher wages, and increased profits. For a time the country was pretty thoroughly wedded to the idea of permitting the conflicting interests of each industry to settle such differences as they might have and to regulate that industry, under certain regulations to be sure, as seemed best.

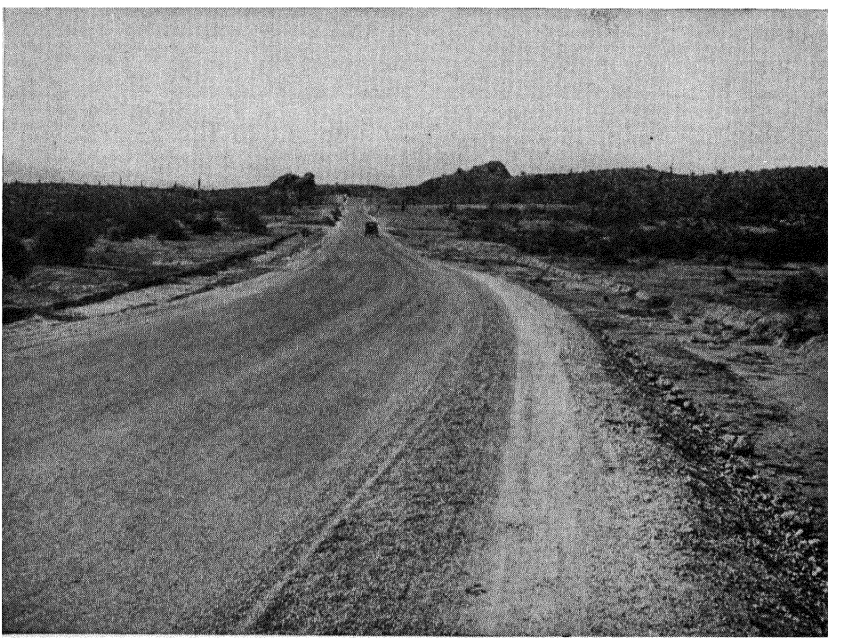
In due course of time the country began to awaken to the realization that much was lacking in the administration of the law. There was too much "cracking down" to suit the American temperament. Such administrative methods could in no way add to the virtues of the law; nor could they cover its faults. Like most laws it operated in a few instances to impose restrictions which seemed unreasonable. For example, the sending of a local tailor to jail for charging a few cents less for pressing a pair of pants than was permitted under the code was according to law. Such situations created doubt in many minds. This law was declared unconstitutional May 27, 1935.*

Relief for the unemployed.—Even before the inauguration of President Roosevelt it was believed that there were too many people in this country lacking the bare necessities of life. With the coming of the New Deal steps were taken to improve this condition. Funds were found for providing relief in a wide variety of ways. Public works were fostered, direct relief voted, transient camps organized, provisions made for assembling young men in conservation camps. Even high school pupils and college students were helped with funds. The magnitude of the operations made effective management next to impossible. The results showed some malfeasance but not as much as might have been expected. Politics saw opportunity for gain. Thus between inherent problems of administration and the pressure of those who

* An estimate of the effects of the NRA is given in Selection 97.

declaimed loudly about human rights, the President, through his subordinates, carried out a difficult task with fair efficiency.

Out of these early attempts came two rather well developed plans of action. One, the Public Works Administration, had charge of government aid in a public works program that covered the country. The other was the Works Progress Administration, in which eventually the unemployed employables of the



Works Progress Administration

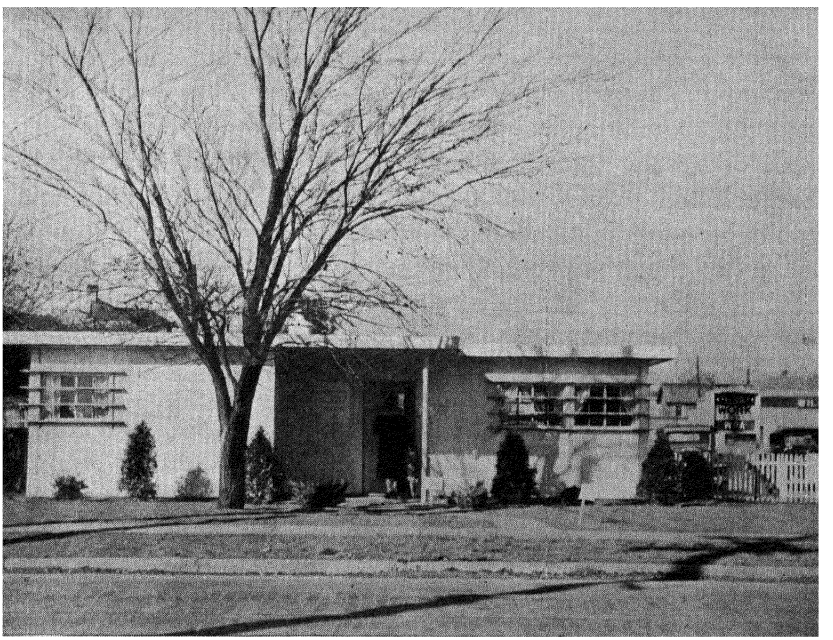
A desert highway built by relief workers

country found work sufficient in amount to maintain a minimum of comforts. So important did these plans bulk in the program of the President that at one time Congress voted him almost five billion dollars to be used in helping the unemployed to maintain a semblance of morale.

The housing program.—Keen was the President's concern about housing. He knew, as did everyone else, that house building had lagged during the depression. He knew also that many families faced the loss of their homes and farms. Such knowledge prompted him to positive action along several fronts. Through his influence law after law went into operation in an effort to correct a bad situation, a situation that threatened the

very existence of the American home. The practical result was that the Federal Government made available to hard-pressed home owners billions of dollars at low rates of interest. Thus by direct action of organized society a national disaster was averted.

Tennessee Valley Authority.—One law designed to serve a variety of functions was known as the Tennessee Valley Author-



Works Progress Administration

A low-cost housing project

ity. Back of it was a desire to control the floodwaters of the Tennessee River, plus navigation and the generation of electric power. Into the hands of this Authority, exercised by three men, were placed broad powers and a large sum of money. Theirs was the task of moving along unchartered courses beset with innumerable hazards. First, there was the question of building up an organization both efficient and honest. Then came the highly controversial one of government in business. Not to be ignored were the questions dealing with submerged lands, competition with the railroads, and with the effect on industry in other sections of the country.

In discussing the TVA project the President often spoke of it

as a yard-stick, meaning that by generating power the Government could get a fair notion of costs of production. Opponents of the plan scoffed at the idea of being able to apply conditions met in developing water power to the production of electric energy from coal or oil. Much of the controversy raged for years about this point.

Those opposed to the development of power by the Government and its sale either to individuals or communities professed to believe that such a policy was extravagant and unfair, and that it pointed the way to a wave of public ownership and operation on a scale never before known in this country. Specifically they argued (1) that actual production costs would be hidden in a maze of figures dealing with navigation and flood control; (2) that selected groups of people, communities, and industries, would be subsidized at the expense of taxpayers the country over; (3) that the production and sale of electric power would inevitably destroy values of private power plants without due process of law; (4) that the furnishing of cheap power, whatever its cost of production, would tend to influence the removal of manufacturing plants from places where they had been long established to the areas served by the TVA.

146. Conserving Natural Resources

Long established policies.—The interest of the Government in conserving natural resources goes back many years. It was not, however, until certain resources were threatened with extinction that the law makers of the land began seriously to consider how nature might be employed to serve the generations of the future as well as the one now living. Of particular interest were the soil, timber, oil, and water resources. Over the years the Government had developed park areas, regulated the exploitation of timber lands, and guarded with care the pumping of oil from the public lands. On a scale even larger had been its activities in canalizing rivers and in controlling their floods.

New points of view.—The necessities of the early depression years opened the door to a broad expansion of conserving natural resources. A significant step taken by the President was his advocacy of a law authorizing the establishment of camps to be occupied by regularly employed young men. These men (known as C.C.C. boys) gave their attention to a wide variety of con-

servation activities. Some spent their time in the national forests; others in cultivated areas, assisting in soil conservation. Whatever the particular thing they might be doing at any time, their common objective was to put an end as far as was possible to the enormous waste that was going on through the destruction of natural resources.

Such activities did not stop with the work of the Civilian Conservation Corps. The TVA, for instance, was in the main a project for utilizing natural forces going to waste, plus the conserving of farm lands and natural navigation. Then there were the National Resources Committee and the Federal Power Commission. Not to be overlooked in this connection was the conservation aspect of the AAA and other farm measures. Whatever attitude may be taken toward a specific law enacted during the early years of the depression, it is easy to agree that the Federal Government should leave nothing undone to prevent the wanton waste of natural resources, either through misuse or through non-use.

It would not be going too far to say that the measures designed by the President to prevent physical malnutrition and loss of morale led in the direction of the conservation of natural resources. The loss of a huge redwood tree or of an acre of fertile land is in itself serious; the loss of a productive worker to society is even more serious. In any instance society has suffered; no one of these factors in production can be replaced without involving social and economic costs.

Looking ahead.—Behind the renewed efforts of Government to conserve natural resources was the feeling that generally speaking all gifts of nature are public property and hence particular objects of interest on the part of the public. Society, future as well as present, has an inherent right to share in the bounties of nature. The institution of private property, as it has been developed in this country, endows land owners with certain privileges of operation; carried to the point of destruction, however, such privileges become socially undesirable. A farmer, for example, possesses rights under the law guaranteed to him by the Government; ordinarily no one else is interested in how he cultivates his farm. Whether he grows corn or cotton or potatoes is chiefly his concern. When, however, he does nothing to prevent the fertility of his farm from becoming exhausted,

his action, or lack of action, becomes of public interest. The same reasoning applies to ruthless exploitation everywhere.

Another type of natural resource is water power. Here nature through evaporation and rainfall raises water from lower to higher levels. This process goes on continuously. Obviously, no individual and no group, not even organized society, plays a part in this process. When, however, the water is on the upper level and ready to seek a lower one, the interests of society emerge. Utilization of the forces thus turned loose by nature must be had at once or they will be lost forever. Nothing material, to be sure, has been destroyed; an opportunity is gone forever.

147. Public and Private Finance

Financing depression measures.—The President's broad program required huge sums of public money. Two sources were open to him. He could increase taxes and he could borrow on the credit and faith of the Federal Government. He drew from both sources. During the year 1929, the Federal Government collected in ordinary receipts $4,033,250,000 and spent $3,298,-859,000. Four years later similar receipts were $2,238,356,000 and expenditures $4,845,018,000. Viewed from another angle, we find that during these four years the national debt grew from a little more than sixteen billion dollars to $22,538,672,000. Combining all expenditures we find that the totals practically

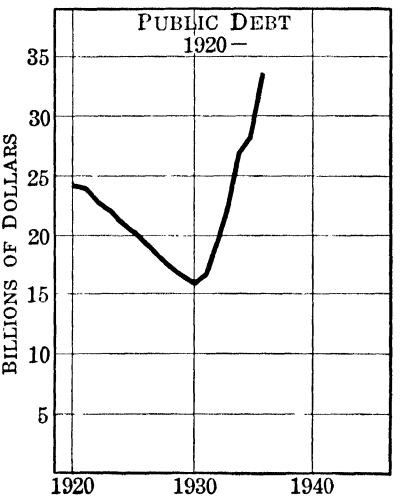
APPROPRIATIONS BY CONGRESS
1929–1935

Year	*Regular Departments*	*Independent Offices*	*All Others*	*Total*
1929	$2,727,006,000	$ 648,089,000	$1,258,483,000	$4,633,578,000
1931	2,595,648,000	1,169,250,000	1,306,812,000	5,071,710,000
1933	2,729,817,000	1,873,491,000	1,181,945,000	5,785,253,000
1935	3,053,774,000	3,085,332,000	1,388,453,000	7,527,559,000

doubled between 1929 and 1935. Increases in costs of operating the regular departments of the Government were modest; at the other extreme stood what was hoped were, in the main, nonrecurring expenses. In 1929, for example, the independent offices of the Government spent approximately two-thirds of a

billion dollars. By 1931 this expenditure had grown to more than a billion dollars; in 1935 it was $3,085,332,000.

Some fiscal policies.—The collecting and spending of public money was but one aspect of a fiscal policy as revolutionary as it was far reaching. The Government spent more than it collected; it was operating with an unbalanced budget. Such a procedure even the most generous spenders could easily see, must in time, if permitted to continue, lead to inflation and perhaps worse. Radical inflationists viewed the situation and did some wistful thinking; those more conservative among the President's advisers



hoped the day would soon come when increases in income and decline in expenditure would bring the two together.

One problem facing the President involved gold and silver. A series of Congressional Acts devalued gold, took it out of circulation, as a money, and provided for storing it underground in the State of Kentucky. In the first instance the President, under the authority thus conferred on him, changed the price of gold from $20.67 an ounce to $35 an ounce. Gold as a money was outlawed. The President also raised the price of silver bullion.

Other bits of fiscal regulation dealt with securities exchanges and with banking. Such exchanges were to be regulated in the interest of the public, and to that end the Government set up a commission with broad powers. This commission, it was ex-

pected, would in time be able to eliminate stock exchange abuses both real and imaginary. As an additional safety measure, the Government provided for insuring bank deposits up to a certain maximum amount. These and other efforts were but part and parcel of a desire on the part of the President to protect the "little fellow" against those who might, and often did, take advantage of him.

State and local finances.—Much of the financial load which the Federal Government found it necessary to carry came from the inability of state and local communities to meet the demands made on them. They had neither the inclination nor the opportunity to contract loans large enough to meet their needs. Many of them were already bonded to the limits prescribed, some lacked borrowing power, others had little or no credit. Whatever the reason, the important fact was that pressure groups forced Congress and the President to assume obligations aggregating billions of dollars a year.

Financing business.—The business man's financial problem during the period was not to find funds but to find uses for such funds. Idle money and idle men have much in common. No one seems to desire the services of either. Despite the complaint, therefore, to be heard on all sides concerning the restriction of credits the banks of the time had ample resources and were anxious to make them available for legitimate enterprise.

As a result of the disinclination of business to borrow money, the National Government came to be the banks' most valuable customer. Into the portfolio of these institutions went billions of dollars in the form of direct obligations of the Government, or obligations of others guaranteed by the Government. Unlike the War period, therefore, when citizens went about selling Liberty Bonds to one another, this period saw the people in general loaning their money to the Government. What actually happened was that the banks loaned their customers' money to the Government.

148. The Return of Legalized Liquor

The Eighteenth Amendment.—After an agitation that lasted for many years, the forces opposed to the use of alcohol as a beverage succeeded in getting into the Federal Constitution a

section outlawing the manufacture and sale of intoxicating liquors of all sorts and kinds. Its prohibiting sections read as follows:

> Section 1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from, the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.
>
> Section 2. The Congress and the several states shall have concurrent power to enforce this article by appropriate legislation.

The Amendment in operation.—This Amendment became operative in January, 1920. Its supporters rejoiced in what they hoped was to be the end of legalized liquor traffic. They had fought a long fight against what they called "demon rum," and now victory was in their grasp. Opposition generally came from two groups. One such group felt the deprivation of intoxicating liquor. Its members enjoyed drinking regardless of effects; anything that operated to deny this privilege they regarded as extremely objectionable. A second group consisted of those, wets as well as drys, who viewed the Amendment as a dangerous precedent. They argued that the basic law of the land should confine itself to basic principles of justice and have no concern whatever with customs and habits.

Just how effectively the statutes enacted under the Amendment operated no one can say with any hope of general agreement. Concerning this effectiveness many judgments were formed and openly expressed, but in too many instances they were based on desire rather than on facts. For one group the prohibition Amendment became the fair-haired angel child; for the other, the scapegoat on which was heaped the ills of society. At one extreme, everything was well; at the other, the world was on its last legs.

The liquor traffic has its economic aspects. With the coming of hard times in 1929 and the resultant harder times tax spenders found their funds curtailed through lowered assessment values and defaults in payments. Hard pressed they cast about for new revenues. Legalized liquor had once paid handsomely for certain privileges; it might be made to pay again. Also, a return to former conditions would, through increased demand, raise the price of corn and other farm products used in making fermented

and distilled drinks. These and other arguments combined to give strength to the opposition to prohibition by statute.

The Wickersham Report.—One of the welter of argument came what is likely to be regarded as the nearest approach to a scientific study of the efforts of a nation to legislate sobriety and self-restraint. This is known as the Wickersham Report, so named after the chairman of the group making the study, a former Attorney General of the United States. Ten men and one woman comprised this committee. From its report made in 1929 came efforts at better administration of the laws under the Amendment. No report, however able, and no laws, however well intended, could save the situation. The people in general had come to feel that under the operation of the Volstead Act and other prohibition acts conditions had become steadily worse; in general, too, their servants in public office would not be denied the revenue that might come from a return to conditions of a former day when the legalized saloon was an accepted social and economic institution.

Taking the alcohol out of beer.—Impatient of the means necessary to repeal the Eighteenth Amendment, Congress set about to decide what was and what was not alcoholic liquor. After long debates in which a great lack of intelligence was displayed, the lawmakers of the land came to the conclusion that beer with a certain alcoholic content was not intoxicating. Bootleggers smiled at the idea. They knew that for different persons the same amount of alcohol produced different results. All this was beside the point. Important was the fact that with beer of any content legalized money would begin to flow into the public treasuries.

Chapter XXXVII

FACTORS IN THE RECOVERY PROGRAM

DURING the years following the emergency efforts made by the National Administration to restore industry to some semblance of its former self, the Government initiated a long-time program affecting millions of persons and requiring the expenditure of billions of dollars. This program was many sided. It concerned itself, among other things, with such matters as unemployment, old-age pension, employer-employe relations, protection for investors in commercial securities, slum clearance, home ownership, public works, insurance of bank deposits, relief through labor projects, and soil conservation.

In setting up this program those in control broke new ground in many directions. Much of what was undertaken had been for years matters for speculative thought, but not for action. There had been rather general agreement on the desirability for such an undertaking, but up to this time little had been done to give reality to desire.

Private industry experienced ups and downs during these years. For a time the various business barometers employed to measure industrial advances and retreats showed unmistakable signs of advancement. Then recession came with a startling suddenness. What brought it about? Different observers differed in their answers. Some blamed the National Administration, some a too rapid advance in prices, some excessive inventories of finished products. Whatever the cause, or causes, industry declined through the late months of 1937, and the decline continued well into 1938. By mid-summer signs of recovery were to be observed. The close of the year saw general upward movements in business and industry. On January 1, 1939, business in general was at approximately the same level it had been three years previously.

149. PHASES OF SOCIAL SECURITY

Purposes of the Social Security Act.—Far reaching in results was the enactment in 1935 of what has come to be known as the

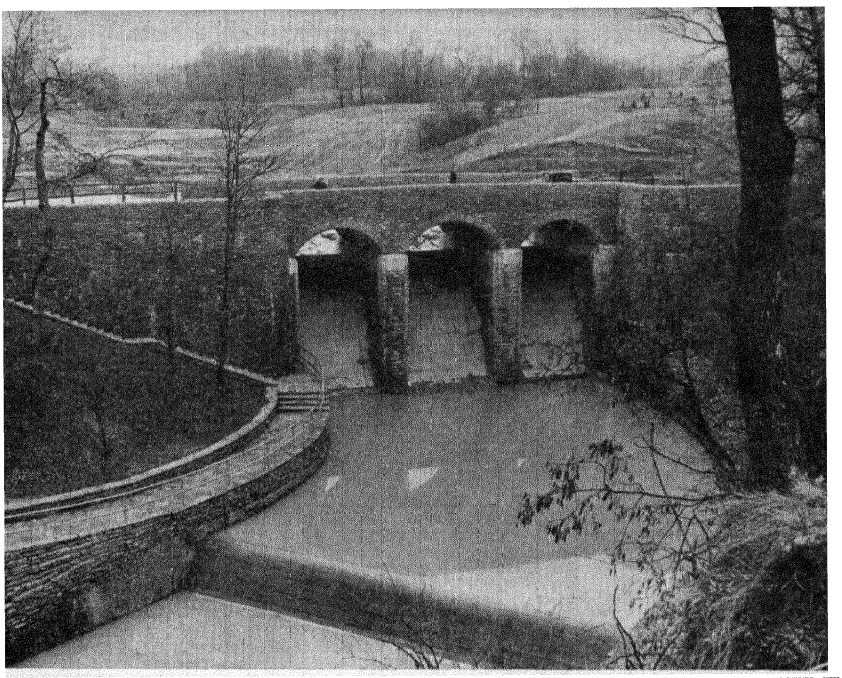
Social Security Act. This law, with such modification as might be necessary from time to time, was designed to aid those who, for one reason or another, are the least able among the people of the country to aid themselves. It concerned itself with removing everyday hazards from the lives of these people and with tempering, if not wholly averting, the catastrophes that threaten constantly the members of the lower income group. To quote, this law "represents a major advance in the attainment of economic security for the individual and for his family." President Roosevelt said on one occasion that in his opinion security concerned itself with three factors. The first was decent homes; the second, the development of the natural resources of the country in the interest of society; and the third, the safeguarding of the members of society against the misfortunes of life. He continued by saying that the Social Security Act was designed in the interest of the third of these factors. It was a "safeguard against misfortune which cannot be wholly eliminated in this man-made world of ours."

Various objectives sought.—In providing social security for millions of persons, Congress and the President took into account the most pressing needs: Unemployment compensation (insurance), old age assistance and old age benefits (pensions), care of children, aid to the blind, extension of public health service, and vocational rehabilitation.

Unemployment accompanied by loss of income is a constant threat to all, but more particularly to the members of the lower income groups. Too often cessation of work leads quickly to want and even to misery. It was to guard against this contingency that provision was made in the law for compensating the members of certain designated groups if and when they became unemployed. Such compensation is in effect an insurance against being out of work, the hazard being thus spread over a great many million workers.

Old age pensions resemble with some variation the pension which the Federal Government had been paying for many years to former soldiers and their dependents. Such pensions however financed and whatever called, are intended to provide some security for men and women who, having reached the age where their productive labor is greatly diminished or entirely gone, find themselves without funds for decent living.

The interest of organized society in the welfare of children goes beyond assistance to individuals who may be in need; its chief concern is in family life. Broken families, whatever the reasons back of them, are a menace to social wellbeing. This situation the law makers recognized when in the Social Security Act they arranged for grants to states (1) to aid dependent children, (2) to provide for the cost of maternal and child-



Works Progress Administration

Federal funds provide park improvements and relief work

health service, (3) to provide service to crippled children, and (4) to provide for child welfare service.

Three other services were provided in this law. One had to do with blind persons, a second with local public health programs, and a third with vocational rehabilitation. In each instance the Federal Government, through minor public units, set itself to the task of assuming leadership in financing as well as in organization and management.

A cooperative enterprise.—In enacting the Social Security Law, Congress and the President provided that its operation should be carried on in the main with the assistance and coopera-

tion of the various states. To that end provision was made for a Board having certain broad powers and duties. It was authorized to supervise and to administer the law. Also, it was required to study and to make recommendations as to the "most effective means of providing economic security through social insurance and as to legislation and matters of administrative policy concerning old-age pension, unemployment compensation, accident compensation, and related subjects."

Provisions for financing social security.—The Social Security program as projected contemplated an aggregate expenditure of many billions of dollars.* In some instances such expenditures were expected to be a direct charge on the public treasury; in others to be supplied in part by those directly benefited and by their employers. The law itself specified that these earmarked taxes should be paid into the Treasury of the United States.

Under the law employers were required to pay two excise taxes and to deduct an income tax from the wages of their employees. "The tax on employers and the corresponding tax on employees for the purpose of raising the money required for old-age benefits are to be paid with respect to persons employed after December 31, 1936, at such time and in such manner as may be prescribed by the Commission of Internal Revenue."

One provision of the Act imposed a tax on all employers having eight or more workers in their employ. These sums were to be used to provide insurance against unemployment. Certain exceptions were provided for: agricultural labor, domestic servants, public officials and employees, and those in the employ of religious, charitable, scientific, literary, and educational institutions of a non-profit nature. Employers subject to this tax were required to pay during 1936, one per cent of their payroll; during 1937, two per cent; during 1938 three per cent; and three per cent thereafter.

Another provision imposed, with suitable exceptions, two taxes —an income tax on employes and an excise tax on employers— for the purpose of financing the old age pension system. The rate of tax on the wages of employees not exempted from the Act and on the payrolls of the employers with respect to employment not exempted are as follows:

* Selection 99 is a discussion of the cost and need for social security.

Calendar Years	*Taxes*
1937–38–39	1 per cent
1940–41–42	1½ per cent
1943–44–45	2 per cent
1946–47–48	2½ per cent
1949—thereafter	3 per cent

150. Federal Grants and Loans

Meeting an emergency.—From the very beginning of his first administration (March 4, 1933) President Roosevelt saw clearly the need of relieving the distress which had been brought about by the hard times following 1929. To him seeing meant action. He tried different methods. In 1935 he requested of Congress a huge sum of money to be spent in various ways by the Government, but with a single purpose in view—the economic relief of millions of his fellow citizens.

The money thus appropriated aggregated $4,880,000,000 which was equal to the total ordinary expenditures of the United States Government from the time of its organization in 1789 up to and including two years of the Civil War. This sum the President could, within limitations, spend as he saw fit. Roughly, however, it was confined to the following projects:

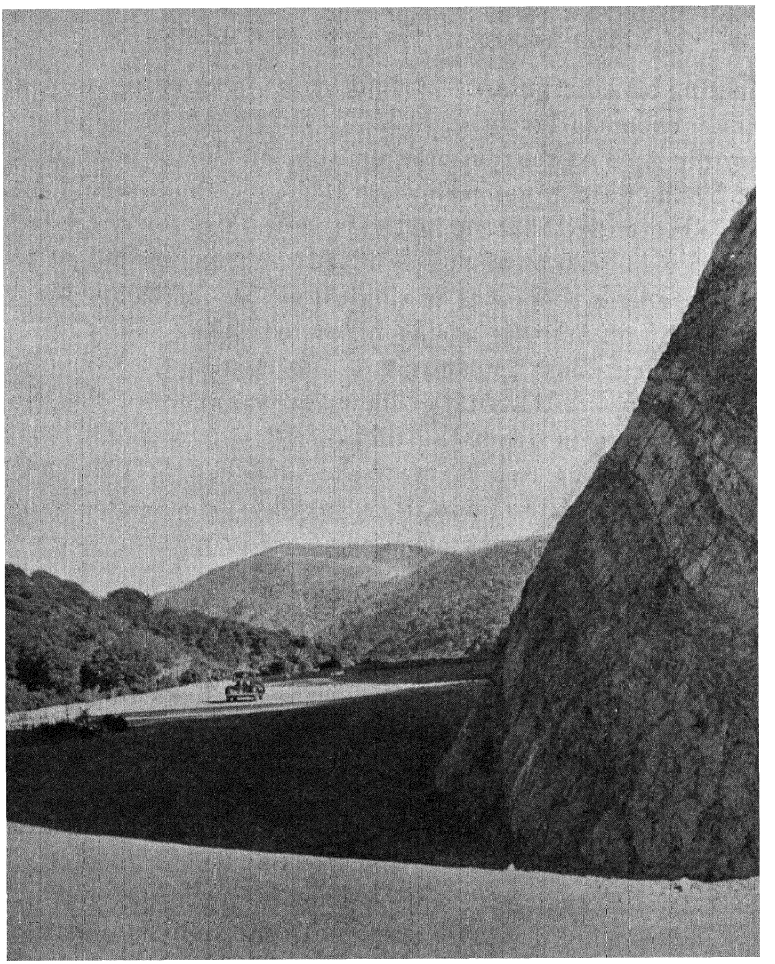
Highways and streets	$800,000,000
Rural Rehabilitation	500,000,000
Housing	450,000,000
Assistance for educational, professional and clerical purposes	300,000,000
C.C.C.	600,000,000
Loans or grants (or both) for state and other governmental units	900,000,000
Soil conservation and similar projects	350,000,000

With these funds various Federal agencies either directly or through local public bodies set about to do two things—to relieve immediate distress and to bring back, if possible, a situation where industry might absorb unemployment and hence make such public expenditures unnecessary.

In making grants and in loaning money to supplement such grants the Federal Government entered on a wide program. In some instances stress was placed on efficiency and economy of expenditures; in some, the stress was on payroll. Thus, in the same community one project might be carried on with improved machinery under the strictest supervision, while another was merely a make-work and, hence, a make-shift, effort to provide

wages and salaries for persons in distress but able and willing to work.

Considering results as a whole, opinions regarding them were mixed. In the matter of relieving want for millions of recipients,



Works Progress Administration

A paving project of the Works Progress Administration

there was general agreement. How did this expenditure of money, partly raised by taxation and partly borrowed, affect business in general? At one extreme were those who regarded it as an essential factor in a business upturn that lasted well into 1937. Even the President in commenting on this upturn said

that it had come as a result of planning. At the other extreme were those who contended that without such expenditures business aided by purchasing power thus diverted from private to public purposes would have "come back under its own power." Between these extremes the mass of the people viewed the whole procedure.*

Three years later, following a business recession that set in during 1937, the President again asked Congress for a sum of money to be expended in an effort to relieve distress and to restore business to some semblance of prosperity. Congress complied with the request, voting $1,850,000,000 to be spent directly for relief and civilian conservation work. Thus, the Federal Treasury was opened again in an effort to give immediate relief to individuals without incomes adequate to fairly decent existence and to stimulate business activities.

151. Banking and the Securities Market

Insuring bank deposits.—The Banking Act of 1933 provided for the insurance of bank deposits under certain conditions. Later, in 1934 and 1935 the Act was modified particularly as to oversight and management. The original Act provided for a maximum insurance of $2,500. Later this was raised to $5,000. All member banks of the Federal Reserve System were in the plan and as a result had their deposits insured. Other banks might secure such insurance by complying with the requirements set up by the Federal Deposit Insurance Corporation. Management of this corporation was placed in the hands of a Board of Directors consisting of three members—the Comptroller of the Currency and two appointed by the President of the United States.

Back of the action of the Federal Government in insuring bank deposits was the need following the bank moratorium of 1933, of restoring confidence in the ability of the banks of the country to meet their deposit liabilities. Such restoration was necessary, for with scores and hundreds of banks closing their doors, financial disorder threatened.

The Securities and Exchange Commission.—Following the stock market collapse of 1929 the people of the country found

* A favorable view of public works as a long-time Government policy is presented in Selection 100.

themselves possessed of worthless or greatly depreciated securities costing billions of dollars. Some represented speculation in which it was hoped an easy dollar might be earned; some, investments made in an effort to create financial backlogs for this or that worthy purpose. Whatever the reason back of the purchase of such securities, the results were very much the same. A clamor went up for the Government to do something in the way of safeguarding transactions in the future in stocks and bonds.

In June, 1934 Congress and the President enacted a law known as the Securities Exchange Act. Under this law, and the laws that followed, a Commission was created and given "The supervision of registration of security issues and the suppression of fraudulent practices in the sale of securities under the Securities Act of 1933; the supervision and regulation of transactions and trading in outstanding securities, both on the stock exchange and in the over-the-counter markets as provided by the Securities Exchange Act of 1934; and the regulation of public utility holding companies as provided in the Public Utility Act of 1935."

Under the law the Commission was organized with a membership of five, all appointed by the President with the advice and consent of the Senate. Not more than three of the five could be members of the same political party. This Commission soon found a place for itself in the investment fields of the country. It imposed reasonable regulations on new issues, and on trading in old ones. This it did in the face of much criticism and considerable opposition.

Export-Import Bank.—This bank was created on February 2, 1934, by executive order, and it was expected that it would "aid in financing and facilitating exports and imports between the United States and any of its territories and insular possessions and other nations and to do a general banking business (except that of discount or circulation); to receive deposits; to purchase, sell and negotiate . . . notes, drafts, checks, bills of exchange, acceptances . . .; to purchase and sell securities, including obligations of the United States or of any State thereof."

152. A New Farm Program

Abandonment of the old plan.—On January 6, 1936, the United States Supreme Court by a six to three decision declared unconstitutional the Agricultural Adjustment Act of May, 1933.

This decision came from a suit brought by the Hoosac Mills Corporation against the United States to avoid payment of approximately eighty thousand dollars "levied against it for cotton processing and flour taxes." Thus, the efforts of the Government to restore what was known as parity to the farmers of the country were brought to a stop by the highest court of the land.

A new agricultural policy.—Following the annulment of the Adjustment Act, Congress again set itself the task of studying the economic problems of the farmer. The result was that a new law known as the Soil Conservation and Domestic Allotment Act became effective with the President's signature on February 29, 1936.

In this Act and its later modification stress was laid on two considerations. One had to do with soil conservation; the other with control of acreage of principal crops. Thus, there were combined two points of view—long-time and immediate benefits. The original law provided that during the first two years following its enactment payments might be made for: (1) preservation and improvement of soil fertility; (2) promotion of economic use and conservation of land; (3) diminution of exploitation and wasteful and unscientific use of national soil resources; (4) protection of rivers and harbors against the results of soil erosion in aid of maintaining the irregularity of waters and watercourses and in aid of flood control.

The chief figure in the administration of this law was the Secretary of Agriculture. He was directed to base payments to farmers "on their treatment or use of their land for soil conservation, restoration and erosion control; on changes in historic land use; or on any of these used in combination." To carry out this program the Secretary of Agriculture had placed at his disposal $500,000,000 a year.

153. Labor and Its Problems

A split in the ranks of labor.—This period saw organized labor sharply divided over policies. On one side was the American Federation of Labor (A.F. of L.) led by William Green; on the other the Committee for Industrial Organization (C.I.O.) led by John L. Lewis. The points at issue, aside from those involving management and control, centered about the methods

to be employed in organizing labor. The A.F. of L. favored the craft union; the C.I.O. the industrial union.

Despite efforts on both sides to bring peace to the ranks of organized labor, the breach remained through the years to plague both groups as groups and the entire labor movement as a movement. Like participants in a bitter political campaign, leaders here and there made charges as extravagant as they were unfounded—charges inimical to the best interests of labor in general and in particular to organized labor.

The craft union as supported by the A.F. of L. and the industrial union as supported by the C.I.O. differ in that one recognizes in general differences in crafts while the other lumps them, if related, into one group. In the one instance we have carpenters, plasterers, and bricklayers; in the other building trades workers. Another illustration may be drawn from the workers in an automobile factory. These workers perform a variety of duties very much alike. Organized according to duties, a multitude of craft unions would exist; organized as one body an industrial union would exist.

National Labor Relations Act, 1935.—Regardless of the split in the ranks of labor, the conflicting groups succeeded, with the aid of the President and friendly Congressmen, in getting in 1935 a Federal law embodying major benefits to labor. This law was and is known as the National Labor Relations Act.

A significant provision of this law dealt with collective bargaining—that is, with the rights of workers through their organization to bargain with their employers. Prior to the enactment of this law their rights had rested on a similar provision in the National Industrial Recovery Act. This new legislation provided that: "Employees shall have the right to self-organization to form, join, or assist labor organization, to bargain collectively through representatives of their own choosing, and to engage in concerted activities, for the purpose of collective bargaining or the mutual aid or protection."

Under the law a National Labor Relations Board consisting of three members was set up with power to put the law into effect. On the Board was conferred authority "to make, amend, and rescind such rules and regulations as may be necessary to carry out the provisions of the Law."

As might be expected the Board, with neither background nor

precedent, faced at the beginning a well nigh impossible task. Employers in general disliked the law; labor itself was split wide open over management and control. Obviously, therefore, whatever the Board did in the way of administering the Law was likely to be unsatisfactory to at least one group.

In the light of subsequent events one can say that this law was the largest single step ever taken by American labor. It recognized as a right what labor had for years been demanding and what had been accorded by society as a privilege rather than as a right. Gone was the day when the worker as an individual found it necessary to bargain with his employer. Under the Law (Wagner Act) he and his kind could combine to present a collective program of betterment drawn up and supported by the whole group concerned.

154. Status of Foreign Trade

Imports and exports.—The depression and recovery years saw a decline in the volume of our foreign trade, the low point being reached in 1932 with a total volume of imports and exports falling slightly short of three billion dollars. The significance of this becomes clear when we know that the average annual value of the foreign trade for the previous decade was in the neighborhood of eight billion dollars.

FOREIGN TRADE, 1929-1938
(000 Omitted)

Year	*Exports*	*Imports*	*Total*	*Balance*
1929	$5,240,995	$4,399,361	$9,649,356	$841,634
1930	3,843,181	3,060,908	6,904,359	782,273
1931	2,424,289	2,090,635	4,514,924	333,664
1932	1,611,016	1,322,774	2,933,790	288,242
1933	1,674,994	1,449,559	3,124,553	225,435
1934	2,132,800	1,655,055	3,787,855	477,745
1935	2,281,800	2,047,287	4,329,087	234,513
1936	*2,456,000	2,422,600	4,878,600	23,400
1937	*3,345,200	3,084,100	6,429,300	261,100
†1938	*1,592,226	961,238	2,553,464	630,988

*Including re-exports. †First six months only.

Reciprocal tariff agreements.—During this period the President of the United States had conferred on him rather wide power in the matter of arranging and approving trade agree-

ments with foreign countries. In conferring this power Congress had in mind the constant need of some method whereby the United States might profit from such agreements. Here and there opposition developed, but on the whole there was general agreement except among high protectionists.

Trade in the precious metals.—The policies adopted and followed by the Government during this time stimulated the importation of gold and silver. In 1928, for instance, we exported more than five hundred million dollars worth of gold and imported less than half that amount. Later the tide turned, and except for the years 1932 and 1933, our imports exceeded our exports. For the period 1934-1938, the imports and exports were as follows:

GOLD IMPORTS AND EXPORTS
1934–1938

Year	*Imports*	*Exports*
1934	$1,186,670,000	$52,579,000
1935	1,740,979,000	1,960,000
1936	1,144,117,000	27,500,000
1937	1,631,523,000	46,020,000
1938	*247,974,000	*5,749,000

*First six months.

The imports and exports of silver followed the same general line. Prior to 1931 the United States was an exporter of the white metal. By 1935 the value of our imports of silver was running far ahead of our exports, the one being less than twenty million dollars, the other in excess of three hundred fifty million dollars.

The result of this movement toward the United States was that vast stores of the precious metals were accumulated here and held in safekeeping by the Government against the day when they might be needed as a medium of exchange.

155. Ups and Downs of Business

A period of recovery.—Measured by the various barometers employed in comparing the movements of business from one time to another, the recovery that began in 1933 continued with some interruption into the early months of 1937. During those years industrial production doubled, factory employment and

payrolls did almost as well, while retail sales increased more than one hundred per cent.

Whatever the cause of this recovery—differences of opinion concerning the cause are wide—the recovery itself was welcome. For a half decade the people of the country had struggled against one of the worst depressions known to history. They were overjoyed, therefore, to see men and women return to their accustomed work with a consequent return of payrolls and purchasing power in the hands of the masses. The future seemed to be assured.

Recession.—Following the peak reached early in 1937 and continuing for fifteen months or more came a recession period. Industrial production declined materially, so much in fact that it threatened for a time to reach the depths of 1933. Employment and payrolls suffered similarly but not to the same extent. Some idea can be had of these movements from an examination of business indexes issued by the United States Government. Using the period 1923-25 as a standard equal to 100, we find from these indexes that during the first six months of each year (1929, 1933–1938) the trend was upward for a time and then downward.

BUSINESS MOVEMENTS, 1929–38
(100 = Monthly Average 1923–25)

First Six Months Period	*Industrial Production*	*Employment*	*Payrolls*	(*Retail Sales*)	
				Dept. Stores	General
1929	123.0	103.9	110.0	101.0	112.0
1933	71.0	64.5	41.8	58.0	54.1
1934	85.0	83.2	64.0	68.0	71.2
1935	89.0	84.6	69.2	70.0	87.3
1936	100.0	88.4	77.7	77.0	96.9
1937	118.0	100.4	100.1	85.0	108.8
1938	78.0	79.8	70.9	77.0	98.8

A better outlook.—During the summer months of 1938 economic conditions began to improve. Factory employment and payrolls increased and prices of bonds and stocks rose. Altogether there was a better and a more optimistic feeling on the part of the people in general. Some said it had been started by the heavy Federal appropriation of 1938; others, by a partial exhaustion of inventories.

Two aspects of the situation caused grave concern. Public expenditures on relief and on make-work jobs continued at a high level; agricultural prices threatened to fall to levels at or near those of the depth of the depression. These situations the people of the United States faced with a determination to maintain industrial life on a high level. They had enjoyed more than one period of prosperity and suffered from as many depressions. The problems which they faced were not simple.

SELECTIONS FROM CONTEMPORARIES

Chapter I

SEEKING OPPORTUNITIES IN A NEW WORLD

1. The Virginia Company Advertises for Colonists

By the Counsell of Virginea.

Seeing it hath pleased God, after such hard successe and the manifold impediments knowne to the World, that now by the Wisdome and industry of the Lord Governour settled in *Virginea,* the state and businesse of the English Plantation there succeedeth with hope of a most prosperous event, and that therefore it is resolved and almost in a readinesse, for the further benefit and better settling of the said Plantation, to make a new supply of men and all necessarie provisions in a fleet of good ships, under the conduct of Sir *Thomas Gates* and Sir *Thomas Dale* Knights, and for that it is not intended any more to burden the action with vagrant and unnecessarie persons: This is to give notice to so many honest and industrious men, as Carpenters, Smiths, Coopers, Fishermen, Tanners, Shoemakers, Shipwrights, Brickmen, Gardeners, Husbandmen, and labouring men of all sorts, that if they repaire to the house of Sir *Thomas Smith* in Philpot lane in *London,* before the end of this present moneth of Januarie, the number not full, they shall be entertained for the Voyage, upon such termes as their qualitie and fitnesse shall deserve.

Imprinted at London for William Welby. 1611.

2. The Progress of Virginia

Now they take not that course the *Virginia* company did for the Planters there, their purses and lives were subject to some few here in *London* who were never there, that consumed all in Arguments, Projects, and their owne conceits: every year trying new conclusions, altering every thing yearely as they altered

(1) Alexander Brown, *The Genesis of the United States.* Boston and New York, 1891. Vol. I, pp. 445. By permission of Houghton Mifflin Company.

(2) Edward Arber, editor, *Captain John Smith, Works.* Birmingham, 1884. pp. 927–929.

opinions, till they had consumed more than two hundred thousand pounds, and neere eight thousand mens lives.

It is true, in the yeere of our Lord 1622. they were, the Company in *England* say 7. or 8. thousand: the Counsell in *Virgina* say but 2200. or thereabouts, English indifferently well furnished with most necessaries, and many of them grew to that height of bravery, living in that plenty and excesse, that went thither not worth any thing, [that] made the Company here thinke all the world was Oatmeale there; and all this proceeded by surviving those that died: nor were they ignorant to use as curious tricks there as here, and out of the juice of Tabacco, which at first they sold at such good rates, they regarded nothing but Tabacco; a commodity then so vendable, it provided them all things. And the loving Salvages their kinde friends, they trained so well up to shoot in a Peece, to hunt and kill them fowle, they became more expert than our owne Country-men; whose labours were more profitable to their Masters in planting Tabacco and other businesse.

This superfluity caused my poore beginnings [to be] scorned, or to be spoken of but with much derision, that never sent Ship from thence fraught, but onely some small quantities of Wainscot, Clap-board, Pitch, Tar, Rosin, Sope-ashes, Glasse, Cedar, Cypresse, Blacke Walnut, Knees for Ships, Ash for Pikes, Iron Ore none better, some Silver Ore but so poore it was not regarded; better there may be, for I was no Mineralist; some Sturgion, but it was too tart of the Vinegar (which was of my owne store, for little came from them which was good); and Wine of the Countries wilde Grapes, but it was too sowre; yet better than they sent us any, [which was] in two or three years but one Hogshead of Claret. . . .

Now because I sent not their ships full fraught home with those commodities; they kindly writ to me, if we failed the next returne, they would leave us there as banished men, as if houses and all those commodities did grow naturally, only for us to take at our pleasure; with such tedious Letters, directions, and instructions, and most contrary to that was fitting, we did admire [*wonder*] how it was possible such wise men could so torment themselves and us with such strange absurdities and impossibilities: making Religion their colour, when all their aime was noth-

ing but present profit, as most plainly appeared, by sending us so many Refiners, Gold-smith, Iewellers, Lapidaries, Stone-cutters, Tobacco-pipe-makers, Imbroderers, Perfumers, Silkemen, with [not only] all their appurtenances but materialls, and all those had great summes out of the common stocke; and [were] so many spies and super-intendents over us, as if they supposed we would turne Rebels, all striving to suppresse and advance they knew not what.

At last [they] got a Commission in their owne names, promising the King custome within seven yeares, where [as] we were free for one and twenty; appointing the Lord *De-la-ware* for Governour, with as many great and stately officers, and offices under him, as doth belong to a great Kingdome, with good summes for their extraordinary expences; also privileges for Cities; Charters for Corporations, Universities, Free-scholes, and Glebe-land; putting all those in practice before there was either people, students, or schollers to build or use them, or provision or victuall to feed them [that] were then there: and to amend this, most of the Tradesmen in *London* that would adventure but twelue pounds ten shillings, had the furnishing [of] the Company of all such things as belonged to his trade, such jug[g]ling there was betwixt them, and such intruding Committies [*Committee men*] their associats, that all the trash they could get in *London* was sent us to *Virginia,* they being well payed [as] for that [which] was good.

Much they blamed us for not converting the Salvages, when those they sent us were little better, if not worse; nor did they all, convert any of those [*natives*] we sent them to *England* for that purpose. So doating of Mines of gold, and the South Sea; that all the world could not have devised better courses to bring us to ruine than they did themselves, with many more such like strange conceits. . . .

3. Agreement between the Plymouth Colonists and the Merchants

An°: 1620. July 1.

1. The adventurers & planters doe agree, that every person that goeth being aged 16. years & upward, be rated at 10^{li}, and ten pounds to be accounted a single share.

(3) *Bradford's History "Of Plimoth Plantation."* Boston, 1898. pp. 56–58.

2. That he that goeth in person, and furnisheth him selfe out with 10^{li} either in money or other provissions, be accounted as haveing 20^{li} in stock, and in y^{e} devission shall receive a double share.

3. The persons transported & y^{e} adventurers shall continue their joynt stock & partnership togeather, y^{e} space of 7. years, (excepte some unexpeted impedimente doe cause y^{e} whole company to agree otherwise,) during which time, all profits & benifits that are gott by trade, traffick, trucking, working, fishing, or any other means of any person or persons, remaine still in y^{e} com̄one stock until y^{e} division.

4. That at their com̄ing ther, they chose out such a number of fitt persons, as may furnish their ships and boats for fishing upon y^{e} sea; imploying the rest in their severall faculties upon y^{e} land; as building houses, tilling, and planting y^{e} ground, & makeing shuch com̄odities as shall be most usefull for y^{e} collonie.

5. That at y^{e} end of y^{e} 7. years, y^{e} capitall and profits, viz. the houses, lands, goods and chatles, be equally devided betwixte y^{e} adventurers, and planters; w^{ch} done, every man shall be free from other of them of any debt or detrimente concerning this adventure.

6. Whosoever cometh to y^{e} colonie herafter, or putteth any into y^{e} stock, shall at the ende of y^{e} 7. years be alowed proportionably to y^{e} time of his so doing.

7. He that shall carie his wife & children, or servants, shall be alowed for everie person now aged 16. years & upward, a single share in y^{e} devision, or if he provid them necessaries, a duble share, or if they be between 10. year old and 16., then 2. of them to be reconed for a person, both in trāsportation and devision.

8. That such children as now goe, & are under y^{e} age of ten years, have noe other shar in y^{e} devision, but 50. acers of unmanured land.

9. That such persons as die before y^{e} 7. years be expired, their executors to have their parte or sharr at y^{e} devision, proportionably to y^{e} time of their life in y^{e} collonie.

10. That all such persons as are of this collonie, are to have their meate, drink, apparell, and all provissions out of y^{e} com̄on stock & goods of y^{e} said collonie. . . .

4. Failure of the Plymouth Agreement, 1623

All this whille no supply was heard of, neither knew they when they might expecte any. So they begane to thinke how they might raise as much corne as they could, and obtaine a beter crope then they had done, that they might not still thus languish in miserie. At length, after much debate of things, the Gov^{r} (with y^{e} advise of y^{e} cheefest amongest them) gave way that they should set corne every man for his owne perticuler, and in that regard trust to them selves; in all other things to goe on in y^{e} generall way as before. And so assigned to every family a parcell of land, according to the proportion of their number for that end, only for present use (but made no devission for inheritance), and ranged all boys & youth under some familie. This had very good success; for it made all hands very industrious, so as much more corne was planted then other waise would have bene by any means y^{e} Gov^{r} or any other could use, and saved him a great deall of trouble, and gave farr better contente. The women now wente willingly into y^{e} feild, and tooke their litle-ons with them to set corne, which before would aledg weaknes, and inabilitie; whom to have compelled would have bene thought great tiranie and oppression.

The experience that was had in this co$\bar{m}$one course and condition, tried sundrie years, and that amongst godly and sober men, may well evince the vanitie of that conceite of Platos & other ancients, applauded by some of later times;—that y^{e} taking away of propertie, and bringing in co$\bar{m}$unitie into a comone wealth, would make them happy and florishing; as if they were wiser then God. For this comunitie (so farr as it was) was found to breed much confusion & discontent, and retard much imploym$\bar{e}$t that would have been to their benefite and comforte. For y^{e} yong-men that were most able and fitte for labour & service did repine that they should spend their time & streingth to worke for other mens wives and children, with out any recompence. The strong, or man of parts, had no more in devission of victails & cloaths, then he that was weake and not able to doe a quarter y^{e} other could; this was thought injuestice. The aged and graver men to be ranked and equalised in labours, and victails, cloaths, &c., with y^{e} meaner & yonger sorte, thought

(4) *Bradford's History "Of Plimoth Plantation."* Boston, 1898. pp. 162–164.

it some indignite & disrespect unto them. And for mens wives to be commanded to doe servise for other men, as dresing their meate, washing their cloaths, &c., they deemd it a kind of slaverie, neither could many husbands well brooke it. Upon y^e^ poynte all being to have alike, and all to doe alike, they thought them selves in y^e^ like condition, and one as good as another; and so, if it did not cut of those relations that God hath set amongest men, yet it did at least much diminish and take of y^e^ mutuall respects that should be preserved amongst them. And would have bene worse if they had been men of another condition. Let none objecte this is men's corruption, and nothing to y^e^ course it selfe. I answer, seeing all men have this corruption in them, God in his wisdome saw another course fiter for them. . . .

Chapter II

ADAPTING OLD METHODS TO NEW CONDITIONS

5. Carrying on Business in Virginia, c. 1697

For want of towns, markets, and money, there is but little encouragement for tradesmen and artificers, and therefore little choice of them, and their labour very dear in the country. A tradesman having no opportunity of a market, where he can buy meat, milk, corn, and all other things, must either make corn, keep cows, and raise stocks himself; or must ride about the country to buy meat and corn where he can find it; and then is puzzled to find carriers, drovers, butchers; salting (for he cannot buy one joint or two) and a great many other things, which there would be no occasion for if there were towns and markets. Then a great deal of the tradesmen's time being necessarily spent in going and coming to and from his work, in dispersed country plantations, and his pay being generally in straggling parcels of tobacco, the collection whereof costs about 10 per cent. and the best of this pay coming but once a year, so that he cannot turn his hand frequently with a small stock, as tradesmen do in England and elsewhere; all this occasions the dearth of all tradesmen's labours, and likewise the discouragement, scarcity and insufficiency of tradesmen.

The merchants live the best of any in that country; but yet are subject to great inconveniencies in the way of their trade, which might be avoided if they had towns, markets, and money: For, first, they are obliged to sell upon trust all the year long, except just a little while when tobacco is ready. 2. They likewise drive a pitiful retail trade to serve every man's little occasions, being all, in effect, but country chapmen, for want of towns to be a center of trade and business. 3. Besides the charge of it they are necessitated to trust all their concerns to their receivers, who go about among the planters that owe them tobacco, and receive and mark it for them, which receivers, if they want either skill

(5) An Account of the present State and Government of Virginia. *Collections of the Massachusetts Historical Society, for the year 1798.* pp. 128–132.

or honesty, it proves very fatal to the merchant. 4. They are at the charge of carting this tobacco so marked and received, to convenient landings; or if it lies not far from these landings, they must trust to the seamen for their careful rolling it on board of their sloops and shallops: and if the seamen roll it in bad weather, or in dirty ways, it is exposed to a great deal of damage. 5. It is a great while before the ships can be loaded, their freight lying at such a distance, and being to be brought together in this scrambling manner. By reason of this, it is an unusual thing with ships to lie three or four months in the country, which might be dispatched in a fortnight's time, if the tobacco were ready at certain ports; and this inflames the freight to almost double the price of what it needed to be, if the ships had a quick dispatch. . . .

Another error they ran into, in their last law for towns, was, that they made it utterly unlawful to buy or sell any goods exported or imported but at these towns, under no less a penalty than the forfeiture of ship and goods; which was a great force upon trade, and would have made all people very uneasy at present; though on the other hand there is this to be said for it, that their merchants being already seated with their stores in country plantations, and having their customers all round about them, without some considerable force, could not be induced to leave all these, and to come and live in towns.

Some are of opinion, that the King's constituting ports for exportation and importation would do the business, i. e. would bring the trade to these ports; and perhaps it would at the long run; for all that set up for merchants, after such a constitution of ports, would probably set up at these places; but it would be a long time before the old merchants, who are in the present possession of the trade, would be persuaded to leave their country houses, and stores, to come and live at towns. Perhaps if there were great care taken to encourage these port towns with privileges and immunities, and likewise to discourage the country stores, the thing would quickly be more effectual. . . .

The want of money, which is another great obstruction of their improvement, is chiefly occasioned by the governor, who finds it his interest to encourage the tobacco and to discourage the money dealings, for by that means he has as much of his salary as he pleases paid him in bills of exchange, which is better

for his use to lay up in England, than that country money, being commonly pieces of eight at five shillings. Then for what he wants to buy in the country, he can buy it much cheaper for quit-rent tobacco than for money, v. g. an ox which would cost him 50 shillings or £.3, he can buy for six hundred pounds of tobacco, which he buys of the King at 4 shillings or 4 and six pence the hundred, so that he hath the ox for about half price of what it would cost him in money.

The Governor thus discouraging money dealings, the auditor is very scrupulous of taking money of the collectors, and the collectors of the merchants, and the merchants of the people, and the people of one another; this being all a natural chain of consequences: For the auditor has but little occasion for money, but to pay it to the Governor, nor the collectors but to pay it to the auditor, nor the merchants but to pay it to the collectors for the 2 shillings a hogshead; nor the people but to pay it to the merchants for such things as they have occasion for; so that a positive instruction that the 2 shillings per hogshead should be paid in money, would cure all this, especially if the value of money were ascertained. Pieces of eight are ascertained by law at 5 shillings, but that law is very imperfect; for there being no weight assigned, they scruple a light piece of eight, alledging it is clipped, or a Peru piece, as not being good silver; and no other coin is at all ascertained, except English money, of which there is very little in the country. . . .

6. Taking up Land in Virginia before 1700

The method settled by the King, from the first seating of that country, was to allot 50 acres of land to every one that should adventure into that country, which, if it had been punctually observed, would have been a lasting encouragement to adventurers, till the country had come to be well peopled; but as the matter has been managed, the land is now gone from the King, and yet the country but very ill peopled.

The first great abuse of this design was by the ignorance and knavery of surveyors, who often gave out draughts of surveys without ever actually surveying, or even coming on the lands. Only they gave description by some natural bounds, and were

(6) An Account of the present State and Government of Virginia. *Collections of the Massachusetts Historical Society, for the year 1798.* pp. 132–133.

sure to allow large measure, that so the persons for whom they surveyed might enjoy much larger tracts of land than they were to pay quit-rent for. Then all courts were very lavish in allowing certificates for rights; for if a master of a ship came into any court and made oath, that he had imported himself, and so many seamen, and passengers, at divers times, into the country, and that he never elsewhere made use of these rights, he had presently an order granted him for so many rights, (i.e. so many times 50 acres of land); and these rights he would sell and dispose of for a small matter. Perhaps the same seamen made oath at another court, that they had adventured themselves so many times into the country, and had not elsewhere proved their rights; and upon this they had an order for so many rights, *toties, quoties*. The masters, likewise, that bought the servants, so imported, would, at another court, make oath, that they had bought so many persons, that had ventured themselves into the country; and upon this, so many rights were ordered them; so that still the land went away, and the adventurers themselves, who remained in the country, for whom it was originally designed, had the least share. Then great liberty was used in issuing certificates for rights, by the county clerks, and especially by the clerks of the secretary's office, which was, and is still, a constant mint of these rights, where they may be purchased at very easy rates of the clerks, from five shillings to one shilling per right.

7. Farming in New Netherland

The following is the mode pursued by the West India Company in the first planting of Bouweries.

The Company, at their own cost and in their own ships conveyed several boors to New Netherland, and gave these the following terms:—

The farmer, being conveyed with his family over sea to New Netherland, was granted by the Company for the term of six years a Bouwerie, which was partly cleared, and a good part of which was fit for the plough.

The Company furnished the farmer a house, barn, farming implements and tools, together with four horses, four cows,

(7) E. B. O'Callaghan, editor, *Documents Relative to the Colonial History of the State of New York*. Albany, 1856. Vol. I, p. 371.

sheep and pigs in proportion, the usufruct and enjoyment of which the husbandman should have during the six years, and on the expiration thereof, return the number of cattle he received. The entire increase remained with the farmer. The farmer was bound to pay yearly one hundred guilders and eighty pounds of butter rent for the cleared land and bouwerie.

The country people who obtained the above mentioned conditions all prospered during their residence on the Company's lands.

Afterwards the cattle belonging to the Company in New Netherland were distributed for some years among those who had no means to purchase stock.

The risk of the cattle dying is shared in common, and after the expiration of the contract the Company receives, if the cattle live, the number the husbandman first received, and the increase which is over, is divided half and half; by these means many people have obtained stock and, even to this day, the Company have still considerable cattle among the Colonists, who make use on the above conditions of the horses in cultivating the farm; the cows serve for the increase of the stock and for the support of the family. . . .

Chapter III

STRUGGLE FOR POWER IN THE NEW WORLD

8. Money in the Colonies

Originally and for some Years following in all the *English American Colonies,* 5*s.* Denomination was equal to an English Crown Sterl. after some Time *Pieces of Eight,* being the general Currency of all foreign American Colonies, became also their Currency; and they remitted or gave Credit to the Merchants at Home (by Home is meant *Great Britain*) a Piece of Eight (value 4*s.* 6*d.* Sterl.) for a Crown or 5*s.* Sterl. *this was a Fraud of* 11 *per Cent.* In sundry of our Colonies were enacted Laws against passing of light Pieces of Eight; these Laws not being put in Execution, *heavy and light Pieces of Eight passed promiscuously;* and as it always happens, a bad Currency drove away the good Currency; heavy Pieces of Eight were ship'd off. This current Money growing daily lighter, a Difference was made between heavy Money which became Merchandize, and light Money in which they paid their Debts gradually from 10, 15, 20, to 25 per Cent. as at present in *Jamaica: this was another and continued Course of cheating their Creditors and Employers at Home.* From a Complaint of Merchants and others dealing to the Plantations; Q. *Anne* by Proclamation, and the Parliament of Great Britain afterwards by the *Proclamation Act,* ordered, that after A. 1709, *A heavy Piece of Eight and other Pieces in Proportion to their Weight, in all our Colonies should pass not exceeding* 6*s. Denomination.* This Act continues to be observed in none of our Colonies, excepting in *Barbadoes,* and *Bermudas. Virginia Currency* was formerly, and continues still better than what the Act directs. . . .

MASSACHUSETTS-BAY: This being more especially the scene of our Discourse, we shall be more particular. At the first settling of the *New England* Colonies; their Medium was Sterling Coin at Sterling Value, and Barter; some Part of their Taxes

(8) [William Douglass] A Discourse Concerning the Currencies of the British Plantations in America. Boston, 1740. pp. 7–10, 17.

was paid in Provisions and other Produce, called *Stock in the Treasury*. When they got into Trade a heavy Piece of Eight passed at 5*s*. A. 1652, *They proceeded to coin Silver Shillings, six Pences, and three Pences, at the Rate of* 6*s*. *to a heavy Piece of Eight;* Silver continued current at this Rate by sundry subsequent Acts of Assembly till *A*. 1705, by a Resolve of the General Court Silver was to pass at 7*s*. *per Oz*. *A*. 1706 the Courts of Judicature chancered Silver to 8*s*. *per Oz*. in satisfying of Debts, being nearly after the Rate of 6*s*. a light Piece of Eight as then current. At this Rate Silver and Province Bills continued upon *Par* until *A*. 1714, the Assembly or Legislature fell into the Error of making from Time to Time large superfluous Sums of *Paper Money upon Loans,* and the Emissions for Charges of Government not cancellable for many Years, so that these *Publick Bills have been continually depreciating for these last* 26 *Years, and are now arrived to* 29*s*. *per Oz*. *Silver.*

Massachusetts-Bay was the Leader of Paper Currencies in our Colonies. Their first Emission was of 40,000 l. A. 1690 & 1691, to pay off the publick Debts incurr'd by that expensive, tho' unsuccessful, Expedition against *Canada;* of this Sum 10,000 l. was cancelled and burnt in *October* A. 1691: In the following Years no more new Emissions, but some Re-emissions of the remainder, and that only for the necessary Charges of Government, called in by Rates or Taxes within the Year; the last Remission of these Bills was A. 1701, of 9,000 l. Bills all this Period continued at the Rate of 6*s*. a heavy Piece of Eight, and were called *Old Charter Bills*. A. 1702 began new Emissions of Province Bills; but, as it ought to be in all wise Administrations, cancelled by Taxes of the same and next following Year, until A. 1704, the Rates for calling them in, were in Part postponed two Years; they began A. 1707 to postpone them in Part for three Years; A. 1709 for 4 Years; A. 1710 for 5 Years; A. 1711 for 6 Years; A. 1715 for 7 Years; A. 1721 for 12 Years; A. 1722 for 13 Years: *Thus unnaturally instead of providing for Posterity, they proceeded to involve them in Debt.* This long publick Credit and the enormous publick Loans, have depreciated our Province Bills to the small Value they bear at present; the Issues and Cancellings of their Bills being for a long Series of Years too tedious to be particularly and minutely inserted.

The Province of the *Massachusetts-Bay* besides the Emission

& Re-emissions of the 40,000 l. old Charter Bills, have since A. 1702 emitted and re-emitted Bills of publick Credit, 1,132,500 l. upon Funds of *Taxes,* and 310,000 l. upon *Loans,* being in all near one and a half Million; whereof about 230,000 l. still outstanding, and if publick Faith be better kept will be gradually cancelled by A. 1742. . . .

In MARYLAND Silver continued at Proclamation Value until A. 1734, with a considerable Concomitant *Truck Trade as a Medium,* viz. *Tobacco;* they then emitted 90,000 l. in Bills, which tho' payable to the Possessors in Sterling well secured, the Sum being too large, and the Periods too long, viz. three partial Payments of 15 Years Periods each; *Exchange immediately rose from* 33 *to* 100 *per Cent.*

VIRGINIA has the same considerable *Truck Trade Medium,* viz. *Tobacco;* and with regard to Silver Currency have kept their Integrity better than the other Colonies. . . .

9. AN ENGLISH VIEW OF THE NAVICATION ACTS

Concerning the Act of *Navigation.*

Though this *Act* be by most concluded a very Beneficial Act for this *Kingdom,* especially by the *Masters* and *Owners* of *Shipping,* and by all *Sea-men;* yet some there are, both wise and honest *Gentlemen* and *Merchants,* that doubt whether the Inconveniences it hath brought with it, be not greater than the Conveniences.

For my own part, I am of opinion that in relation to *Trade, Shipping, Profit* and *Power,* it is one of the choicest and most prudent *Acts* that ever was made in *England,* and without which we had not now been *Owners* of one half the *Shipping,* nor *Trade,* nor *Employed,* one half the *Sea-men* which we do at present; but seeing time hath discovered some *Inconveniences* in it, if not *Defects,* which in my poor opinion do admit of an easie Amendment, and seeing that the whole *Act* is not approved by unanimous Consent, I thought fit to Discourse a little concerning it, wherein after a plain method I shall lay down such Objections as I have met with and subjoyn my Answers, with such Reasons as occur to my Memory in Confirmation of my own Opinion.

The *Objections* against the whole *Act* are such as these;

(9) Josiah Child, *A New Discourse on Trade.* London, 1698. pp. 112–116.

Object. 1. Some have told me, That I on all occasions magnifie the *Dutch Policy* in relation to their Trade, and the *Dutch* have no *Act of Navigation,* and therefore they are certainly not always in the right, as to the understanding of their true interest in Trade, or else we are in the wrong in this.

I answer, I am yet to be informed where the *Dutch* have missed their proper Interest in Trade; but that which is fit for one Nation to do in relation to their Trade, is not fit for all; no more than the same Policy is necessary to a prevailing Army that are Masters of the Field, as to an Army of less force, to be able to encounter their Enemy at all times and places: *The Dutch by reason of their great Stocks, low Interest, multitude of Merchants and Shipping, are Masters of the Field in Trade, and therefore have no need to build Castles, Fortresses and places of Retreat;* such I account Laws of Limitation, and Securing of Particular Trades to the *Natives* of any Kingdom; because they, *viz.* the *Dutch,* may be well assured, *That no Nation can enter in common with them in any Trade, to gain Bread by it, while their own Use of Money is at* 3 per cent, *and others at* 6 per cent *and upwards,* &c. Whereas if we should suffer their Shipping in common with ours in those Trades which are secured to the *English* by *Act of Navigation,* they must necessarily, in a few Years, for the reasons above-said, Eat us quite out of them.

Object. 2. The second *Objection* to the whole *Act* is; Some will confess that as to *Merchants* and *Owners of Ships, the Act of Navigation is eminently Beneficial,* but say, that *Merchants* and *Owners* are but an Inconsiderable number of Men in respect of the whole *Nation,* and that Interest of the greater number, that our *Native Commodities* and *Manufactures* should be taken from us at the best Rates, and Foreign Commodities sold us at the cheapest, with admission of *Dutch Merchants* and *Shipping in common with the English,* by my own Implication would effect.

My answer is, That I cannot deny but this may be true, if the present Profit of the generality be barely and singly considered; but this *Kingdom* being an *Island,* the defence whereof hath always been our *Shipping* and *Seamen,* it seems to me *absolutely necessary that Profit and Power ought joyntly to be considered,* and if so, I think none can deny but the *Act* of *Navigation* hath and doth occasion building and employing three times the number of *Ships* and *Sea-men,* that otherwise we should or would do;

and that consequently, *If our Force at Sea were so greatly impaired, it would expose us to the receiving of all kind of Injuries and Affronts from our Neighbours, and in conclusion render us a despicable and miserable People.*

Objections to Several Parts of the Act of

NAVIGATION.

Object. 1. *The Inhabitants and Planters of our Plantations in* America, *say, This Act will in time Ruin their Plantations, if they may not be permitted, at least, to carry their Sugars to the best Markets, and not be compelled to send all to, and receive all Commodities from* England.

I answer, *If they were not kept to the Rules of the Act of Navigation, the consequence would be,* that in *a few Years the Benefit of them would be wholly left to the Nation;* It being agreeable to the Policy of the *Dutch, Danes, French, Spaniards, Portugals* and *all Nations in the World,* to keep their external *Provinces* and *Collonies* in a subjection unto, and dependency upon their *Mother-Kingdom;* and if they should not do so, the *Dutch,* who, as I have said, are Masters of the *Field* in Trade, would carry away the greatest of advantages by the Plantations of all the Princes in *Christendom,* leaving us and others only the trouble of Breeding Men, and sending them abroad to Cultivate the Ground, and have Bread for their Industry. . . .

Chapter IV

ECONOMIC LIFE IN THE ENGLISH COLONIES

10. Trade of the Colonies with Great Britain

TRADE *between* England *and the* Tobacco Plantations.

THE *Tobacco Plantations* take from *England* their Cloathing, Household Goods, Iron Manufactures of all Sorts, Saddles, Bridles, Brass and Copper Wares, and notwithstanding their dwelling among the Woods, they take their very Turner's Wares, and almost every Thing else that may be called the Manufacture of *England:* So that indeed it is a very great Number of People that are employed to provide a sufficient Supply of Goods for them.

ENGLAND takes from them not only what Tobacco we consume at Home, but very great Quantities for Re-exportation, which may properly be said to be the surest Way of enriching this Kingdom.

CHAP. XVI

TRADE *between* England *and* Carolina.

CAROLINA lies in as happy a Climate as any in the World, from 32 to 36 Degrees of *Northern* Latitude. The Soil is generally fertile: The Rice it produces is said to be the best in the World, and no Country affords better Silk than has been brought from thence, though for Want of sufficient Encouragement the Quantity imported is very small. . . . The Rice Trade, since it hath been made an enumerated Commodity, is under great Discouragement; for it cannot be sent directly to Portugal and Spain as formerly; and it will not bear the Charge of bringing home and Re-shipping, unless it be at a Time when the Crops in the Milanese and Egypt prove bad. . . .

(10) Joshua Gee, *The Trade and Navigation of Great Britain Considered.* London, 1729. pp. 20–25.

CHAP. XVII

TRADE *between* England *and* Pensilvania.

PENSILVANIA within Forty Years has made wonderful Improvements; they have built a large and regular City, they have cleared great Tracts of Land, and raised very great Quantities of Wheat and other Provisions, and they have by Way of *Jamaica* beat out a very great Trade for their Corn and Provisions to the *Spanish West-Indies;* and if this Trade be properly nurs'd up, it may draw the *Spanish* Coast very much to depend on us for a Supply of Flower, Bisket, &c. which may be of great Advantage to us.

It is already attended with that good Consequence, that it hath supplied them with Gold and Silver, which is frequently brought home by our trading Ships from thence, and has very much enlarged their Demands upon us for Broad-cloth, Kersies, Druggets, Serges, Stuffs, and Manufactures of all Sorts.

THEY supply the *Sugar Plantations* with Pipes and Barrel-Staves, and other Lumber, with Flower, Bisket, Pork, &c. But this is not sufficient for their Cloathing, and therefore are forced to make something by their own Labour and Industry to answer that End.

CHAP. XVIII

TRADE *between* England, New-Jersey *and* New-York.

THE Provinces of *New-Jersey* and *New-York* produce much the same with *Pensilvania,* and their Traffic is much the same; we have what Money that can raise to buy our Manufactures for their Cloathing, and what they further want, they are forced to manufacture for themselves as the aforesaid Colonies do.

CHAP. XIX

TRADE *between* England *and* New-England.

NEW-ENGLAND takes from us all Sorts of Woollen Manufactures, Linnen, Haberdashery, &c. To raise Money to pay for what they take of us, they are forced to visit the *Spanish* Coasts, where they pick up any commodity they can trade for: They carry Lumber and Provisions to the Sugar Plantations, exchange Provision for Logwood with the Logwood Cutters at *Campeachey.* They send Pipe and Barrel-Staves and Fish to

Spain, Portugal, and the *Streights.* They send Pitch, Tar and Turpentine to *England,* with some Skins: But all those Commodities fall very short of purchasing their Cloathing in *England;* and therefore what other Necessaries they want, they are forced to manufacture for themselves, as the aforementioned Colonies. . . .

11. Manufactures in the Colonies, 1732

Pursuant to an order of the British House of Commons, directed to the Lords Commissioners of Trade and Plantations, in the latter end of the last or the beginning of this same year 1732, relating to the dispute still subsisting between the sugar colonies and the northern continental colonies of America; the said board reported, with respect to any laws made, manufactures set up, or trade carried on there, detrimental to the trade, navigation, or manufactures of Great Britain, as follows, viz. . . .

"That in New England, New York, Connecticut, Rhode Island, Pennsylvania, and in the county of Somerset in Maryland, they had fallen into the manufacture of woolen cloth and linen cloth, for the use of their own families only.

"For, first, The product of those colonies being chiefly stock," i. e. cattle, "and grain, the estates of the inhabitants depended wholly on farming, which could not be managed without a certain quantity of sheep, so that their wool would be entirely lost were not their servants employed during the winter in manufacturing it for the use of their families.

"Secondly, That flax and hemp being likewise easily raised, the inhabitants manufactured them into a coarse sort of cloth bags, traces, and halters, for their horses; which they found did more service than those they had from any part of Europe. That, however, the height of wages and high price of labour in general in America rendered it impracticable for people there to manufacture their linen cloth at less than twenty per cent. more than the rate in England, or woollen cloth at less than fifty per cent. dearer than that which is exported from hence for sale. It were to be wished, that some expedient might be fallen upon to divert their thoughts from undertakings of this nature: so much the rather, because those manufactures, in process of time, may be

(11) Adam Anderson, *An Historical and Chronological Deduction of the Origin of Commerce.* London, 1787. Vol. III, pp. 190–194.

carried on in a greater degree, unless an early stop be put to their progress, by employing them in naval stores. . . .

"I. *New Hampshire.*

"The governor, in his answer, said, That there were no settled manufactures in that province, and that their trade principally consisted in lumber and fish.

"II. *Massachusett's Bay,* in New England.

"The governor informed us, that in some parts of this province, the inhabitants worked up their wool and flax into an ordinary coarse cloth, for their own use; but did not export any. That the greatest part of both woollen and linen cloathing worn in this province was imported from Great Britain, and sometimes from Ireland. But, considering the excessive price of labour in New England, the merchants could afford what was imported cheaper than what was made in that country.

"That there were also a few hatters set up in the maritime towns: and that the greater part of the leather used in that country was manufactured amongst themselves. That there had been for many years some iron-works in that province, which had afforded the people iron for some of their necessary occasions; but that the iron imported from Great Britain was esteemed much the best, and wholly used by the shipping. And that the iron works of that province were not able to supply the twentieth part of what was necessary for the use of the country.

"III. *New York.*

"That they had no manufactures in that province that deserved mentioning; their trade consisting chiefly in furs, whalebone, oil, pitch, tar, and provisions.

"IV. *New Jersey.*

"No manufactures here that deserve mentioning: their trade being chiefly in provisions exported to New York and Pennsylvania.

"V. *Pennsylvania.*

"Its chief trade lay in the exportation of provisions and lumber; having no manufactures established; their cloathing and utensils for their houses being all imported from Great Britain.

"VI. From *New Hampshire,* further advices, viz.

"That the woollen manufacture of this province is much less than formerly; the common lands on which the sheep used to feed, being now divided into particular properties, and the people

almost wholly cloathed with woollen from Great Britain. That the manufacturing of flax into linen (some coarser, some finer) daily increased by the great resort of people from Ireland thither, who are well skilled in that business. And that the chief trade of this province continued, as for many years past, in the exportation of naval stores, lumber, and fish.

"VII. Later accounts from *Massachuset's Bay,* in New England, viz.

"The assembly have voted a bounty of thirty shillings for every piece of duck or canvas to be made in this province.—Some other manufactures are carried on there; as the making of brown Hollands, for womens wear; which lessens the importation of calicoes, and some other sorts of East India goods.—They also make some small quantities of cloth made of linen and cotton, for ordinary shirting and sheeting.—By a paper-mill, set up three years ago, they make to the value of two hundred pounds yearly. —There are also several forges for making of bar iron, and some furnaces for cast iron, or hollow wares, and one slitting mill:—and a manufacture of nails.

"The governor writes, concerning the woollen manufacture, that the country people who used formerly to make most of their cloathing out of their own wool, do not now make a third part of what they wear, but are mostly cloathed with British manufactures.—The governor (Belcher) by some of his letters of an older date, in answer to our annual queries, writes, that there are some few copper mines in this province, but so far distant from water carriage, and the ore so poor, that it is not worth the digging.—The Surveyor General of his Majesty's woods writes, that they have in New England six furnaces and nineteen forges for making of iron:—and that in this province many ships are built for the French and Spaniards, in return for rum, melasses, wines, and silk, which they truck there by connivance.—Great quantities of hats are made in New England, of which the Company of Hatters of London have likewise lately complained to us.—That great quantities of those hats are exported to Spain, Portugal, and our West India islands.—They also make all sorts of iron-work for shipping.—That there are several still-houses and sugar bakers established in New England.

"VIII. Later advices from *New York,* viz.

"There are no manufactures here that can affect the manu-

factures of Great Britain.—There is yearly imported into New York a very large quantity of the woollen manufactures of this kingdom, for their cloathing, which, 'as the President of the Council of this province writes,' they would be rendered incapable to pay for, and would be reduced to the necessity of making for themselves, if they were prohibited from receiving from the foreign sugar colonies, the money, rum, sugar, melasses, cocoa, cotton-wool, &c. which they at present take in return for provisions, horses, and lumber, the produce of that province and of New Jersey; of which, he affirms, the British sugar colonies do not take off above one-half. But the Company of Hatters of London have since informed us, that hats are manufactured in great quantities in this province.

"IX. *New Jersey.*

"No particular returns from this province.

"X. From *Pennsylvania,* later advices, viz.

"The deputy-governor writes, that he does not know of any trade carried on in that province that can be injurious to this kingdom: and that they do not export any woollen or linen manufactures: all that they make, which are of a coarse sort, being for their own use. We are further informed, that in this province are built many brigantines and small sloops, which they sell to the West Indies.

"XI. *Rhode Island.*

"The governor informs us, in answer to our queries, that there are iron mines there; but not a fourth part iron enough to serve their own use. But he takes no notice of any sort of manufactures established there.

"XII. *Connecticut.*

"No return from the governor of this province." . . . "But," says this report of the Board of Trade, "we find by some accounts, that the produce of this colony is timber, boards, all sorts of English grain, hemp, flax, sheep, black cattle, swine, horses, goats, and tobacco.—That they export horses and lumber to the West Indies, and receive in return sugar, salt, melasses, and rum. —We likewise find, that their manufactures are very inconsiderable; the people there being generally employed in tillage; some few in tanning, shoe-making, and other handicrafts; other in building, joiners, taylors and smiths work, without which they could not subsist."

"No report is made concerning Carolina, the Bahama, nor the Bermuda isles: and as for Newfoundland, it is scarcely to be called a plantation, and Hudson's Bay not at all. . . .

"From the foregoing state," continues the report, "it is observable that there are more trades carried on and manufactures set up in the provinces on the continent of America to the northward of Virginia, prejudicial to the trade and manufactures of Great Britain, particularly in New England, than in any other of the British colonies; which is not to be wondered at; for their climate, soil, and produce, being pretty near the same with ours, they have no staple commodities of their own growth to exchange for our manufactures; which puts them under greater necessity, as well as under greater temptation of providing for themselves at home: to which may be added, in the charter governments, the little dependence they have upon their mother-country, and consequently the small restraints they are under in any matters detrimental to her interests.

"And therefore, we would humbly beg leave to report and submit to the wisdom of this Honourable House, the substance of what we formerly proposed in our report on the silk, linen, and woollen manufactures herein before recited; namely, whether it might not be expedient to give those colonies proper encouragements for turning their industry to such manufactures and products as might be of service to Great Britain, and more particularly to the production of all kinds of naval stores.

"Whitehall, Feb. 15, 1731-2 PAUL DOCKMINIQUE, &c."

Chapter V

EARLY RESTRICTIVE MEASURES

12. The Balance of Trade Theory Stated

The means to enrich the Kingdom,
and to encrease our Treasure.

Although a Kingdom may be enriched by gifts received, or by purchase taken from some other Nations, yet these are things uncertain and of small consideration when they happen. The ordinary means therefore to encrease our wealth and treasure is by *Forraign Trade,* wherein wee must ever observe this rule; to sell more to strangers yearly than wee consume of theirs in value. For suppose that when this Kingdom is plentifully served with the Cloth, Lead, Tinn, Iron, Fish and other native commodities, we doe yearly export the overplus to forraign Countries to the value of twenty two hundred thousand pounds; by which means we are enabled beyound the Seas to buy and bring in forraign wares for our use and Consumptions, to the value of twenty hundred thousand pounds; By this order duly kept in our trading, we may rest assured that the Kingdom shall be enriched yearly two hundred thousand pounds, which must be brought to us in so much Treasure; because that part of our stock which is not returned to us in wares must necessarily be brought home in treasure. . . .

The Exportation of our Moneys in
Trade of Merchandize is a means
to encrease our Treasure.

This Position is so contrary to the common opinion, that it will require many and strong arguments to prove it before it can be accepted of the Multitude, who bitterly exclaim when they see any monies carried out of the Realm; affirming thereupon that wee have absolutely lost so much Treasure, and that this is an

(12) Thomas Mun, *England's Treasure by Forraign Trade.* London, 1664. pp. 11–12, 34–35.

act directly against the long continued laws made and confirmed by the wisdom of this Kingdom in the High Court of Parliament, and that many places, nay *Spain* itself which is the Fountain of Mony, forbids the exportation thereof, some cases only excepted. . . .

13. The Molasses Act

An act for the better securing and encouraging the trade of his Majesty's sugar colonies in America.

WHEREAS *the welfare and prosperity of your Majesty's sugar colonies in* America *are of the greatest consequence and importance to the trade, navigation and strength of this kingdom: and whereas the planters of the said sugar colonies have of late years fallen under such great discouragements, that they are unable to improve or carry on the sugar trade upon an equal footing with the foreign sugar colonies, without some advantage and relief be given to them from* Great Britain: for remedy whereof . . . be it enacted . . ., That from and after the twenty fifth day of *December* one thousand seven hundred and thirty three, there shall be raised, levied, collected and paid, unto and for the use of his Majesty . . ., upon all rum or spirits of the produce or manufacture of any of the colonies or plantations in *America,* not in the possession or under the dominion of his Majesty . . ., which at any time or times within or during the continuance of this act, shall be imported or brought into any of the colonies or plantations in *America,* which now are or hereafter may be in the possession or under the dominion of his Majesty . . ., the sum of nine pence, money of *Great Britain,* to be paid according to the proportion and value of five shillings and six pence the ounce in silver, for every gallon thereof, and after that rate for any greater or lesser quantity: and upon all molasses or syrups of such foreign produce or manufacture as aforesaid, which shall be imported or brought into any of the said colonies or plantations of or belonging to his Majesty, the sum of six pence of like money for every gallon thereof . . .; and upon all sugars and paneles of such foreign growth, produce or manufacture as aforesaid, which shall be imported into any of the said colonies or plantations of or belonging to his Majesty, a

(13) 6 George II, Chapter 13.

duty after the rate of five shillings of like money, for every hundred weight *Avoirdupoize,* of the said sugar and paneles. . . .

14. Colonial Trade with the West Indies

As there is no commodity raised in the colony suitable for the European market, but the few articles aforementioned; and as the other goods raised for exportation, will answer at no market but in the West Indies, it necessarily follows that the trade thither must be the foundation of all our commerce; and it is undoubtedly true, that solely from the prosecution of this trade with the other branches that are pursued in consequence of it, arises the ability to pay for such quantities of British goods. . . .

Of these foreign vessels, about one hundred and fifty are annually employed in the West India trade, which import into this colony about fourteen thousand hogsheads of molasses; whereof, a quantity, not exceeding twenty-five hundred hogsheads, come from all the English islands together.

It is this quantity of molasses which serves as an engine in the hands of the merchant to effect the great purpose of paying for British manufactures; for part of it is exported to the Massachusetts Bay, to New York and Pennsylvania, to pay for British goods, for provisions and for many articles which compose our West India cargoes; and part to the other colonies, southward of these last mentioned, for such commodities as serve for a remittance immediately to Europe; such as rice, naval stores, &c., or such as are necessary to enable us to carry on our commerce; the remainder (besides what is consumed by the inhabitants,) is distilled into rum, and exported to the coast of Africa; nor will this trade to Africa appear to be of little consequence, if the following account of it be considered.

Formerly, the negroes upon the coast were supplied with large quantities of French brandies; but in the year 1723, some merchants in this colony first introduced the use of rum there, which, from small beginnings soon increased to the consumption of several thousand hogsheads yearly; by which the French are deprived of the sale of an equal quantity of brandy; and as the demand for rum is annually increasing upon the coast, there is

(14) Remonstrance of the Colony of Rhode Island to the Lords Commissioners of Trade and Plantations. *Records of the Colony of Rhode Island and Providence Plantations, in New England.* Providence, 1861. Vol. VI, pp. 379–383.

the greatest reason to think, that in a few years, if this trade be not discouraged, the sale of French brandies there will be entirely destroyed. This little colony, only, for more than thirty years past, have annually sent about eighteen sail of vessels to the coast, which have carried about eighteen hundred hogsheads of rum, together with a small quantity of provisions and some other articles, which have been sold for slaves, gold dust, elephants' teeth, camwood, &c. The slaves have been sold in the English islands, in Carolina and Virginia, for bills of exchange, and the other articles have been sent to Europe; and by this trade alone, remittances have been made from this colony to Great Britain, to the value of about £40,000, yearly; and this rum, carried to the coast, is so far from prejudicing the British trade thither, that it may be said rather to promote it; for as soon as our rum vessels arrive, they exchange away some of the rum with the traders from Britain, for a quantity of dry goods, with which each of them sort their cargoes to their mutual advantage. . . .

From this deduction of the course of our trade, which is founded in exact truth, it appears that the whole trading stock of this colony, in its beginning, progress and end is uniformly directed to the payment of the debt contracted by the importation of British goods; and it also clearly appears, that without this trade, it would have been and always will be, utterly impossible for the inhabitants of this colony to subsist themselves, or to pay for any considerable quantity of British goods. . . .

It ought further to be considered, that the produce of His Majesty's northern colonies, especially those of New England, is near alike, and that the British West India islands are not, nor in the nature of things, ever can, be able to consume the produce of the said colonies; and therefore, if they cannot export it (which they never can, unless they are allowed to bring molasses home) a very great part of the produce of the said colonies must be entirely lost. . . .

There are upwards of thirty distil houses, (erected at a vast expense; the principal materials of which, are imported from Great Britain,) constantly employed in making rum from molasses. This distillery is the main hinge upon which the trade of the colony turns, and many hundreds of persons depend immediately upon it for a subsistence. These distil houses, for want

of molasses, must be shut up, to the ruin of many families, and of our trade in general; particularly, of that to the coast of Africa, where the French will supply the natives with brandy, as they formerly did. Two-thirds of our vessels will become useless, and perish upon our hands; our mechanics, and those who depend upon the merchant for employment, must seek for subsistence elsewhere; and what must very sensibly affect the present and future naval power and commerce of Great Britain, a nursery of seamen, at this time consisting of twenty-two hundred, in this colony only, will be in a manner destroyed; and as an end will be put to our commerce, the merchants cannot import any more British manufactures, nor will the people be able to pay for those they have already received.

It having been shown that this trade is of the utmost importance to this colony; that the great consumption of British goods, which is continually increasing at a great rate, compels us to prosecute this trade, as having no other means wherewith to pay for those goods; and the same arguments holding pretty generally true with respect to most all the other British colonies upon the continent of North America, it remains only to show that this trade is in nowise disadvantageous to Great Britain, and that the English islands are not injured by it, and have no reason to complain of it.

This intercourse between the northern colonies and the foreign plantations in the West Indies, as it is the great cause of the consumption of British manufactures, cannot be thought to prejudice the interest of Great Britain, unless it be made to appear that it encourages and promotes the growth of foreign plantations, especially those of the French, of whose improvements we should undoubtedly be very jealous.

That this is not the case, well appear, if it be considered that the cargoes carried from hence to the French islands, consist of horses, lumber and fish; nor will the French permit us to import any other articles to their colonies, save some trifles not worth mentioning; that the horses we send them, serve rather for luxury than any real use in the plantation service, and that they may be, and are, supplied with mules and horses from the Spanish Main; that the fish we send them, is of an inferior quality, and will not suit the European market; and that if they are not suffered to purchase their fish from us, it will naturally tend to

increase the shipping and seamen of France, as they will be obliged to prosecute the fishery themselves; that if we do not supply them with lumber, they can procure it from the Mississippi, or have it brought in their ships from France, which generally come out not half loaded; and that the sole reason of the French purchasing any of the above articles from us, is, because they can pay for them in molasses, a commodity at present of but little value to them, although of the greatest consequence to us; add to all this, if we are prevented from purchasing their molasses, they will naturally increase their distillery, and make it into rum, and export it elsewhere themselves, especially to Mississippi; by means of which river, great quantities may, and will be vended among the various tribes of Indians, which will increase their shipping and seamen, and greatly interfere with the interest of Great Britain; and more especially, as by means of the trade with the Indians, they may gain such an influence over them, as may be attended with pernicious consequences in case of a future war. . . .

Jamaica is the only English island that now supplies us with molasses (excepting the new acquisition of the Grenades, which affords a small quantity of an inferior quality); and it can be proved by undoubted testimony, that even from thence our vessels have been frequently obliged to bring back money, because molasses was not to be had; and this has happened in the course of a few years, while the trade from the northern colonies to foreign plantations was at the highest.

The West India planters cannot with justice complain, if we purchase from others what they cannot supply us with; and what ought still further to silence their complaints, is, that in the article of sugar, which is their first and most material staple, they can receive no prejudice by our trade to foreign plantations; for it is well known that the policy both of the French and Dutch has confined the trade of sugar to themselves; so that we never obtain any of that commodity from them, save now and then a small quantity of an ordinary kind, which is generally procured (not without hazard) by the assistance and address of those merchants there who help us in the transaction of our business. . . .

Chapter VI

ECONOMIC BACKGROUND OF THE REVOLUTION

15. Reasons for Prohibiting Western Settlements, 1772

The object of colonisation in North America has been to improve and extend the commerce, navigation and manufactures of this kingdom,—(1) by the fisheries on the northern coast; (2) by the growth of naval stores and raw produce to be exchanged for manufactures and other merchandise; (3) by securing a supply of lumber and provisions for the island colonies. For these purposes, settlements were confined as much as possible to the seacoast, so as to be accessible to merchant ships and defensible by the British Navy, which could use the ports as stations in time of war. . . .

The arguments in favour of inland settlements are, (1) Such colonies promote population and form a market for English woollens; (2) they secure the fur trade from the French and Spaniards; (3) they defend the old colonies against the Indians; (4) they lessen the expense of supplying the distant forts with provisions; (5) the people already residing there require some form of civil government.

(1) The new sea-coast colonies provide a market for manufactures; but *these,* being 1,500 miles inland, would supply no returns to pay for British manufactures, and would probably be led to manufacture for themselves, "which experience shows has constantly attended in a greater or lesser degree every inland settlement."

(2) "It does appear to us that the extension of the fur trade depends entirely upon the Indians being undisturbed in the possession of their hunting-grounds; that all colonising does in its nature, and must in its consequences, operate to the prejudice of that branch of commerce, and that the French and Spaniards would be left in possession of a great part of what remained; as New Orleans would still continue the best and surest market."

(15) *Acts of the Privy Council,* Colonial Series, The Unbound Papers. London, 1911, Vol. VI, pp. 513–518.

(3) "So far from affording protection to the old colonies, they will stand most in need of it themselves."

(4) The degree of utility of the provisions raised will be proportioned to the number of the forts; the French inhabitants near the Lakes, and on the Mississippi, Illinois and Ohio could supply all the forts that will be required.

(5) Settlements formed under military establishments require no other superintendence than that of the military officers in command. The B. of T. next quote the opinion of the Commander in Chief in America in a letter to Lord Hillsborough: he conceived such settlements inconsistent with sound policy. The only commodities these parts could have to barter for manufactures would be furs and skins, which will naturally decrease as the country increases in people. Necessity would force them to manufacture for themselves, "and when all connection upheld by commerce with the mother country shall cease, it may be expected that an independency on her government will soon follow . . . there is room enough for the colonists to spread within our present limits for a century to come. If we reflect how the people of themselves have gradually retired from the coast, we shall be convinced they want no encouragement to desert the seacoasts and go into the back-countries, where the lands are better and got upon easier terms. They are already almost out of the reach of law and government. . . . The lower provinces are still thinly inhabited, and not brought to the point of perfection that has been aimed at for the mutual benefit of Great Britain and themselves. Although America may supply the mother country with many articles, few of them are yet supplied in quantities equal to her consumption; the quantity of iron transported is not great, of hemp very small; and there are many other commodities not necessary to enumerate, which America has not yet been able to raise, notwithstanding the encouragement given her by bounties and premiums. The laying open new tracts of fertile territory in moderate climates might lessen her present produce, for it is the passion of every man to be a landholder, and the people have a natural disposition to rove in search of good lands, however distant. It may be a question likewise whether colonisations of the kind could be effected without an Indian war and fighting for every inch of the ground. . . . I conceive that to procure all the commerce that it will afford,

and at as little expense to ourselves as we can, is the only object we should have in view in the interior country for a century to come." The Indians desire our manufactures as much as we do their peltry; firearms are necessary to them for hunting, as they are disused to the bow; for their own sakes, therefore, they would protect the trade. . . .

The B. of T. propose that no grant be made, and that another proclamation be issued against any settlement beyond the line prescribed by the Proclamation of 1763.

16. Causes of Colonial Resistance

Upon the restoration of the monarchy, when many of the rights of the subject, and of the constitution were settled; *the constitution of the colonies, received their great alteration:* the King participated the sovereignty of the colonies with the parliament; the parliament in its proper capacity, was admitted to a share in the government of them: The parliament then first, taking up the idea, indeed very naturally, from the power they had exercised during the commonwealth; that all these, his Majesty's foreign dominions, and "all these, his Majesty's subjects," were of or belonging to the realm; then first, in the proper capacity of legislature, (supreme legislature of the realm,) interposed in the regulation and governing of the colonies.—And thenceforward, from time to time, sundry acts of parliament were made, not only (1st) for regulating the trade of the colonies; but also (2dly) for ordering and limiting their internal rights, privileges and property; and even (3dly) for taxing them.—In the course of which events; while the Colonists considered this principle as the *Palladium* of their liberties, *viz.* that they were to be ruled and governed only by acts of parliament, together with their own laws not contrary to the laws of England; the King in the same course of events called in the aid of parliament, to enable him to regulate and govern the colonies.—The British merchants at times applied to parliament, on the affairs of the colonies: and even the *West India* Planters applied to the same power, to carry a measure against the colonies of North America. Hence we find enacted, in the course of those events,

(16) Thomas Pownall, *The Administration of the British Colonies.* Fifth Edition. London, 1774. Vol. I, pp. 126–129.

I. The navigation act; the sugar, and other acts, for regulating and restraining the trade of the colonies.

II. Also Acts, 1. altering the nature of their estates, by treating real estates as chattels. 2. Restraining them from manufactures. 3. Regulating their money. 4. Altering the nature of evidence in the courts of common law; by making an affidavit of a debt before the Lord mayor in London, &c. certified in writing, an evidence in their courts in America. 5. Dissolving indentures; by discharging such of their servants as should enlist in the King's service.

III. Also Acts, fixing a tax upon American sailors, payable to the Greenwich Hospital. 2. Likewise imposing taxes; by the several duties payable on sundry goods, if intended as materials of trade, to be paid *within the province,* or colony, *before* they can be put on board, for exportation. 3. Also, the revenue arising from the *duties* payable on the postage of letters. 4. Also, the tax of quartering soldiers, and supplying them in their quarters. Lastly, establishing the claim which Great Britain makes, of taxing the colonies in all cases whatsoever, by enacting the claim into a declared right, by act of parliament. . . .

17. Trade of Rhode Island in 1765

The merchants sustained very great losses in the late war; and the channels of that little commerce which they have left, are so obstructed by regulations since made, that it is continually declining; the demand for the produce of the country, employ for laborers and other kinds of business, are proportionably decreased; the annual taxes assessed for payment of the immense debt contracted by the colony's unlimited ardor for His Majesty's service, during the war, are almost insupportable. The lands within this colony, have also sunk nearly or quite one half in their value; the merchants are greatly indebted to Great Britain for her manufactures (without which, the people cannot live); and at the same time that they are thus deeply distressed, new duties are required of them, the payment of which, in the happiest times of the colony, would have been attended with the greatest difficulties. But in its present impoverished and distressed situation, is absolutely impracticable; money being already so scarce, that

(17) *Records of the Colony of Rhode Island and Providence Plantations, in New England.* Providence, 1861. Vol. VI, p. 473.

there is not, by the best estimate which I am able to procure, enough in the colony, to pay those duties two years; and they have the mortification also, to find themselves most unhappily distinguished from their fellow subjects in Great Britain. . . .

18. An English View of the Colonial Grievances

Upon the Whole therefore, what is the Cause of such an amazing Outcry as you raise at present?—Not the Stamp Duty itself; all the World are agreed on that Head; and none can be so ignorant, or so stupid, as not to see, that this is a mere Sham and Pretence. What then are the real Grievances, seeing that the Things which you alledge are only the pretended ones? Why, some of you are exasperated against the Mother Country, on account of the Revival of certain Restrictions laid upon their Trade:—I say, a *Revival;* for the same Restriction have been the standing Rules of Government from the Beginning; though not enforced at all Times with equal Strictness. During the late War, you *Americans* could not import the Manufactures of other Nations (which it is your constant Aim to do, and the Mother Country always to prevent) so conveniently as you can in Times of Peace; and therefore, there was no Need of watching you so narrowly, as far as that Branch of Trade was concerned. But immediately upon the Peace, the various Manufactures of *Europe,* particularly those of *France,* which could not find Vent before, were spread, as it were, over all your Colonies, to the prodigious Detriment of your Mother Country; and therefore our late Set of Ministers acted certainly right, in putting in Force the Laws of their Country, in order to check this growing Evil. If in so doing, they committed any Error; or, if the Persons to whom the Execution of these Laws were intrusted, exceeded their Instructions; there is no Doubt to be made, but that all this will be rectified by the present Administration. And having done that, they will have done all that in Reason you can expect from them. But alas! the Expectations of an *American* carry him much further: For he will ever complain and smuggle, and smuggle and complain, 'till all Restraints are removed, and 'till he can both buy and sell, whenever, and wheresoever he pleases. Any thing short of this, is still a Grievance, a Badge of Slavery,

(18) Josiah Tucker, *Four Tracts on Political and Commercial Subjects.* Glocester, 1776. pp. 132–136.

an Usurpation on the natural Rights and Liberties of a free People, and I know not how many bad Things besides.

But, my good Friend, be assured, that these are Restraints, which neither the present, nor any future Ministry can exempt you from. They are the standing Laws of the Kingdom; and God forbid, that we should allow that dispensing Power to our Ministers, which we so justly deny to our Kings. In short while you are a Colony, you must be subordinate to the Mother Country. These are the Terms and Conditions, on which you were permitted to make your first Settlements: They are the Terms and Conditions on which you alone can be entitled to the Assistance and Protection of *Great-Britain;*—they are also the fundamental Laws of the Realm;—and I will add further that if *we* are obliged to pay many Bounties for the Importation of *your* Goods, and are excluded from purchasing such Goods, in other Countries (where we might purchase them on much cheaper Terms) in order to promote *your* Interest;—by Parity of Reason *you* ought to be subject to the like Exclusions, in order to promote *ours*. This then being the Case, do not expect, from the present Ministry, that which is impossible for any set of Ministers to grant. All that they can do, is to connive a while at your unlawful Proceedings. But this can be but of short Duration: For as soon as ever fresh Remonstrances are made by the *British* Manufacturers, and *British* Merchants, the Ministry must renew the Orders of their Predecessors; they must enforce the Laws; they must require Searches, and Confiscations to be made; and then the present Ministers will draw upon themselves, for *doing their Duty,* just the same Execrations, which you now bestow upon the last. . . .

Chapter VII

THE WAR FOR INDEPENDENCE

19. Finances of America, October 22, 1778

Observations on the Finances of America.

At the commencement of the war, it was obvious that the permanent revenues and resources of Great Britain must eventually overbalance the sudden and impetuous sallies of men contending for freedom on the spur of the occasion, without regular discipline, determinate plans, or permanent means of defence. America having never been much taxed, nor for a continued length of time, being without fixed government, and contending against what once was the lawful authority, had no funds to support the war, notwithstanding her riches and fertility. And the contest being upon the very question of taxation, the laying of imposts, unless from the last necessity, would have been madness.

To borrow from individuals, without any visible means of repaying them, and while the loss was certain from ill success, was visionary.

A measure, therefore, which had been early adopted, and thence become familiar to the people, was pursued. This was the issuing of paper notes representing specie, for the redemption of which the publick faith was pledged.

As these were to circulate from hand to hand, there was no great individual risk, unless from holding them too long; and no man refused to receive them for one commodity, while they would purchase every other.

This general credit, however, did not last long. It menaced so deeply the views of our enemies, who had built their hopes upon the defect of our resources, that they and their partisans used every effort to impeach its value. Their success in one instance of this kind always made room for another; because he

(19) *Secret Journals of the Acts and Proceedings of Congress.* Vol. II, pp. 118–122.

who could not relieve his wants with our paper would not part with his property to procure it.

To remedy this evil, the states, as soon as formed into any shape of legislation, enacted laws to make the continental paper a lawful tender, and indeed to determine its value, fixing it by penalties, at the sum of specie expressed on the face. These laws produced monopoly throughout.

The monopoly of commodities, the interruption of commerce rendering them scarce, and the successes of the enemy, produced a depreciation. The laws devised to remedy this evil either increased, or were followed by an increase of it.

This demanded more plentiful emissions, thereby increasing the circulating medium to such a degree as not only to exclude all other, but, from its superabundant quantity, again to increase the depreciation.

The several states, instead of laying taxes to defray their own private expenses, followed the example of Congress, and also issued notes of different denominations and forms. Hence to counterfeit became much easier, and the enemy did not neglect to avail themselves of this great though base advantage. And hence arose a further depreciation.

Calling the husbandman frequently to arms, who had indeed lost the incitements to industry from the cheapness of the necessaries of life in the beginning, compared with other articles which took a more rapid rise, soon reduced that abundance which preceeded the war. This, added to the greater consumption, together with the ravages and subsistence of the enemy, at length pointed the depreciation to the means of subsistence.

The issues from this moment became enormous, and consequently increased the disease from which they arose, and which must soon have become fatal, had not the successes of America, and the alliance with France, kept it from sinking entirely. The certainty of its redemption being now evident, we only suffer from the quantity.

This, however, not only impairs the value simply in itself, but, as it calls for continued large emissions, so the certainty that every thing will be dearer than it is, renders every thing dearer than it otherwise would be; and vice versa. Could we possibly absorb a part of the inundation which overwhelms us, every thing

would be cheaper, from the certainty that it would become cheaper.

The money can be absorbed but three ways. The first is by taxation, which cannot reach the evil while the war continues. Because the emissions must continue to supply what is necessary over and above even the nominal produce of taxes. And the taxes cannot be very productive by reason of the possession of part, and the ravagement of other parts of the country by the enemy; and also from the weakness of governments yet in their infancy, and not arrived to that power, method and firmness, which are the portion of elder states.

The second method is by borrowing; and is not efficient; because no interest can tempt men to lend paper now, which paid together with that interest in paper a year hence, will not probably be worth half as much as the principal sum is at present. And whenever the case shall alter, then, in proportion to the appreciation, will be the loss of the publick on what they borrow; to say nothing of the enormous burdens for which they must pay interest in species, or what is equal to it, if so much of what hath been emitted could be borrowed as to render the remainder equally valuable with silver.

The last method is by very considerable loans or subsidies in Europe, and is the only mode at once equal to the effect desired, and free from the foregoing exceptions. For, if such a sum is drawn for at the advanced exchange, as by taking up the greater part of our paper to reduce the exchange to par, the paper then remaining will be fully appreciated, and the sum due will not nominally, and therefore in the event really, exceed its real value.

But to this mode there are objections. 1. Subsidies by any means equal to our necessities can hardly be expected while our allies, being engaged in war, will want all the money they can procure; and,

2. Loans cannot probably be obtained without good guarantee, or other security, which America may not, perhaps, be able to procure or give. But until our finances can be in a better situation, the war cannot possibly be prosecuted with vigour, and the efforts made feeble, as they must be attended with an oppressive weight of expense, rendering still more weak the confederated states.

This will appear from the foregoing observations; and also

from this, that the present, and in all probability the future, seat of the war, also, that is, the middle states, are so exhausted that, unless by the most strenuous voluntary exertions of all the inhabitants, no great numbers of men can possibly be subsisted. And such exertions cannot be expected without the temptation of money more valued than ours is at present.

To the Honourable Benjamin Franklin, Esquire.

Sir,

The above observations referred to in your instructions, you shall lay substantially before the French ministry, and labour for their assistance to remove the difficulties there stated.

By order of Congress. . . .

20. Borrowing in Europe

I immediately made the application, so strongly pressed by the Congress, for a loan of four millions of dollars. I annexed to my memoir the resolves of Congress, with copies and extracts of your several letters and those of Mr. Livingston upon the subject, all of which appeared to me extremely well written for enforcing the request. I was at last told that it would be a difficult thing to furnish such a sum at present, but it would be considered. . . . I have since continually pressed for a favorable answer. The Marquis de Lafayette has likewise been importunate; but we could only learn that there was yet no decision. The negotiations for peace were going on, and I ascribed the delay partly to the uncertainty of the event, which might make a less sum sufficient, if it succeeded, or a greater necessary, if the war was still to be continued. I believe, too, that the new loan meditated for this government, but not ascertained, might cause some suspension. But, whatever are the causes, the fact is, that though I understand we are to be aided, I am still ignorant what the quantum will be, or when it can be obtained. . . .

Of the amount of Mr. Adams' loan in Holland I have no certain account. He thinks it may be between fifteen and seventeen hundred thousand florins. Mr. Grand obtained a part of it to pay the interest of the Dutch loan, which is done. . . .

Penet, who was employed by that State as an agent to borrow

(20) J. Bigelow, *The Complete Works of Benjamin Franklin.* New York, 1888. Vol. VIII, pp. 224-227. By permission of G. P. Putnam's Sons.

money here, is broke and absconded. His creditors are all worrying me with their complaints, who have nothing to do with his affairs. I have long since mentioned the inconvenience of the attempts of separate States to borrow money in Europe. They have hurt our credit, and produced nothing. We have put faith in every adventurer who pretended to have influence here, and who, when he arrived, had none but what our appointment gave him.

I congratulate you on the tokens of approaching peace. I wish nothing may happen to prevent it. With sincere and great esteem, I am, sir, etc.,

B. FRANKLIN.

21. FURNISHING SUPPLIES FOR THE ARMY

They were conveying to the army a part of the contingent of provisions furnished by New Hampshire. This contingent is a sort of tax, divided amongst all the inhabitants, on some of whom the imposition amounts to one hundred and fifty, on others to one hundred or eighty pounds of meat, according to their abilities; so that they agree amongst themselves to furnish a larger or a smaller sized ox, no matter which, as each animal is weighed. Their conveyance to the army is then intrusted to some farmers and drovers. The farmers are allowed about a dollar a day; and their expenses, as well as those of the cattle, are paid them on their return, according to the receipts, which they are obliged to produce, from the inn-keepers where they have halted. The usual price is from threepence to fivepence, English, per night for each ox, and in proportion at noon. . . .

(21) François Jean Chastellux, *Travels in North America, in the years 1780, 1781, 1782.* London, 1787. Vol. I, p. 58.

Chapter VIII

ECONOMIC LIFE UNDER THE CONFEDERATION

22. The State of the Nation in 1787

In order to make a true estimate of the magnitude of agriculture, we must remember, that it is encouraged by few or no duties on the importation of rival produce. . . . That the number of people employed in agriculture is at least nine parts in ten of the inhabitants of America . . . that the value of property, occupied by agriculture, is far greater than that employed in every other way—that the settlement of our waste lands, and subdividing our improved farms, are every year increasing the pre-eminence of the agriculture interest. . . .

The commerce of America, including our exports, imports, shipping, manufactures, and fisheries, may be properly considered as forming one interest. So uniformed and mistaken have many of us been, that it has been stated as our greatest object; and it is feared, that it is yet believed by some to be the most important interest of New-England. But calculations carefully made do not raise the proportion of property, or the number of men employed in manufactures, fisheries, navigation, and trade, to one-eighth of the property and people occupied by agriculture, even in that commercial quarter of the Union. . . . But the disproportion is much greater, taking the union at large, for several of the states have little commerce, and no manufactures—others have no commerce, and scarcely manufacture anything. The timber, iron, cordage, and many other articles necessary for building ships to fish or trade—nine parts in ten of their cargoes—the subsistence of the manufacturers, and much of their raw materials are the produce of our lands. . . . The United States have yet few factories to throw into the scale against the landed interest. We have in our lands full employment for our present inhabitants, and instead of sending colonies to newly discovered islands, we have adjoining townships and

(22) Tench Coxe, *A View of the United States of America.* Philadelphia, 1794. pp. 6–8, 26–30.

counties, whose vacant fields await the future increase of our people. . . .

The commercial citizens of America have for some time felt the deepest distress. Among the principal causes of their unhappy situation were the inconsiderate spirit of adventure to this country, which pervaded almost every kingdom in Europe; and the prodigious credit there given to our merchants on the return of peace. To these may be added, the high spirits, and the golden dreams, which naturally followed such a war, closed with so much honour and success. . . . But the enjoyment of these substantial blessings is rendered precarious by domestic circumstances. Scarcely held together by a weak and half-formed federal constitution, the powers of our national government are unequal to the complete execution of any salutary purpose, foreign or domestic. The evils resulting from this unhappy state of things have again shocked our reviving credit, produced among our people alarming instances of disobedience to the laws, and, if not remedied, must destroy our property, liberties, and peace. Foreign powers, however disposed to favour us, can expect neither satisfaction nor benefit from treaties with Congress, while it is unable to enforce them. We can therefore hope to secure no privileges from them, if matters be thus conducted. We must immediately remedy this defect, or suffer exceedingly. Desultory commercial acts of the legislatures, formed on the impression of the moment, proceeding from no uniform or permanent principles, clashing with the laws of other states, and opposing those made in the preceding year by the enacting state, can no longer be supported, if we be to continue one people . . . Commerce is more affected by the distractions and evils arising from the uncertainty, opposition, and errours, of our trade laws, than by the restrictions of any one power in Europe. A negative upon all commercial acts of the legislatures, if granted to Congress, would be perfectly safe, and must have an excellent effect . . . Congress would thus be enabled to prevent every regulation, that might oppose the general interest; and by restraining the states from impolitic laws, would gradually bring our national commerce to order and perfection. . . .

23. Establishing the Land System

Friday, *May* 20, 1785.

An Ordinance for ascertaining the Mode of disposing of Lands in the Western Territory.

Be it ordained by the United States in Congress assembled, that the territory ceded by individual states to the United States, which has been purchased of the Indian inhabitants, shall be disposed of in the following manner:

A surveyor from each state shall be appointed by Congress or a committee of the states, who shall take an oath for the faithful discharge of his duty, before the geographer of the United States, who is hereby empowered and directed to administer the same; and the like oath shall be administered to each chain carrier, by the surveyor under whom he acts. . . .

The surveyors, as they are respectfully qualified, shall proceed to divide the said territory into townships of 6 miles square, by lines running due north and south, and others crossing these at right angles. . . . And each surveyor shall be allowed and paid at the rate of two dollars for every mile, in length, he shall run, including the wages of chain carriers, markers, and every other expense attending the same.

The first line, running due north and south as aforesaid, shall begin on the river Ohio, at a point that shall be found to be due north from the western termination of a line, which has been run as the southern boundary of the state of Pennsylvania; and the first line, running east and west, shall begin at the same point, and shall extend throughout the whole territory. . . . The geographer shall designate the townships, or fractional parts of townships, by numbers progressively from south to north; always beginning each range with No. 1; and the ranges shall be distinguished by their progressive numbers to the westward. The first range, extending from the Ohio to the lake Erie, being marked No. 1. The geographer shall personally attend to the running of the first east and west line; and shall take the latitude of the extremes of the first north and south line, and of the mouths of the principal rivers.

The lines shall be measured with a chain; shall be plainly

(23) *Journals of Congress: containing their proceedings from November 1, 1784, to November 4, 1785.*

marked by chaps on the trees, and exactly described on a plat; whereon shall be noted by the surveyor, at their proper distances, all mines, salt-springs, salt-licks and mill-seats, that shall come to his knowledge; and all water-courses, mountains and other remarkable and permanent things, over and near which such lines shall pass, and also the quality of the lands.

The plats of the townships respectively, shall be marked by subdivisions into lots of one mile square, or 640 acres, in the same direction as the external lines, and numbered from 1 to 36; always beginning the succeeding range of the lots with the number next to that with which the preceding one concluded. And where, from the causes before-mentioned, only a fractional part of a township shall be surveyed, the lots, protracted thereon, shall bear the same numbers as if the township had been entire. And the surveyors, in running the external lines of the townships, shall, at the interval of every mile, mark corners for the lots which are adjacent, always designating the same in a different manner from those of the townships. . . .

There shall be reserved for the United States out of every township the four lots, being numbered 8, 11, 26, 29, and out of every fractional part of a township, so many lots of the same numbers as shall be found thereon, for future sale. There shall be reserved the lot No. 16, of every township, for the maintenance of public schools, within the said township; also one-third part of all gold, silver, lead and copper mines, to be sold, or otherwise disposed of as Congress shall hereafter direct. . . .

24. Economic Causes of the Constitution

During the war of the revolution, our commerce was suspended; after the peace, in 1783, our trade continued to languish; it had to contend with domestic and foreign obstacles; foreign nations entertained a jealousy concerning these states; at home a rivalship was prevalent amongst the several members of the confederacy, and checked the prosperity of the nation. Each of the thirteen independent sovereignties, contemplated its own intermediate interests; some of the states declared the commercial intercourse with them, to be equally free to all nations, and they cautiously avoided to lay duties on such merchandise as was subject to them, when imported into other states. To

(24) Adam Seybert, *Statistical Annals*. Philadelphia, 1818. pp. 57–59.

provide a fund to discharge the public debt, and to pay the arrears due to the soldiers who fought the battles of the revolution, it was proposed in Congress, during the operation of the articles of Confederation, to lay a duty of five per centum ad valorem, on foreign merchandise imported into the United States; the opposition of the state of Rhode Island, was, of itself, adequate to defeat this plan. When the state of Pennsylvania laid a duty on foreign merchandise imported, the state of New-Jersey, equally washed by the waters of the Delaware River, admitted the same articles free of duty: they could easily be smuggled into one state from the other. The several states laid different rates of duty on foreign tonnage: in some one shilling sterling per ton was imposed on vessels, which in other states paid three shillings sterling per ton. Such was the misunderstanding amongst the several states; there were no general commercial regulations for them, nor could the Congress enforce any, unless they were adopted by every member of the federation; the opposition of any one of the states, could prevent the passage of any act on the subject.

Other nations were well disposed to take advantage of our domestic embarrassments. Very soon after the conclusion of the American war, Great Britain was not alone opposed to our commercial prosperity; France and Spain were equally jealous of it; we were by these nations considered as their rival, possessed of the means and the character to dispute the benefits arising from navigation. Our intercourse with all these nations, was placed under restrictions; their connection with us was measured by the scale of interest. After France and Spain had become parties to our revolutionary war, they consented to admit foreign vessels into their West India ports, whereby they were enabled to man their fleets, and to obtain subsistence for the inhabitants. Immediately after the preliminaries of the peace were signed, in 1783, these nations abridged, and very soon thereafter, abolished the privileges, they had granted to foreigners in this branch of their trade. By an *arret* of the 30th of August, 1784, foreign vessels, of more than sixty tons, were not permitted to enter the ports of the French West Indies; the merchandise that was allowed to be entered, was enumerated and very limited; it consisted principally of articles of first necessity, and in return for the American cargoes, molasses, rum, and

such merchandise as had been imported from France could only be taken away. Recently the same system of restrictions has been again adopted.

Soon after the peace, in 1783, the United States offered to enter into treaties of commerce with Great Britain, France, Spain and Portugal; all our overtures were, under various pretexts, rejected.

Surrounded by difficulties, it became a paramount duty to cure the palsy which afflicted us at home. It was manifest, that general regulations were essential to the safety and welfare of the Union; it was absolutely necessary, that the power to regulate and control our intercourse with foreign nations should be confided to Congress alone; and it was that conviction, which, principally, induced the people of the United States, to call the convention to revise the articles of the confederation.

By the Constitution of the United States, Congress has power,

"To regulate commerce with foreign nations, and among the several states, and with the Indian tribes."

"No tax or duty shall be laid on articles exported from any state; no preference shall be given, by any regulation of commerce or revenue, to the ports of one state over that of another; nor shall vessels, bound to or from one state, be obliged to enter, clear or pay duties in another."

"No state shall, without the consent of Congress, lay any impost or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws; and the net produce of all duties and imposts, laid by any state, on imports or exports, shall be for the use of the Treasury of the United States, and all such laws shall be subject to the revision and control of Congress."

The adoption of our present constitution, stamped upon us the characters of a nation; that instrument secured domestic tranquillity, and paved the way for amicable relations with foreign powers: at home it was succeeded by general prosperity; abroad, it gained for us the respect of foreign powers. . . .

Chapter IX

A STRONG CENTRAL GOVERNMENT

25. Hamilton's Report on the Public Credit, 1790

The Secretary of the Treasury, in obedience to the resolution of the House of Representatives of the twenty-first day of September last, has, during the recess of Congress, applied himself to the consideration of a proper plan for the support of the public credit, with all the attention which was due to the authority of the House, and to the magnitude of the object. . . .

In the opinion of the Secretary, the wisdom of the House, in giving their explicit sanction to the proposition which has been stated, cannot but be applauded by all who will seriously consider and trace, through their obvious consequences, these plain and undeniable truths:

That exigencies are to be expected to occur, in the affairs of nations, in which there will be a necessity for borrowing;

That loans in times of public danger, especially from foreign war, are found an indispensable resource, even to the wealthiest of them;

And that in a country which, like this, is possessed of little active wealth, or, in other words, little moneyed capital, the necessity for that resource must, in such emergencies, be proportionably urgent.

And as, on the one hand, the necessity for borrowing in particular emergencies cannot be doubted, so, on the other, it is equally evident, that, to be able to borrow upon good terms, it is essential that the credit of a nation should be well established.

For, when the credit of a country is in any degree questionable, it never fails to give an extravagant premium, in one shape or another, upon all the loans it has occasion to make. Nor does the evil end here; the same disadvantage must be sustained upon whatever is to be bought on terms of future payment.

From this constant necessity of borrowing and buying dear,

(25) *Reports of the Secretary of the Treasury of the United States.* Washington, 1837. Vol. I, pp. 3–4, 13–14, 27.

it is easy to conceive how immensely the expenses of a nation, in a course of time, will be augmented by an unsound state of the public credit. . . .

If the maintenance of public credit, then, be truly so important the next inquiry which suggests itself is, by what means it is to be effected. The ready answer to which question is, by good faith, by a punctual performance of contracts. States, like individuals, who observe their engagements, are respected and trusted; while the reverse is the fate of those who pursue an opposite conduct. . . .

The liquidated debt, traced to its origin, falls under two principal discriminations: one relating to loans, the other to services performed and articles supplied. The part arising from loans was at first made payable at fixed periods, which have long since elapsed, with an early option to lenders, either to receive back their money at the expiration of those periods, or to continue it at interest, till the whole amount of continental bills circulating should not exceed the sum in circulation at the time of each loan. This contingency, in the sense of the contract, never happened; and the presumption is, that the creditors preferred continuing their money indefinitely at interest, to receiving it in a depreciated and depreciating state.

The other parts of it were chiefly for objects which ought to have been paid for at the time—that is, when the services were performed, or the supplies furnished; and were not accompanied with any contract for interest.

But by different acts of Government and administration, concurred in by the creditors, these parts of the debt have been converted into a capital, bearing an interest of six per cent. per annum, but without any definite period of redemption. . . .

Persuaded, as the Secretary is, that the proper funding of the present debt will render it a national blessing, yet he is so far from acceding to the position in the latitude in which it is sometimes laid down, that "public debts are public benefits"—a position inviting to prodigality, and liable to dangerous abuse—that he ardently wishes to see it incorporated, as a fundamental maxim in the system of public credit of the United States, that the creation of debt should always be accompanied with the means of extinguishment. This he regards as the true secret for rendering public credit immortal. And he presumes that it is

difficult to conceive a situation in which there may not be an adherence to the maxim. At least, he feels an unfeigned solicitude that this may be attempted by the United States, and that they may commence their measures for the establishment of credit with the observance of it. . . .

26. Hamilton's Report on Manufactures, 1791

Iron

The manufactures of this article are entitled to pre-eminent rank. None are more essential in their kinds, nor so extensive in their uses. They constitute, in whole, or in part, the implements or the materials, or both, of almost every useful occupation. Their instrumentality is everywhere conspicuous.

It is fortunate for the United States that they have peculiar advantages for deriving the full benefit of this most valuable material and they have every motive to improve it with systematic care. It is to be found in various parts of the United States in great abundance, and of almost every quality; and fuel, the chief instrument in manufacturing it, is both cheap and plenty. This particularly applies to charcoal; but there are productive coal mines already in operation, and strong indications that the material is to be found in abundance in a variety of other places.

The inquiries to which the subject of this report has led have been answered with proofs, that manufactories of iron, though generally understood to be extensive, are far more so than is commonly supposed. The kinds in which the greatest progress has been made have been mentioned in another place, and need not be repeated; but there is little doubt that every other kind, with due cultivation, will rapidly succeed. It is worthy of remark that several of the particular trades of which it is the basis are capable of being carried on without the aid of large capitals.

Iron works have greatly increased in the United States, and are prosecuted with much more advantage than formerly. The average price before the Revolution was about $64 per ton; at present it is about $80,—a rise which is chiefly to be attributed to the increase of manufactures of the material. . . .

(26) *Reports of the Secretary of the Treasury of the United States.* Washington, 1837. Vol. I, pp. 118–130.

Steel is a branch which has already made a considerable progress, and it is ascertained that some new enterprises on a more extensive scale have been lately set on foot. . . .

The United States already in a great measure supply themselves with nails and spikes. They are able, and ought certainly to do it entirely. The first and most laborious operation in this manufacture is performed by water-mills; and of the persons afterwards employed, a great proportion are boys, whose early habits of industry are of importance to the community, to the present support of their families, and to their own future comfort. It is not less curious than true that, in certain parts of the country, the making of nails is an occasional family manufacture. . . .

The implements of husbandry are made in several States in great abundance. In many places it is done by the common blacksmiths. And there is no doubt that an ample supply for the whole country can with great ease be procured among ourselves.

Various kinds of edged tools, for the use of mechanics, are also made; and a considerable quantity of hollow wares,—though the business of castings has not yet attained the perfection which might be wished. It is, however, improving, and as there are respectable capitals in good hands embarked in the prosecution of those branches of iron manufactories, which are yet in their infancy, they may all be contemplated as objects not difficult to be acquired. . . .

Fire-arms, and other military weapons, may, it is conceived, be placed without inconvenience in the class of articles rated at 15%. There are already manufactories of these articles, which only require the stimulus of a certain demand to render them adequate to the supply of the United States. . . .

Manufactures of steel generally, or of which steel is the article of chief value, may with advantage be placed in the class of goods rated at 7½%. As manufactures of this kind have not yet made any considerable progress, it is a reason for not rating them as high as those of iron; but as this material is the basis of them, and as their extension is not less practicable than important, it is desirable to promote it by a somewhat higher duty than the present. . . .

Copper

The manufactures of which this article is susceptible are also of great extent and utility. Under this description, those of brass, of which it is the principal ingredient, are intended to be included.

The material is a natural production of the country. Mines of copper have actually been wrought, and with profit to the undertakers, though it is not known that any are now in this condition. And nothing is easier than the introduction of it from other countries on moderate terms and in great plenty.

Coppersmiths and brassfounders, particularly the former, are numerous in the United States,—some of whom carry on business to a respectable extent. . . .

Lead

There are numerous proofs that this material abounds in the United States, and requires little to unfold it to an extent more than equal to every domestic occasion. A prolific mine of it has long been open in the southwestern parts of Virginia, and under a public administration, during the late war, yielded a considerable supply for military use. This is now in the hands of individuals, who not only carry it on with spirit, but have established manufactories of it at Richmond, in the same State. . . .

Fossil Coal

This, as an important instrument of manufactures, may without impropriety be mentioned among the subjects of this report. . . .

It is known that there are several coal mines in Virginia, now worked; and appearances of their existence are familiar in a number of places. . . .

Wood

Several manufactures of this article flourish in the United States. Ships are nowhere built in greater perfection, and cabinet wares generally are made little, if at all, inferior to those of Europe. Their extent is such as to have admitted of considerable exportation. . . .

Skins

There are scarcely any manufactories of greater importance than of this article. Their direct and very happy influence upon agriculture, by promoting the raising of cattle of different kinds, is a very material recommendation.

It is pleasing, too, to observe the extensive progress they have made in their principal branches, which are so far matured as almost to defy foreign competition. Tanneries, in particular, are not only carried on as a regular business in numerous instances, and in various parts of the country, but they constitute, in some places, a valuable item of incidental family manufactures. . . .

Grain

Ardent spirits and malt liquors are, next to flour, the two principal manufactures of grain. The first has made a very extensive, the last a considerable progress in the United States. In respect to both, an exclusive possession of the home market ought to be secured to the domestic manufacturers, as fast as circumstances will admit. Nothing is more practicable, and nothing more desirable. . . .

The consumption of Geneva, or gin, in this country, is extensive. It is not long since distilleries of it have grown up among us to any importance. They are now becoming of consequence, but being still in their infancy, they require protection. . . .

Flax and Hemp

Manufactures of these articles have so much affinity to each other, and they are so often blended, that they may with advantage be considered in conjunction. The importance of the linen branch to agriculture; its precious effects upon household industry; the ease with which the materials can be produced at home to any requisite extent; the great advances which have been already made in the coarser fabrics of them, especially in the family way,—constitute claims of peculiar force to the patronage of government. . . .

Cotton

There is something in the texture of this material which adapts it in a peculiar degree to the application of machines. The signal

utility of the mill for spinning of cotton, not long since invented in England, has been noticed in another place; but there are other machines scarcely inferior in utility, which, in the different manufactories of this article, are employed either exclusively or with more than ordinary effect. This very important circumstance recommends the fabrics of cotton in a more particular manner to a country in which a defect of hands constitutes the greatest obstacle to success.

The variety and extent of the uses to which the manufactures of this article are applicable is another powerful argument in their favor. . . .

Manufactories of cotton goods not long since established at Beverly, in Massachusetts, and at Providence, in the State of Rhode Island, and conducted with a perseverance corresponding with the patriotic motives which began them, seem to have overcome the first obstacles to success,—producing corduroys, velverets, fustians, jeans, and other similar articles, of a quality which will bear a comparison with the like articles brought from Manchester. The one at Providence has the merit of being the first in introducing into the United States the celebrated cotton mill, which not only furnishes materials for that manufactory itself, but for the supply of private families for household manufacture.

Other manufactories of the same material as regular businesses have also been begun at different places in the State of Connecticut, but all upon a smaller scale than those above mentioned. Some essays are also making in the printing and staining of cotton goods. There are several small establishments of this kind already on foot.

Wool

In a country the climate of which partakes of so considerable a proportion of winter as that of a great part of the United States, the woollen branch cannot be regarded as inferior to any which relates to the clothing of the inhabitants.

Household manufactures of this material are carried on in different parts of the United States to a very interesting extent, but there is only one branch which as a regular business can be said to have acquired maturity. This is the making of hats.

Hats of wool, and of wool mixed with fur, are made in large

quantities in different States, and nothing seems wanting but an adequate supply of materials to render the manufacture commensurate with the demand.

A promising essay towards the fabrication of cloths, cassimeres and other woolen goods, is likewise going on at Hartford, in Connecticut. Specimens of the different kinds which are made, in the possession of the secretary, evince that these fabrics have attained a very considerable degree of perfection. . . .

Silk

The production of this article is attended with great facility in most parts of the United States. Some pleasing essays are making in Connecticut as well towards that as towards the manufacture of what is produced. Stockings, handkerchiefs, ribbons and buttons are made, though as yet but in small quantities.

A manufactory of lace, upon a scale not very extensive, has been long memorable at Ipswich, in the State of Massachusetts. . . .

Glass

The materials for making glass are found everywhere. In the United States there is no deficiency of them. . . .

Gunpowder

No small progress has been of late made in the manufacture of this very important article. It may, indeed, be considered as already established, but its high importance renders its further extension very desirable. . . .

Paper

Manufactories of paper are among those which are arrived at the greatest maturity in the United States, and are most adequate to national supply. That of paper-hangings is a branch in which respectable progress has been made. . . .

Printed Books

The great number of presses disseminated throughout the Union seem to afford an assurance that there is no need of being indebted to foreign countries for the printing of the books which are used in the United States. . . .

Refined Sugars and Chocolate

Are among the number of extensive and prosperous domestic manufactures. . . .

There is reason to believe that the progress of particular manufactures has been much retarded by the want of skilful workmen. And it often happens that the capitals employed are not equal to the purposes of bringing from abroad workmen of a superior kind. Here, in cases worthy of it, the auxiliary agency of Government would in all probability be useful. There are also valuable workmen in every branch who are prevented from emigrating solely by the want of means. Occasional aids to such persons, properly administered, might be a source of valuable acquisitions to the country.

The propriety of stimulating by rewards the invention and introduction of useful improvements, is admitted without difficulty. . . .

Chapter X

INTERNATIONAL RELATIONS AND THE WAR OF 1812

27. Orders and Decrees

In Senate of the U. S., April 16, 1808.

Mr. Anderson, from the committee to whom was referred, on the 4th instant, the correspondence between Mr. Monroe and Mr. Canning, and between Mr. Madison and Mr. Rose, relative to the attack made upon the frigate Chesapeake by the British ship of war Leopard; and also the communications made to the Senate by the President of the United States, on the 30th day of March last, containing a letter from Mr. Erskine to the Secretary of State, and a letter from Mr. Champagny to General Armstrong, reported:

That, on a review of the several orders, decrees, and decisions of Great Britain and France, within the period of the existing war, it appears that, previous to the measures referred to in the letters from Mr. Erskine to the Secretary of State, and from Mr. Champagny to General Armstrong, various and heavy injuries have been committed against the neutral commerce and navigation of the United States under the following heads:

1st. The British order of June, 1803, unlawfully restricting the trade of the United States with a certain portion of the unblockaded ports of her enemies, and condemning vessels with innocent cargoes, on a return from ports where they had deposited contraband articles.

2d. The capture and condemnation, in the British courts of admiralty, of American property, on a pretended principle, debarring neutral nations from a trade with the enemies of Great Britain interdicted in time of peace. The injuries suffered by the citizens of the United States, on his head, arose, not from any

(27) *American State. Papers. Foreign Relations.* Washington, 1832. Vol. III, pp. 219-220.

public order of the British Council, but from a variation in the principle upon which the courts of admiralty pronounced their decisions. These decisions have, indeed, again varied, without any new orders of council being issued; and in the higher courts of admiralty some of the decisions, which had formed the greatest cause for complaint, have been reversed, and the property restored. There still remains, however, a heavy claim of indemnity for confiscations which were made during the period of these unwarrantable decisions, and for which all negotiation has hitherto proved unavailing.

3d. Blockades notified to the minister of the United States at London, and thence made a ground of capture against the trade of the United States, in entire disregard of the law of nations, and even of the definition of legal blockades, laid down by the British Government itself. Examples of these illegitimate blockades will be found in the notifications of the blockade of May 16, 1806, of the coast from the river Elbe to Brest, inclusive; blockade of 11th May, 1807, expounded 19th June, 1807, of the Elbe, Weser, and Ems, and the coast between the same; blockade 11th of May, 1807, of the Dardanelles and Smyrna; blockade of 8th January, 1808, of Carthagena, Cadiz, and St. Lucar, and of all the intermediate ports between Carthagena and St. Lucar, comprehending a much greater extent of coast than the whole British navy could blockade according to the established law of nations.

4th. To these injuries, immediately authorized by the British Government, might be added other spurious blockades by British naval commanders, particularly that of the island of Curacoa, which, for a very considerable period, was made a pretext for very extensive spoliations on the commerce of the United States.

5th. The British proclamation of October last, which makes it the duty of the British officers to impress from American merchant vessels all such of their crews as might be taken or mistaken for British subjects; those officers being the sole and absolute judges in the case.

For the decrees and acts of the French Government violating the maritime law of nations, in respect to the United States, the committee refer to the instances contained in the report of the Secretary of State, January 25, 1806, to the Senate, in one of which, viz: a decree of the French General Ferrand, at St.

Domingo, are regulations sensibly affecting the neutral and commercial rights of the United States.

The French act, next in order of time, is the decree of November 21, 1806, declaring the British isles in a state of blockade, and professing to be a retaliation on antecedent proceedings of Great Britain, violating the law of nations.

This decree was followed, first, by the British order of January, 1807, professing to be a retaliation on that decree, and subjecting to capture the trade of the United States, from the port of one belligerent to a port of another; and, secondly, by the orders of November last, professing to be a further retaliation on the same decree, and prohibiting the commerce of neutrals with the enemies of Great Britain, as explained in the aforesaid letter of Mr. Erskine.

These last British orders again have been followed by the French decree of December 17, purporting to be a retaliation on the said orders, and to be put in force against the commerce of the United States, as stated in the aforesaid letter of Mr. Champagny.

The committee forbear to enter into a comparative view of these proceedings of the different belligerent Powers, deeming it sufficient to present the materials from which it may be formed. They think it their duty, nevertheless, to offer the following remarks, suggested by a collective view of the whole:

The injury and dangers resulting to the commerce of the United States from the course and increase of these belligerent measures, and from similar ones adopted by other nations, were such as first to induce the more circumspect of our merchants and ship-owners no longer to commit their property to the high seas, and at length to impose on Congress the indispensable duty of interposing some legislative provision for such an unexampled state of things.

Among other expedients, out of which a choice was to be made, may be reckoned—

1st. A protection of commerce by ships of war.

2d. A protection of it by self-armed vessels.

3d. A war of offence as well as of defence.

4th. A general suspension of foreign commerce.

5th. An embargo on our vessels, mariners, and merchandise.

This last was adopted, and the policy of it was enforced, at

the particular moment, by accounts, quickly after confirmed, of the British orders of November, and by the probability that these would be followed, as has also happened by an invigorated spirit of retaliation in other belligerent Powers; the happy effect of the precaution is demonstrated by the well-known fact that the ports of Europe are crowded with captured vessels of the United States, unfortunately not within the reach of the precaution.

28. The Embargo Act

An Act *laying an Embargo on all ships and vessels in the ports and harbors of the United States.*

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That an embargo be, and hereby is laid on all ships and vessels in the ports and places within the limits or jurisdiction of the United States, cleared or not cleared, bound to any foreign port or place; and that no clearance be furnished to any ship or vessel bound to such foreign port or place, except vessels under the immediate direction of the President of the United States: and that the President be authorized to give such instructions to the officers of the revenue, and of the navy and revenue cutters of the United States, as shall appear best adapted for carrying the same into full effect: *Provided,* that nothing herein contained shall be construed to prevent the departure of any foreign ship or vessel, either in ballast, or with the goods, wares and merchandise on board of such foreign ship or vessel, when notified of this act.

Sec. 2. *And be it further enacted,* That during the continuance of this act, no registered, or sea letter vessel, having on board goods, wares and merchandise, shall be allowed to depart from one port of the United States to any other within the same, unless the master, owner, consignee or factor of such vessel shall first give bond, with one or more sureties to the collector of the district from which she is bound to depart, in a sum of double the value of the vessel and cargo, that the said goods, wares, or merchandise shall be relanded in some port of the United States, dangers of the seas excepted, which bond, and also a certificate from the collector where the same may be relanded, shall by the collector respectively be transmitted to the Secretary

(28) Richard Peters, editor, *The Public Statutes at Large of the United States of America.* Boston, 1845–55. Vol. II, pp. 451–453.

of the Treasury. All armed vessels possessing public commissions from any foreign power, are not to be considered as liable to the embargo laid by this act.

29. Effects of the Embargo on Business in New York City

When I arrived at New York in November [1807], the port was filled with shipping, and the wharfs were crowded with commodities of every description. Bales of cotton, wool, and merchandize; barrels of pot-ash, rice, flour, and salt provisions; hogsheads of sugar, chests of tea, puncheons of rum, and pipes of wine; boxes, cases, packs and packages of all sizes and denominations, were strewed upon the wharfs and landing-places, or upon the decks of the shipping. All was noise and bustle. The carters were driving in every direction; and the sailors and labourers upon the wharfs, and on board the vessels, were moving their ponderous burthens from place to place. The merchants and their clerks were busily engaged in their counting-houses, or upon the piers. The Tontine coffee-house was filled with under-writers, brokers, merchants, traders, and politicians; selling, purchasing, trafficking, or insuring; some reading, others eagerly inquiring the news. The steps and balcony of the coffee-house were crowded with people bidding, or listening to the several auctioneers, who had elevated themselves upon a hogshead of sugar, a puncheon of rum, or a bale of cotton; and with Stentorian voices were exclaiming, *"Once, twice." "Once, twice." "Another cent." "Thank ye, gentlemen,"* or were knocking down the goods, which took up one side of the street, to the best purchaser. The coffee-house slip, and the corners of Wall and Pearl-streets, were jammed up with carts, drays, and wheelbarrows; horses and men were huddled promiscuously together, leaving little or no room for passengers to pass. Such was the appearance of this part of the town when I arrived. Everything was in motion; all was life, bustle, and activity. The people were scampering in all directions to trade with each other, and to ship off their purchases for the European, Asian, African, and West Indian markets. Every thought, look, word, and action of the multitude seemed to be absorbed by commerce; the welkin

(29) John Lambert, *Travels through Canada, and the United States of North America, in the years 1806, 1807, & 1808.* London, 1814. Vol. II, pp. 62–65.

rang with its busy hum, and all were eager in the pursuit of its riches.

But on my return to New York the following April, what a contrast was presented to my view! and how shall I describe the melancholy dejection that was painted upon the countenances of the people, who seemed to have taken leave of all their former gaiety and cheerfulness? The coffee-house slip, the wharfs and quays along South-street, presented no longer the bustle and activity that had prevailed there five months before. The port, indeed, was full of shipping; but they were dismantled and laid up. Their decks were cleared, their hatches fastened down, and scarcely a sailor was to be found on board. Not a box, bale, cask, barrel, or package, was to be seen upon the wharfs. Many of the counting-houses were shut up, or advertised to be let; and the few solitary merchants, clerks, porters, and labourers, that were to be seen, were walking about with their hands in their pockets. Instead of sixty or a hundred carts that used to stand in the street for hire, scarcely a dozen appeared, and they were unemployed; a few coasting sloops, and schooners, which were clearing out for some of the ports in the United States, were all that remained of that immense business which was carried on a few months before. The coffee-house was almost empty; or, if there happened to be a few people in it, it was merely to pass away the time which hung heavy on their hands, or to enquire anxiously after news from Europe, and from Washington: or perhaps to purchase a few bills, that were selling at ten or twelve per cent. above par. In fact, everything presented a melancholy appearance. The streets near the water-side were almost deserted, the *grass had begun to grow* upon the wharfs, and the minds of the people were tortured by the vague and idle rumours that were set afloat upon the arrival of every letter from England or from the seat of government. In short, the scene was so gloomy and forlorn, that had it been the month of September instead of April, I should verily have thought that a malignant fever was raging in the place; so desolating were the effects of the embargo, which in the short space of five months had deprived the first commercial city in the States of all its life, bustle, and activity; caused above one hundred and twenty bankruptcies; and completely annihilated its foreign commerce! . . .

Chapter XI

EARLY INDUSTRIAL PROGRESS

30. Increase in American Manufactures

One circumstance which has contributed to diminish the increase both of imports and exports, is the growth of manufactures, which has at once enlarged the home market for the raw materials, and lessened the demand of imports. . . .

Comparing the same articles of manufacture in 1810 and 1840, the increase, from $59,574,660 to $186,079,592, is 212 per cent in thirty years, or a decennial increase of 46 per cent.

The returns of manufactures made by the marshals in 1820 were still more imperfect and inaccurate. . . .

The gross annual amount of the manufactures, so far as it can be gathered from such defective returns, appears to be only $36,115,000, and the capital employed in them to $41,507,000. As this branch of industry is known to have been steadily advancing from 1810 to 1815, so great a falling off in five years as is indicated by the returns of 1820, seems to be utterly inadmissible. Without doubt it must have greatly declined after the peace of 1815, which at once raised the price of raw materials and lowered that of manufactures; but after making large allowance for these circumstances and the omissions in the returns of 1820, they do not seem sufficient to account for the great apparent difference, and a part of it seems not improbably to be referred to an over valuation of the manufactures in 1810.

Perhaps the best mode of comparing the manufactures of 1820 with those of 1840 is to compare the number of persons employed in those years; and the rather as this part of the returns is the most complete, and in the most manufacturing States makes some approach to accuracy. The number employed in 1820 was 36,705 men, 5,812 women, and 13,779 children—in all 56,296. The whole number of persons employed in 1840 was 455,668—that is, 100 to 809; which supposes the extraor-

(30) George Tucker, *Progress of the United States in Population and Wealth in Fifty Years*. New York, 1843. pp. 206–208.

dinary decennial increase of 284 per cent. After making the most liberal deduction from this estimate for the omissions in the returns of 1820, the remainder shows an advancement in this branch of industry that is without example. As a further evidence of the same fact, we find that while no other branch of our domestic exports has ever doubled since 1820, that of manufactures has increased sixfold; that is, from $2,342,000 to $12,868,840 in 1840, and $13,523,072 in 1841. . . .

31. Introduction of the Power Loom

My connection with the Cotton Manufacture takes date from the year 1811, when I met my friend Mr. Francis C. Lowell, at Edinburgh, where he had been passing some time with his family. We had frequent conversations on the subject of the Cotton Manufacture, and he informed me that he had determined, before his return to America, to visit Manchester, for the purpose of obtaining all possible information on the subject, with a view to the introduction of the improved manufacture in the United States. I urged him to do so, and promised him my co-operation. He returned in 1813. He and Mr. Patrick T. Jackson, came to me one day on the Boston exchange, and stated that they had determined to establish a Cotton manufactory, that they had purchased a water power in Waltham, (Bemis's paper mill,) and that they had obtained an act of incorporation, and Mr. Jackson had agreed to give up all other business and take the management of the concern. . . .

The power loom was at this time being introduced in England, but its construction was kept very secret, and after many failures, public opinion was not favorable to its success. Mr. Lowell had obtained all the information which was practicable about it, and was determined to perfect it himself. He was for some months experimenting at a store in Broad street, employing a man to turn a crank. It was not until the new building at Waltham was completed, and other machinery was running, that the first loom was ready for trial. Many little matters were to be overcome or adjusted, before it would work perfectly. Mr. Lowell said to me that he did not wish me to see it until it was complete, of which he would give me notice. At length the time arrived.

(31) Nathan Appleton, *Introduction of the Power Loom, and Origin of Lowell.* Lowell, 1858. pp. 7–9, 14–16.

He invited me to go out with him and see the loom operate. I well recollect the state of admiration and satisfaction with which we sat by the hour, watching the beautiful movement of this new and wonderful machine, destined as it evidently was, to change the character of all textile industry. This was in the autumn of 1814. . . .

Mr. Lowell adopted an entirely new arrangement, in order to save labor, in passing from one process to another; and he is unquestionably entitled to the credit of being the first person who arranged all the processes for the conversion of cotton into cloth, within the walls of the same building. . . .

The introduction of the cotton manufacture in this country, on a large scale, was a new idea. What would be its effect on the character of our population was a matter of deep interest. The operatives in the manufacturing cities of Europe, were notoriously of the lowest character, for intelligence and morals. The question therefore arose, and was deeply considered, whether this degradation was the result of the peculiar occupation, or of other and distinct causes. We could not perceive why this peculiar description of labor should vary in its effects upon character from all other occupation.

There was little demand for female labor, as household manufacture was superseded by the improvements in machinery. Here was in New England a fund of labor, well educated and virtuous. It was not perceived how a profitable employment has any tendency to deteriorate the character. The most efficient guards were adopted in establishing boarding houses, at the cost of the Company, under the charge of respectable women, with every provision for religious worship. Under these circumstances, the daughters of respectable farmers were readily induced to come into these mills for a temporary period. . . .

The following are the changes in the price of the article first manufactured at Waltham.

1816	.30 cents per yard
1819	.21 cents per yard
1826	.13 cents per yard
1829	.8½ cents per yard
1843	.6½ cents per yard

From that time, the price has fluctuated with the price of cotton, from 7 to 9 cents per yard.

32. Further Improvements in Manufacturing Processes

Francis McCully . . . has recently made an important simplification in the process of spinning cotton. He has invented an improvement of the machine called a throstle, which, we are told by competent judges, is likely to work a great revolution in the cotton manufacturing business. The new process requires less than half the power required by the ordinary machine, takes less oil, dispenses with the use of bands, makes a smaller amount of waste, enables one person to attend a larger number of spindles, yet with all its economy in these several respects, produces more yarn, and of a better quality. . . .

Brown and Elton of Waterbury, (Conn.,) have in operation an improved machine for the manufacture of pins, which turns out two barrels of pins per day. A barrel contains 4,000,000 pins, consequently 8,000,000 are manufactured in this little machine each day, or 48,000,000 a week, and 15,024,000,000 per annum, deducting 52 days for Sundays. The machine is perfect and simple in its operation. The wire is run into the machine from a reel, cut to the requisite length, pointed and headed, and made a finished pin by the one simple operation. From this machine they fall into the hopper of the sticking machine, as it is called, in which they are arranged and stuck upon the papers, and come out perfect, only requiring to be packed to be ready for a market. This latter machine, tended by a girl, will do the work of thirty persons by the old hand process. There are four other machines in the United States; a few more would supply not only enough for home consumption, but export to foreign countries, and at a large profit, after paying freight and duty, as it would be out of the question for the "little pin-headers" of England to compete with the ingenious Yankee contrivance. . . .

The extensive demand for iron, both in Europe and in this country, not only for railroads and ships, but an innumerable variety of purposes, has stimulated the inventive genius of some American, and the result is as important as it is gratifying. Experiments have been made by Mr. W. C. Green of New Jersey, at the Boston Iron Works of Sherman and Atwater of the city of New York, whose extensive iron foundries are in New Jersey. Mr. Green's improvement is in the process of puddling the iron

(32) *Hunt's Merchants' Magazine,* Vol. XIV (1846), pp. 154–159.

from the pig to the bar. Instead of using the pig iron, which costs about $35 per ton, he is enabled to use a large portion of the ore, which costs but $2.50 per ton, by which he effects, in labor and material, a saving of more than 33 per cent, and he gives a far better quality of iron than that which is obtained from the pig; as much better in appearance as china is better than earthenware. . . .

The Rifle Factory of Mr. Eli Whitney, situated at the foot of East Rock, on the Hartford and New Haven Turnpike, was founded by the father of the present proprietor, in the year 1778, and was long used by him in the manufacture of arms for the United States Government. . . . The rifles, when finished, weigh ten and a half pounds each. A striking advantage gained by the extended use of machinery in making the different parts of the rifle is the perfect uniformity of the work. So accurately and in so many different ways is every part, even the most minute, gauged, that in putting together the whole, no delay is occasioned from trifling inaccuracies in fitting. Each screw, spring, sight, top-board, or any other piece whatever, is so nicely wrought that it may be applied to and will fit any one of the three thousand rifles made in the course of the year as exactly as it does the one of which it finally forms a part. . . .

Chapter XII

THE WESTWARD MOVEMENT

33. Classes of Settlers

All who have paid attention to the progress of new settlements, agree in stating, that the first possession of the woods in America, was taken by a class of hunters, commonly called backwoodsmen. These, in some instances, purchased the soil from the government, and in others, placed themselves on the public lands without permission. Many of them, indeed, settled new territories before the ground was surveyed, and before public sales commenced. Formerly pre-emption rights were given to these squatters; but the irregularities and complicacy that the practice introduced into the business of the landoffice, have caused its being given up, and squatters are now obliged to make way for regular purchasers. The improvements of a backwoodsman are usually confined to building a rude log cabin, clearing and fencing a small piece of ground for raising Indian corn. A horse, a cow, a few hogs, and some poultry, comprise his livestock; and his farther operations are performed with his rifle. The formation of a settlement in his neighbourhood is hurtful to the success of his favourite pursuit, and is the signal for his removing into more remote parts of the wilderness. In the case of his owning the land on which he has settled, he is contented to sell it at a low price, and his establishment, though trifling, adds much to the comfort of his successor. The next class of settlers differ from the former in having considerably less dependence on the killing of game, in remaining in the midst of a growing population, and in devoting themselves more to agriculture. A man of this class proceeds on a small capital; he either enlarges the clearings begun in the woods by his backwoodsmen predecessor, or establishes himself on a new site. On his arrival in a settlement, the neighbours unite in assisting him to erect a cabin for the reception of his family. Some of them

(33) James Flint, *Letters from America.* Edinburgh and London, 1822. pp. 206–209.

cut down the trees, others drag them to the spot with oxen, and the rest build up the logs. In this way a house is commonly reared in one day. For this well-timed assistance no immediate payment is made, and he acquits himself by working to his neighbours. It is not in his power to hire labourers, and must depend therefore on his own exertions. If his family is numerous and industrious, his progress is greatly accelerated. He does not clear away the forests by dint of labour, but girdles the trees. By the second summer after this operation is performed, the foliage is completely destroyed, and his crops are not injured by the shade. He plants an orchard, which thrives and bears abundantly under every sort of neglect. His live-stock soon becomes much more numerous than that of his backwood predecessor; but, as his cattle have to shift for themselves in the woods, where grass is scanty, they are small and lean. He does not sow grass seeds to succeed his crops, so that his land, which ought to be pasturage, is overgrown with weeds. The neglect of sowing grass seeds deprives him of hay; and he has no fodder laid up for the winter except the blades of Indian corn, which are much withered, and do not appear to be nutritious food. The poor animals are forced to range the forests in winter, where they can scarcely procure any thing which is green, except the buds of underwood on which they browse.—Trees are sometimes cut down that the cattle may eat the buds. Want of shelter in the winter completes the sum of misery. Hogs suffer famine during the droughts of summer, and the frosts and snows of winter; but they become fat by feeding on the acorns and beech nuts which strow the ground in autumn. Horses are not exempted from their share in these common sufferings, with the addition of labour, which most of them are not very able to undergo. This second rate class of farmers are to be seen in the markets of towns, retailing vegetables, fruits, poultry, and dairy produce. . . . The settler of the grade under consideration, is only able to bring a small portion of his land into cultivation, his success, therefore, does not so much depend on the quantity of produce which he raises, as on the gradual increase in the value of his property. When the neighbourhood becomes more populous, he in general has it in his power to sell his property at a high price, and to remove to a new settlement, where he can purchase a more extensive tract of land, or commence farming on a larger scale than formerly.

The next occupier is a capitalist, who immediately builds a larger barn than the former, and then a brick or a frame house. He either pulls down the dwelling of his predecessor, or converts it into a stable. He erects better fences, and enlarges the quantity of cultivated land; sows down pasture fields, introduces an improved stock of horses, cattle, sheep, and these probably of the Merino breed. He fattens cattle for the market, and perhaps erects a flour-mill, or a saw-mill, or a distillery. Farmers of this description are frequently partners in the banks; members of the State assembly, or of Congress, or Justices of the Peace. The condition of the people has necessarily some relation to the age and prosperity of the settlements in which they live. In Pennsylvania, for instance the most extensive farmers are prevalent. In the earliest settled parts of Ohio and Kentucky, the first and second rate farmers are most numerous, and are mixed together. In Indiana, backwoodsmen and second rate settlers predominate. . . .

34. Results of Building the Erie Canal

The region throughout the entire line of the canal was indeed advanced in value to a great extent, through the agency of this great work. Furnishing a direct line of communication to the great metropolis of the country, the city of New York, it brought the agricultural resources of that region of country into a most valuable market, and at the same time furnished a cheap and safe line of transportation from the Atlantic sea board to the populous towns and thriving settlements which were beginning to spring up throughout the west. Villages also began to arise along the line of the canal, and became the depots of a rapidly increasing and prosperous trade. That portion of the interior of New York which had before spread out tracts of unsettled wilderness, was gradually subdued to agricultural industry, as the motives for cultivation increased by the opening of lines of transportation to new markets. The increase of canal boats along the line of the canal, with the trampling of horses, and the clattering of the machinery of canal transportation, tended to enliven a scene which had before spread out a comparative solitude. In fact, the commercial metropolis of the country, the city of New York, derived the greatest benefit from the construction of the

(34) *Hunt's Merchants' Magazine,* Vol. XIII (1845), p. 54.

work, growing out of its increased trade, both in the supply of goods to the western interior, and in its being able to receive the agricultural products of the west in return.

This magnificent work is the most prominent in the nation, and has thus far yielded a large profit. Although it has more recently come into direct competition with the railroads which have been constructed through the same region, it has, notwithstanding, maintained its own share of the business of transportation. . . .

Chapter XIII

DEVELOPMENTS IN BANKING AND FINANCE

35. Veto of the Second Bank of the United States by Andrew Jackson

The bill "to modify and continue" the act entitled "An act to incorporate the subscribers to the Bank of the United States" was presented to me on the 4th July instant. Having considered it with that solemn regard to the principles of the Constitution which the day was calculated to inspire, and come to the conclusion that it ought not to become a law, I herewith return it to the Senate, in which it originated, with my objections.

A bank of the United States is in many respects convenient for the Government and useful to the people. Entertaining this opinion, and deeply impressed with the belief that some of the powers and privileges possessed by the existing bank are unauthorized by the Constitution, subversive of the rights of the States, and dangerous to the liberties of the people, I felt it my duty at an early period of my Administration to call the attention of Congress to the practicability of organizing an institution combining all its advantages and obviating these objections. I sincerely regret that in the act before me I can perceive none of those modifications of the bank charter which are necessary, in my opinion, to make it compatible with justice, with sound policy, or with the Constitution of our country.

The present corporate body, denominated the president, directors, and company of the Bank of the United States, will have existed at the time this act is intended to take effect twenty years. It enjoys an exclusive privilege of banking under the authority of the General Government, a monopoly of its favor and support, and, as a necessary consequence, almost a monopoly of the foreign and domestic exchange. The powers, privileges, and favors bestowed upon it in the original charter, by increasing the value of the stock far above its par value, operated as a gratuity of many millions to the stockholders.

(35) J. D. Richardson, editor, *Messages and Papers of the Presidents.* Washington, 1896. Vol. II, pp. 576–578.

An apology may be found for the failure to guard against this result in the consideration that the effect of the original act of incorporation could not be certainly foreseen at the time of its passage. The act before me proposes another gratuity to the holders of the same stock, and in many cases to the same men, of at least seven millions more. This donation finds no apology in any uncertainty as to the effect of the act. On all hands it is conceded that its passage will increase at least 20 or 30 per cent more the market price of the stock, subject to the payment of the annuity of $200,000 per year secured by the act, thus adding in a moment one-fourth to its par value. It is not our own citizens only who are to receive the bounty of our Government. More than eight millions of the stock of this bank are held by foreigners. By this act the American Republic proposes virtually to make them a present of some millions of dollars. For these gratuities to foreigners and to some of our own opulent citizens the act secures no equivalent whatever. They are the certain gains of the present stockholders under the operation of this act, after making full allowance for the payment of the bonus.

Every monopoly and all exclusive privileges are granted at the expense of the public, which ought to receive a fair equivalent. The many millions which this act proposes to bestow on the stockholders of the existing bank must come directly or indirectly out of the earnings of the American people. It is due to them, therefore, if their Government sell monopolies and exclusive privileges, that they should at least exact for them as much as they are worth in open market. The value of the monopoly in this case may be correctly ascertained. The twenty-eight millions of stock would probably be at an advance of 50 per cent, and command in market at least $42,000,000, subject to the payment of the present bonus. The present value of the monopoly, therefore, is $17,000,000, and this the act proposes to sell for three millions, payable in fifteen annual installments of $200,000 each.

It is not conceivable how the present stockholders can have any claim to the special favor of the Government. The present corporation has enjoyed its monopoly during the period stipulated in the original contract. If we must have such a corporation, why should not the Government sell out the whole stock and thus secure to the people the full market value of the priv-

ileges granted? Why should not Congress create and sell twenty-eight millions of stock, incorporating the purchasers with all the powers and privileges secured in this act and putting the premium upon the sales into the Treasury?

But this act does not permit competition in the purchase of this monopoly. It seems to be predicated on the erroneous idea that the present stockholders have a prescriptive right not only to the favor but to the bounty of Government. It appears that more than a fourth part of the stock is held by foreigners and the residue is held by a few hundred of our own citizens, chiefly of the richest class. For their benefit does this act exclude the whole American people from competition in the purchase of this monopoly and dispose of it for many millions less than it is worth. This seems the less excusable because some of our citizens not now stockholders petitioned that the door of competition might be opened, and offered to take a charter on terms much more favorable to the Government and country.

But this proposition, although made by men whose aggregate wealth is believed to be equal to all the private stock in the existing bank, has been set aside, and the bounty of our Government is proposed to be again bestowed on the few who have been fortunate enough to secure the stock and at this moment wield the power of the existing institution. I can not perceive the justice or policy of this course. If our Government must sell monopolies, it would seem to be its duty to take nothing less than their full value, and if gratuities must be made once in fifteen or twenty years let them not be bestowed on the subjects of a foreign government nor upon a designated and favored class of men in our own country. It is but justice and good policy, as far as the nature of the case will admit, to confine our favors to our own fellow citizens, and let each in his turn enjoy an opportunity to profit by our bounty. In the bearings of the act before me upon these points I find ample reasons why it should not become a law.

36. Banking and Finance in 1837

The prodigious increase of State banks was the result of State legislation. From the 1st of January 1830 to the 1st of January

(36) Albert Gallatin, *Suggestions on the Banks and Currency of the Several United States.* New York, 1841. pp. 26–28.

1837, three hundred new banks were created, with a capital of one hundred and forty-five millions of dollars. This increase was undoubtedly due to the eagerness for capital applicable to commercial accommodations or other purposes. It may be ascribed in part to the expiration of the charter of the Bank of the United States, and to the anticipation of that event. It was thought necessary, in some places, to fill the chasm in capital and commercial accommodations that must follow the dissolution of that institution. The same effect had been produced in the years 1810–16, on the occurrence of the expiration of the charter of the former national bank; and in both cases the increase far exceeded the apprehended loss and the wants of the country.

The great increase of banks took place accordingly in the Western States, where capital was most wanted. During the years above mentioned, the increase in the banking capital of the North-Western States amounted to near twenty, and that of the South-Western to almost fifty-five millions of dollars.

But that increase was far beyond what might have been wanted for useful purposes. Near three-fifths of the foreign merchandize imported into the United States are imported into New York. That city is also the principal place of deposit for the sale of the domestic manufactures of the country; and it is also the centre of all the monied transactions of the United States. In the year 1837, the capital of all the banks of that city hardly exceeded twenty millions of dollars; and it was sufficient for all the legitimate operations of commerce. When an unexpected increase of the public deposits enabled and induced those banks to expand their discounts beyond their ordinary rate, that excess excited over-trading, and was applied to extraordinary and dangerous speculations.

In order to obtain or to assist in obtaining the capital wanted for the new banks, for internal improvements, and for some other miscellaneous purposes, debts were incurred by several States, amounting from 1830 to 1838 to near one hundred and fifty millions of dollars. The debt contracted by the Atlantic States was almost entirely for internal improvements; no part of it for banking purposes, and it fell little short of sixty millions. That contracted by the North-Western States amounted to about thirty-eight millions, of which thirty-one millions five hundred thousand dollars were for internal improvements, and the resi-

due for banking capital. That incurred by the South-Western States was about fifty-two millions, of which more than forty-four millions were for banking capital, and the residue for internal improvements. . . .

It may be observed, that the reason why so much more capital was applied in the South-Western than in the North-Western States to banking purposes, is to be found in the difference of capital wanted for the employment of slave and free labor respectively. The northern farmer advances no more than twelve months wages to the laborer he employs. The southern planter, who wishes to increase the product of his land, must advance the price of the slave himself, which amounts perhaps to five or six times the net product of his annual labor. The application of banking accommodation to purely agricultural purposes has accordingly been much greater, and has been attended with far more fatal effects, in the South-Western States, than in any other section of the Union. But even the State debts, created for internal improvements, have co-operated in aggravating the evils under which we now labor. Not only were their proceeds applied to purposes of which the returns were slow and uncertain, but they also supplied the means of paying balances or obtaining credits abroad. Thus, extravagant importations were encouraged, whilst, at the same time, some of those stocks became objects of speculation at home, in which individuals and banks were involved, and which proved injurious to all the parties concerned; to the States, as well as to the purchasers. Several of the States neglected to provide a revenue sufficient to pay the annual interest accruing on their debts. Additional loans were resorted to for that purpose; and occasionally forced loans were required by the States from the banks, which lessened their resources, and had a tendency to produce or to protract the suspension of specie payments. . . .

37. Gallatin's Views on Jackson's Financial Measures

The early agitation of the question respecting the renewal of the charter of the Bank of the United States, the veto of the bill passed by the two Houses of Congress for that purpose, and the removal of the public deposits long before the expiration of the

(37) Albert Gallatin, *Suggestions on the Banks and Currency of the Several United States.* New York, 1841. pp. 29–33.

charter, are the principal acts of the executive branch of the General Government which may have affected the state of the currency.

Previous to any of these, there had been an improper interference, on the part of the Treasury Department, in the choice of some of those officers whose appointment did by the charter belong exclusively to the directors of the mother bank. This, instead of strengthening, had a tendency to weaken the natural and legitimate influence of that department over the general management of the bank: it was an unfortunate and novel introduction of party feelings into the fiscal concerns of the nation.

The President had an undoubted right to put his veto on a law which renewed the charter of an institution which, in his opinion, was not constitutional. But there was no necessity for the early attack on an institution, the charter of which did not expire till two years after the end of the term for which the President had been elected.

The currency of the country was as sound in the year 1829, as may probably be expected under any system which admits the substitution of paper for the precious metals. It seems to have been unwise to interfere with this, without having previously weighed the probable consequences and without having prepared a proper substitute. The President indeed suggested the possibility, not of dispensing altogether with a national bank, but of establishing one founded on different principles. It appears, however, that he entertained only general views on the subject, and had not adopted any determinate plan of action. In point of fact, no such plan or substitute was ever offered; and the final result was to leave the currency at the mercy of State banks and State legislation.

The immediate consequences were, to encourage the creation of new State banks, to place the Government and the Bank of the United States in an unnatural hostile attitude to each other, to change the character of that institution, which could not previously be justly charged with any wilful misconduct, and to convert every discussion connected with the subject into pure party questions.

The early removal of the public deposits seems to have been unnecessary; and the reasons alleged for it were altogether insufficient. On a similar previous occasion, those deposits had

been removed only a week prior to the expiration of the charter of the former Bank of the United States. Not the slightest inconvenience was felt on that account. And it may be generally observed, that the course pursued at that time by all parties, was such that the bank expired quietly without agitating the public mind. The subject did not, as of late, absorb every other public consideration, and become the great political or party question of the country.

The specie circular, issued at a subsequent date, and which directed the payments to the Treasury for public lands, and only for public lands, to be made in specie, appears to the writer of this essay to have been improper. The order was issued several months before the suspension of specie payments by the banks. Whether the President thought the practice of paying in notes of specie-paying banks, generally acquiesced in for a period of more than forty years, to be consistent with or contrary to the constitution, the rule should have been general. It is not seen on what principle two different rules were established, and a distinction made between payments into the Treasury, on account of duties on importations, and those for purchases of public lands; between those who claimed lands, by entries according to law, or by actual settlement.

The only effect of that measure, so far as it has been ascertained, was to cause a drain of specie on the banks of New York, at a time when it was important that that point should have been strengthened. It transferred specie from the place where it was most wanted in order to sustain the general currency of the country, to places where it was not wanted at all. It thus accumulated so much in Michigan, that, whilst it was travelling from New York to Detroit, the Secretary of the Treasury was obliged to draw heavily on Michigan, in favor of New York and other sea-ports. Had no interference taken place, and had the transactions of individuals been left to their natural course, it is clear that the lands would have been paid for in Eastern funds, and that the double transmission of specie, where it took place, would at least have been avoided. . . .

But Congress, justly alarmed at that great increase of the public moneys in the Treasury, thought proper to distribute it among the several States. The propriety of this measure, and its consistancy with the spirit of the constitution, may be ques-

tioned. Subsequent events have shown that the amount intended to be withdrawn from the Treasury was too large, and that, as might have been anticipated, the revenue of the next ensuing years fell short of the current expenditures. But, viewed in reference only to the banking system and to the paper currency of the country, the process, though protracted and spread over fifteen months, was much too prompt. The Legislature was not, and could not indeed be aware, how slow and gradual the diminution of discounts must be, in order that universal distress may not ensue.

The public deposits in the city banks of New York amounted to fourteen millions of dollars. At the same time that they were ordered to be withdrawn, the state of the money market in England arrested the progressive and exaggerated credits heretofore granted to the American merchants, and on the continuance of which they had relied. The consequent necessity of making large remittances to England, whilst those expected from the South-West began to fail, and the simultaneous withdrawal of the public deposits, may be considered as the principal proximate causes of the suspension of specie payments in 1837. . . .

Chapter XIV

THE PROGRESS OF AGRICULTURE

38. Agriculture of the North and South Compared

If we take the figures of the exports of Southern production for a series of years, we may observe the progress in this respect:—

EXPORTABLE PRODUCTS OF THE SOUTH

	1820	*1830*	*1840*	*1850*	*1859*
Naval stores	$292,000	$321,019	$602,520	$1,142,713	$3,695,474
Rice	1,714,923	1,986,824	1,942,076	2,631,557	2,207,148
Tobacco	8,118,188	8,833,112	9,883,957	9,951,023	21,074,038
Sugar	1,500,000	3,000,000	5,200,000	14,796,150	31,455,241
Cotton	26,309,000	34,084,883	74,640,307	101,834,616	204,104,923
Total	$37,934,111	$48,225,838	$92,268,860	$130,356,059	$262,536,824
Number hands	1,543,688	2,009,053	2,487,355	3,119,509	4,000,000
Product per hand	$24½	$22½	$37	$43½	$65.6

The figures for naval stores, rice, and tobacco are the export values of the crops. The sugar and cotton are the values of the whole production.

The result is, that the value per head of these articles, which increased 16 per cent from 1840 to 1850, increased 50 per cent in the last nine years. It must not, however, be supposed that this was all the products of that section. On the other hand, the production of those exported articles formerly involved the purchase of food for the hands employed in the production. At present a large portion of food is raised by the same hands in addition. This is a most interesting feature of Southern industry, yet but little understood. There have been no general returns of production since 1850, but we may compare the products of leading articles as given by the census of 1850:—

(38) *Hunt's Merchants' Magazine.* Vol. XLII (1860), pp. 168–169.

	1840		1850	
	North	South	North	South
Area			1,578,737	871,458
Population	...	...	13,527,229	9,664,656
Wheat, bushels	54,748,284	30,074,998	72,607,129	27,878,815
Corn	124,988,073	252,543,802	243,013,603	349,057,501
Swine	10,084,970	16,216,323	10,343,265	20,008,948
Horses	2,097,307	2,238,362	2,284,344	2,052,375
Mules			40,341	518,990
Hay	9,402,097	846,111	12,815,484	1,023,158
Cows	7,569,022	7,402,564	3,481,617	2,833,338
Oxen			878,366	822,078
Other Cattle			4,224,628	5,469,441

These figures present facts somewhat different from the popular idea, which is, that for articles of general agriculture the North and West are much in excess of the South. The leading items of food and labor at the South, as at the North and West, are cattle, horses, mules, swine, and corn; "bacon and corn cakes," "hog and hominy" are the staples. Now the census figures show that in addition to the great export crops the South raises far more corn and pork than the other sections. The South had, in 1850, absolutely double the number of swine that the other sections held. It raised 109,000,000 bushels more corn than the whole North and West. It raised 100 bushels of corn for every black hand. The wheat was less in actual quantity; but there were raised five bushels of wheat for every white person, which is the same ratio as at the North. The South had more cattle of all kinds than the other section, and it is enabled to maintain them, because it is not compelled to house or make hay for the winter fodder, which are heavy drafts upon Northern labor imposed by the climate. The South had horses and mules, 2,571,365, and the North 2,324,685, an excess of 246,680 in favor of the South, and yet the latter States raised only 10 per cent of the hay that was raised at the North. Allowing the actual cost of making hay, in labor, &c., to be $5 per ton, the same number of cattle cost the North $44,000,000 more to keep them than at the South. The hay expense is, however, shared with the cattle of all kinds. These must be fed in the winter at the North, and that is not required at the South. In all that concerns agricultural prosperity the South has a decided advan-

tage. The larger production of hay at the North has sometimes been appealed to as an evidence of its greater agricultural wealth, whereas it is only an evidence of a more disadvantageous climate. The Southern cattle obtain the same quantity of food as those of the North, that is, a quantity sufficient for their wants, but they obtain it themselves. Nature has it always ready for them. At the North, on the other hand, men have to cut the food in the summer, cure and preserve it for the winter, when the Northern animals could not get it for themselves. . . .

39. The Economics of Slavery

The economic advantages of slavery are easily stated: they are all comprised in the fact that the employer of slaves has absolute power over his workmen, and enjoys the disposal of the whole fruit of their labours. Slave labour, therefore, admits of the most complete organization, that is to say, it may be combined on an extensive scale, and directed by a controlling mind to a single end, and its cost can never rise above that which is necessary to maintain the slave in health and strength.

On the other hand, the economical defects of slave labour are very serious. They may be summed up under the three following heads:—it is given reluctantly; it is unskilful; it is wanting in versatility.

It is given reluctantly, and consequently the industry of the slave can only be depended on so long as he is watched. The moment the master's eye is withdrawn, the slave relaxes his efforts. The cost of slave labour will therefore, in great measure, depend on the degree in which the work to be performed admits of the workmen being employed in close proximity to each other. If the work be such that a large gang can be employed with efficiency within a small space, and be thus brought under the eye of a single overseer, the expense of superintendence will be slight; if, on the other hand, the nature of the work requires that the workmen should be dispersed over an extended area, the number of overseers, and therefore, the cost of the labour which requires this supervision, will be proportionately increased. The cost of slave labour thus varies directly with the degree in which the work to be done requires dispersion of the

(39) J. E. Cairnes, *The Slave Power*. London and Cambridge, 1863. pp. 43–52.

labourers, and inversely as it admits of their concentration. Further, the work being performed reluctantly, fear is substituted for hope, as the stimulus to exertion. . . .

Secondly, slave labour is unskilful, and this, not only because the slave, having no interest in his work, has no inducement to exert his higher faculties, but because, from the ignorance to which he is of necessity condemned, he is incapable of doing so. . . .

But further, slave labour is eminently defective in point of versatility. The difficulty of teaching the slave anything is so great, that the only chance of turning his labour to profit is, when he has once learned a lesson, to keep him to that lesson for life. Where slaves, therefore, are employed there can be no variety of production. If tobacco be cultivated, tobacco becomes the sole staple, and tobacco is produced, whatever be the state of the market, and whatever be the condition of the soil. . . .

The line dividing the Slave from the Free States marks also an important division in the agricultural capabilities of North America. North of this line, the products for which the soil and climate are best adapted are cereal crops, while south of it the prevailing crops are tobacco, rice, cotton, and sugar; and these two classes of crops are broadly distinguished in the methods of culture suitable to each. The cultivation of the one class, of which cotton may be taken as the type, requires for its efficient conduct that labour should be combined and organized on an extensive scale. On the other hand, for the raising of cereal crops this condition is not so essential. Even where labour is abundant and that labour free, the large capitalist does not in this mode of farming appear on the whole to have any preponderating advantage over the small proprietor, who, with his family, cultivates his own farm, as the example of the best cultivated states in Europe proves. Whatever superiority he may have in the power of combining and directing labour seems to be compensated by the greater energy and spirit which the sense of property gives to the exertions of the small proprietor. But there is another essential circumstance in which these two classes of crops differ. A single labourer, Mr. Russell tells us, can cultivate twenty acres of wheat or Indian corn, while he cannot manage more than two of tobacco, or three of cotton. It appears from this that tobacco and cotton fulfil that condition

which we saw was essential to the economical employment of slaves—the possibility of working large numbers within a limited space; while wheat and Indian corn, in the cultivation of which the labourers are dispersed over a wide surface, fail in this respect. We thus find that cotton, and the class of crops of which cotton may be taken as the type, favour the employment of slaves in the competition with peasant proprietors in two leading ways: first, they need extensive combination and organization of labour—requirements which slavery is eminently calculated to supply, but in respect to which the labour of peasant proprietors is defective; and secondly, they allow of labour being concentrated, and thus minimize the cardinal evil of slave labour —the reluctance with which it is yielded. On the other hand, the cultivation of cereal crops, in which extensive combination of labour is not important, and in which the operations of industry are widely diffused, offers none of these advantages for the employment of slaves, while it is remarkably fitted to bring out in the highest degree the especial excellencies of the industry of free proprietors. Owing to these causes it has happened that slavery has been maintained in the Southern States, which favour the growth of tobacco, cotton, and analogous products, while, in the Northern States, of which cereal crops are the great staple, it from an early period declined and has ultimately died out. And, in confirmation of this view, it may be added that wherever in the Southern States the external conditions are especially favourable to cereal crops, as in parts of Virginia, Kentucky, and Missouri, and along the slopes of the Alleghanies, there slavery has always failed to maintain itself. It is owing to this cause that there now exists in some parts of the South a considerable element of free labouring population.

These considerations appear to explain the permanence of slavery in one division of North America, and its disappearance from the other; but there are other conditions essential to the economic success of the institution besides those which have been brought into view in the above comparison, to which it is necessary to advert in order to a right understanding of its true basis. These are high fertility of the soil, and a practically unlimited extent of it. . . .

Chapter XV

THE GROWTH OF MANUFACTURES AND TARIFF DEVELOPMENT

40. A Protectionist View of the Tariff

Why is protection needed? Why cannot trade with foreign nations be carried on without the intervention of custom-house officers? Why is it that that intervention should be needed to enable the loom and the anvil to take their natural places by the side of the plough and the harrow? Such are the questions which have long occupied my mind, and to the consideration of which I now invite my readers.

Of the advantage of perfect freedom of trade, theoretically considered, there could be no doubt. The benefit derived from such freedom in the intercourse of the several States, was obvious to all; and it would certainly seem that the same system so extended as to include the commerce with the various states and kingdoms of the world could not fail to be attended with similar results. Nevertheless, every attempt at so doing had failed. The low duties on most articles of merchandise in the period between 1816 and 1827, had produced a state of things which induced the establishment of the first really protective tariff, that of 1828. The approach to almost perfect freedom of trade in 1840, produced a political revolution, and a similar but more moderate measure, led to the revolution of last year. These were curious facts, and such as were deserving of careful examination.

It may be assumed as an universal truth, that every step made in the right direction will be attended with results so beneficial as to pave the way for further steps in the same direction, and that every one made in the wrong direction will be attended with disadvantageous results tending to produce a necessity for a retrograde movement. The compromise bill, in its final stages, was a near approach to perfect freedom of trade, the highest

(40) *Miscellaneous Works of Henry C. Carey.* Philadelphia, 1865. pp. 3–6.

duty being only 20 per cent. Believing it to be a step in the right direction, one of the enthusiastic advocates of perfect freedom of trade proposed, soon after its passage, that, commencing with 1842, there should be a further reduction of one per cent. per annum for twenty years, at the end of which time all necessity for custom-houses would have disappeared. With the gradual operation of the earlier stages of that bill there was, however, produced a state of depression so extraordinary as to lead to a political change before reaching its final stages, and the duties had scarcely touched the point of 20 per cent. before they were raised to 30, 50, 60, or more, by the passage of the tariff of 1842. With the election of 1844, the friends of free trade were restored to power, and two years afterwards was passed the tariff of 1846—the free-trade measure—in which the revenue duty on articles to be protected was fixed at *thirty* per cent. Here was a retrograde movement. Instead of passing from twenty downwards, we went up to thirty, and thus was furnished an admission that so near an approach to free trade with foreign nations as was to be found in twenty per cent. duties had not answered in practice. Since then, it has been admitted, even by the most decided free-trade advocates, that on certain commodities even thirty per cent. was too low, and within six months from the date of the passage of the act of 1846, its author proposed to increase a variety of articles to thirty-five and forty per cent. Here was another retrograde movement. It is now admitted that there are other articles the duties on which require to be raised, and daily experience goes to prove that such must be the case, or we must abandon some of the most important branches of industry. The tendency is, therefore, altogether backward. Thirty per cent. duty is now regarded as almost perfect freedom of trade, and instead of proposing a further annual reduction, each year produces a stronger disposition for a considerable increase. In all this, it is impossible to avoid seeing that there is great error somewhere, and almost equally impossible to avoid feeling a desire to understand why it is that the approaches towards freedom of trade with foreign nations have so frequently failed, and why it is that every strictly revenue tariff is higher than that which preceded it.

With a view to satisfy myself in regard thereto, I have recently made the examination, before referred to, of our com-

mercial policy during the last twenty-eight years, commencing with 1821, being the earliest in relation to which detailed statements have been published. Before commencing to lay before you the results obtained, it may be well to say a few words as to the merits claimed by the two parties for their respective systems.

The one party insists that protection is "a war upon labour and capital," and that by compelling the application of both to pursuits that would otherwise be unproductive, the amount of necessaries, comforts, and conveniences of life obtainable by the labourer is diminished. The other insists that by protecting the labourer from competition with the ill-fed and worse-clothed workmen of Europe, the reward of labour will be increased. Each has thus his theory, and each is accustomed to furnish facts to prove its truth, and both can do so while limiting themselves to short periods of time, taking at some times years of small crops, and at other those of large ones, and thus it is that the inquirer after truth is embarrassed. No one has yet, to my knowledge, ever undertaken to examine all the facts during any long period of time, with a view to show what have been, under the various systems, the powers of the labourer to command the necessaries and comforts of life. One or other of the systems is true, and that is true under which labour is most largely rewarded: that under which the labourer is enabled to consume most largely of food, fuel, clothing, and all other of those good things for the attainment of which men are willing to labour. If, then, we can ascertain the power of consumption at various periods, and the result be to show that it has invariably increased under one course of action, and as invariably diminished under another, it will be equivalent to a demonstration of the truth of the one and the falsehood of the other. To accomplish this, has been the object of the inquiry in which I have recently been engaged.

It is necessary now to show what have been the distinguishing features of the several systems that have been in operation during the period to be examined. They are as follows:—

First. The tariff of 1816 was a planters' and farmers' measure. Cotton and coarse cotton cloths were carefully protected. Iron itself was well protected, but almost all manufactures of iron, the commodities for the production of which pig or bar iron could be used, were admitted at 20 per cent. Wool paid 15 per

cent. Blankets and woollen and stuff goods paid 15 per cent., and finer goods 25 per cent., until 1819, after which they paid but 20 per cent. Spirits paid a heavy specific duty, for the benefit of the farmers; but paper, hats, caps, manufactures of leather, types, and manufactured articles generally, paid only from 20 to 30 per cent. Coal paid 5 cents per bushel, but the commodities in the manufacture of which coal was to be used paid ad valorem duties. Protection was thus given to the coarse commodities that least required it, and refused to those for the production of which the coarser ones were to be used. As a matter of course, its protective features were totally inoperative.

Second. That of 1824, under which iron was, as before, well protected, but manufactures of iron, and of metals generally, were admitted at 25 per cent. Wool was raised to 20 per cent., to increase, by successive stages, until it reached 30 per cent. Coarse woollens were fixed permanently at 25 per cent. Finer ones were to rise gradually until they reached 33 1/3 per cent. Carpets paid from 20 to 50 cents per square yard. Hams paid 3, and butter 5 cents per pound. Potatoes 10, oats 10, and wheat 25 cents per bushel; while scythes, spades, shovels, and other things requisite for the raising of wheat and potatoes, paid 30 per cent. Spirits were carefully protected. Bolting cloths paid 15 per cent. Sail-duck, Osnaburgs, &c., 15 per cent. Cotton cloths paid 25 per cent., with a minimum of 30 cents per yard. The general features of this law did not vary materially from those of that of 1816, although protection was slightly increased.

Third. The first tariff thoroughly protective, and so intended to be, was that of 1828. It continued until 1832, when was passed the first of two laws by which the whole policy of the country was changed. This series constitutes stage the

Fourth. By the act of July 14, 1832, railroad iron was admitted free of duty. Axes, spades, &c., as before, 30 per cent. Bar and pig iron were carefully protected, but a large portion of the commodities for which they were needed were thus admitted without duty, or at the same rate as under our present free-trade tariff. Tea and coffee were free. Silks paid 10 per cent. Wool was protected, but worsted stuff goods were admitted at 10 per cent. Cotton goods paid 25 per cent., with minimum of 30 cents for plain, and 35 for prints. This continued in force until the

following March, when was passed *the Compromise Act,* under which linens, stuff goods, silks, and other articles were admitted free of duty, and one-tenth of the excess over 20 per cent. reduced from all other commodities, to take effect December, 1833, with a further similar reduction every two years until 1841, when one-half of the remaining surplus was to be reduced, and the other half in 1842, when no duty would exceed 20 per cent.

Fifth. The protective tariff of 1842, which was followed by

Sixth. The free trade tariff of 1846, now in existence. . . .

41. A Free Trade View of the Tariff

We are not called upon to discuss the abstract question, whether another mode of taxation would be more eligible than the impost, or whether an unrestrained intercourse between all nations, free of the payment of any duties on imports, would be best calculated to promote the industry and prosperity of all. On that subject, the experience of forty years is conclusive so far as relates to the United States. The people prefer, in time of peace, duties raised on the importation of foreign merchandise, to any internal tax, direct or indirect. Whether for good or for evil, that system affords an encouragement to domestic manufactures not less efficient for being incidental. Duties on imports, amounting on an average, to about 20 per cent. on the value, appear necessary to the support of Government. Although they may, to that extent, by diverting national industry from its natural channels, render it less productive; although they may, to that extent, lay a tax on the consumers in addition to that which is paid to Government; although they operate unequally on different sections of the country; all your memorialists ask, is, that the evil shall not be aggravated by an inequality in the rates of duty. The question then at issue is, simply whether the amount wanted shall be so raised as to fall equally upon all the consumers, or, in other words, on the community, and so as to encourage equally every branch of industry, or whether certain branches shall receive special protection by high and sometimes prohibitory duties.

Whether taxes are laid on income or on consumption, it is equally the duty of a government, founded in justice, to lay them

(41) Memorial of the Committee of the Free Trade Convention. *Senate Document. Number 55,* 22d Congress 1st Session. 1831–32. pp. 6–7.

equally on all, in proportion, as the case may be, to the income or the consumption. Were there no taxes of the latter description, every part of the country, and every class of society, would be left at liberty to supply its wants on the cheapest terms, and to pursue that branch of industry for which each was best fitted. If a tax, equivalent to an average duty of 20 per cent. (or at any other rate) on all foreign commodities, becomes necessary for the support of Government, and is laid at an equal and uniform rate on all such commodities, all the sections of the country, classes of society, and individuals, are left, as far as practicable, in the same relative situation as before. But any law, materially varying the rate on any of the taxed articles, will, in some respect, change that relative situation, and, to an extent proportionate to the change, render the burden of the tax unequal. An alteration which thus deranges the natural order of things, should at least be productive of an adequate and indisputable advantage to the community. Higher duties on luxuries, than on articles generally, and in some cases exclusively, used by the less wealthy classes of society, are justified by the propriety of laying a heavier burden on those who are the best able to bear it. The domestic manufacture of a sufficient stock of arms, by Government or by contract, at a much higher price than they could be procured abroad, may be necessary, in order to secure at all times a supply of those indispensable means of defence. Raw materials are admitted free of duty, because they are not, in that state, immediate objects of consumption, but necessary for the production of commodities to which the national industry may be advantageously applied. The presumed advantages of the restrictive system should be equally palpable and clearly demonstrated: the burden of the proof lies altogether on its advocates.

Let it, however, be recollected, that even the general benefit arising to the country at large, may not always be a sufficient justification of great and important deviations from the equal and uniform system of taxation. A Government which acknowledges the principle that no individual can be divested of his property for public purposes without indemnity, cannot claim the right to do that indirectly, which it is forbidden to do directly. A system calculated to lay permanent burdens, greatly unequal and oppressive on some classes of society, or on a particular section of the country, would be radically unjust, and altogether

indefensible, even though it might be, attended with some advantages to the community, considered as a whole. But whether such advantages are in fact realized; whether, on any supposition, they ever can produce a profit equal to the actual national loss arising even from the indispensable duty of 20 to 25 per cent., must be first examined.

It is self-evident that the industry of a country is most profitably employed, or, in other words, that a country acquires the greatest wealth, and its general prosperity is most advanced, in proportion as its capital and labor are most productive.

It is not less obvious that, if a given amount of capital and labor produces in the same time, a less quantity of a certain commodity than could have been purchased with that quantity of another article which might have been produced in the same time by the same amount of capital and labor, there has been a misapplication of such capital and labor, and a national loss equal to the difference between the quantity produced, and that which might have been purchased, with the proceeds of the same capital and labor otherwise applied.

If the price at which a commodity can be afforded by the person who undertakes to produce it, it is higher than that at which it may be, or might have been purchased from others, the difference of price is the measure of the national loss incurred by his misapplication of capital and labor to the production of that commodity. . . .

Chapter XVI

THE EXPANSION OF TRADE

42. Internal Commerce

In 1797, as has been before stated, the first American vessel was launched on the lakes. In 1816 the first steamer was built on the waters of Lake Ontario, and the first on Lake Erie in 1818. For some considerable time the first vessels put in commission on Lake Erie were used merely for facilitating the movements and operations of the Indian traders, carrying westward supplies and trinkets for the trade, and returning with cargoes of furs and peltries. In 1825 the Erie canal was completed, and its influence began at once to be felt through the western country. The western portion of the State of New York immediately began to assume an air of civilization and to advance in commercial growth. This influence continued still to increase until the Welland canal and the Ohio canals were completed. The tonnage, which had then increased to about 20,000 tons, found at this time full employment in carrying emigrants and their supplies westward, which continued to be their principal trade till 1835, when Ohio began to export breadstuffs and provisions to a small extent. In 1800 Ohio had 45,000 inhabitants; in 1810, 230,760; in 1820, 581.434; in 1830, 937,903.

During this year a portion of the canals was opened, and during the ten years next ensuing after 1830 some five hundred miles of canals had been completed, connecting the lakes by two lines with the Ohio. Under the influence of these improvements the population of the State augmented to 1,519,467 individuals. In 1835 she exported by the lakes the equivalent of 543,815 bushels of wheat. In 1840 her exports of the same article over the same waters were equivalent to 3,800,000 bushels of wheat, being an increase, in the space of five years, in the articles of wheat and flour, of what is equal to 3,300,000 bushels of wheat, or nearly

(42) Israel D. Andrews, *Report on the Trade and Commerce of the British North American Colonies, and upon the Trade of the Great Lakes and Rivers*, Washington, 1853. pp. 55–56, 743–745, 904–906.

six hundred per centum. These articles are selected, as being the most bulky, in order to illustrate the effect of canals upon lake commerce. At this period, 1840, there were not completed over two hundred miles of railway in the State, and this distance was composed of broken portions of roads, no entire route existing as yet across the length or breadth of the State. In 1850, there were in operation something over four hundred miles of railroad, and rather a greater length of canals, while the population had increased to 1,908,408, and her exports, by lake, of wheat and flour, were equivalent to 5,754,075 bushels of wheat, and that, too, in spite of the fact that the crop of 1849 was almost an absolute failure throughout the West.

In 1851 the exports of wheat and flour, by lake, were equivalent to no less than 12,193,202 bushels of wheat; and the cost of freight and shipping charges on this amount of produce falls little, if any, short of $510,000; nearly the whole amount having reached the lakes via the canals and railways of Ohio. . . .

The history of the rise and progress of the steam-marine of the United States is one of the most interesting and wonderful things in our national advancement. Although one steamboat was built at Pittsburg as early as the year 1811, and although eleven other boats were built on the Ohio river and its headwaters within the next five years, it was not until the year 1817 that steam navigation could be said to have been fairly introduced upon the Mississippi and its tributaries. Previous to this year, there were twelve steamboats upon these waters, having an aggregate carrying capacity of 2,235 tons. From 1817 to 1834, the number of boats increased to 230, and the aggregate of tonnage to 39,000 tons. In 1842 there were 475 boats on the same waters: in 1851 this number had been increased to 601. . . .

The year following the real commencement of regular steamboat navigation on the waters of the Mississippi and its tributaries, (1817,) the first steamer employed on the upper lakes was built and launched on Lake Erie. In 1819 the waters of Lake Huron were first ploughed by the keel of a steamer, and in 1826 those of Lake Michigan. In 1832 a steamboat first appeared at Chicago, and in 1833 there were but eleven small steamers on the three lakes named. This date may therefore be

fairly taken as that of the real commencement of steamboat navigation on the upper lakes. . . .

These comparative statements show that in a period of nine years the steamboat tonnage of the Mississippi valley has nearly doubled itself, and that in a period of eight years that of the upper lakes has more than quadrupled itself: very significant facts touching increase of population, production, and trade.

The average size of steamboats now running on the lakes is found to be 437 tons; that of the steamboats of the Ohio basin $206\frac{33}{95}$ tons; and that of those of the lower and upper Mississippi, the Arkansas, the Missouri, and the Illinois rivers, $273\frac{47}{95}$. On the Mississippi and Ohio rivers there are many steamers of from 300 to 500 tons each, and a number from 600 to 800 each; but the large number of light-draught boats, built to run in periods of low water on those rivers, and in all seasons on the smaller streams emptying into them, carry the general averages down to the figures given above. Several of the passenger steamers of the lakes are of eleven hundred tons and upwards each. . . .

The canal commerce of the United States is prosecuted upon about 3,000 miles of canal, which, excluding the coal trade, cleared and landed an average of about 6,000 tons per mile. The New York State canals averaged, in clearances and landings, about 9,000 tons per mile, but this is above the average for all the canals. At 6,000 tons per mile, 3,000 miles give 18,000,000 tons, valued at $66 the ton, and forming a gross sum of $1,188,000,000.

There are also completed in this country, 13,315 miles of railway; but as 2,500 miles have been opened since January 1, 1852, only 10,815 miles can be considered as having participated in the trade of 1852. Several of the longest freight lines have received and delivered an aggregate amounting to an average of 2,000 tons per mile; but as many other lines do a comparatively light freighting business, the average assumed will be 1,000 tons per mile, or a gross business of 10,815,000 tons, which, from the general character of railway freight, as being of a lighter and more costly character than water freight, may be valued at $100 the ton: this would give an aggregate of gross railway commerce amounting to $1,081,500,000. . . .

Comment upon such facts as are here presented, will readily

suggest themselves to the minds of all intelligent men. It will be seen that our domestic commerce is of incalculable value to us, even as represented by the "coasting" trade; but when to this is added the value of our whale, cod, and mackerel fisheries, and our California trade, that is carried on in registered bottoms, its magnitude will be still more astonishing. The fact that our domestic exchanges amount, by sale and resale and by the additional value gained by the labor bestowed in transportation, sale, &c., annually to over *five thousand million dollars,* as the sum upon which one commission or profit is paid, and that in this trade is employed actively and profitably over *two million tons* of shipping, which cost not less than one hundred and twenty million dollars, three thousand miles of canal, thirteen thousand miles of railway, and twenty thousand miles of telegraph, costing about four hundred and fifty million dollars, is one calculated not only to astonish, but to excite admiration of the energy, industry, and enterprise which, in so short a period, have achieved this high position.

43. The Foundation of the Atlantic Packet Lines

No peaceful event of modern times has excited a greater interest in this country and Europe, than the establishment of regular steam communication between the opposite shores of the Atlantic. The experiment, at first denounced as visionary, and which one of the greatest mechanical philosophers of England, even within the last four years, demonstrated to be impossible, has been fairly and fully tried, and its success is no longer a question of doubt anywhere. . . . The distance which Columbus, in his first voyage, was seventy days in accomplishing, from Palos to San Salvador, and which the Plymouth pilgrims, two hundred and twenty years after him, were sixty-five days in traversing from Plymouth to Cape Cod, *is now accomplished in less than thirteen days!* . . . But, upon a calculation of ten years, the average passage of sailing-vessels from Liverpool to New York, is found to be thirty-six days, and from New York to Liverpool, twenty-four. The average passage of the packets during 1839, was less, the outward being only twenty-two and a half days, and the homeward passage thirty-three days and seventeen hours. The shortest outward was made in eighteen days, and the short-

(43) *Hunt's Merchants' Magazine,* Vol. III (1840), pp. 296–299.

est return passage in twenty-two. The establishment of the two great lines of steamships which now ply between London, Liverpool, Bristol, and New York, and between Liverpool and Boston via Halifax, reduces the passage across the Atlantic, to an average of about thirteen days! . . .

While it is conceded that the British have been the first to demonstrate the superior safety of their steamers on the sea, the Americans were the first to accomplish the passage of the Atlantic by steam power. Fulton, at his death, left unfinished a steam-vessel, intended for St. Petersburgh, where the Russian government had offered him and his associates high privileges, in case of its arrival before a certain period. The vessel was finished and fitted for sea, but for some unforeseen cause, the enterprise was suddenly abandoned. Other parties, however, took it up, and on the twenty-second of August, 1818, the steamship Savannah was launched at New York. . . . Having completed his vessel, Captain Rogers proceeded to Savannah, in May, 1819, and on the 25th of that month sailed for Liverpool, where he came to anchor on the 20th of June, in 26 days from Savannah. . . .

The idea of establishing a regular steam communication between New York and Liverpool had now come to be seriously entertained by some of the sagacious and enterprising, on both sides the Atlantic. The voyages of the British steamer Enterprise, in 1825, to the East Indies, by means similar to those used by the Savannah, seems to have settled the question in the minds of the English public, as to the superiority of ocean steam navigation, provided ships could be so constructed as to carry a sufficient quantity of fuel. . . .

We do not feel called upon here to discuss the question, whether the "Great Western Steamship Company," or the "British and American Steam Navigation Company," are entitled to the credit—and an honorable distinction it certainly is—of *leading the way* in this great enterprise. . . . The Bristol company were indeed first upon the line with their noble ship, the Great Western; but the London and New York company were actually first to accomplish the passage through by steam with the Sirius, chartered for the express purpose. To the unwearied perseverance of Mr. JUNIUS SMITH, an opulent and distinguished American merchant in London, more than to any other individual, is the final and successful accomplishment of this great enterprise

doubtless to be attributed. From January, 1833, to the present moment, he has been enthusiastically devoted to the object. As early as June, 1835, he published his first prospectus of a line of steam packets between England and America. The public were at first disposed to ridicule the project. Nothing daunted, he persevered, and in November following, issued a second prospectus, which began to attract the attention of capitalists. Shares were subscribed, doubt yielded to demonstration, the requisite capital was soon provided, and the "British and American Steam Navigation Company" was organized on a solid foundation. In October, 1836, they made their contract for building their first steamship; the keel was laid on the 1st of April, 1837, but owing to the failure of one of the contractors, and other difficulties, she was not launched until the 24th of May, 1838, when she received the name of the *British Queen.* She left Portsmouth on the 12th of July, 1839, on her first trip to New York, and arrived at New York on the 27th, after a passage of fourteen days and eighteen hours.

No sooner did the fact of the establishment of the British and American company transpire, than the people of Bristol became aroused to the importance of securing to their ancient city the advantages of a steam communication with New York. Mr. Brunel, the celebrated engineer, and other gentlemen connected with the great western railway, came forward with liberal subscriptions. A committee was appointed, assisted by one of the most competent practical ship-builders of the kingdom, to make the necessary surveys and examination. Their report was made to the subscribers on the 1st of January, 1836, and on the 2d of June, 1836, the "Great Western Steamship Company" was established by deed of settlement. On the 28th of July following, the stern-post of the Great Western was raised, and on the 19th of July, 1837, she was launched. After testing the working of her machinery, she departed from Bristol on the 8th of April, 1838, for New York, arriving at this port 23d of April, after a passage of fourteen days, twelve hours. She had made fifteen trips across the Atlantic before the British Queen was placed upon the line.

The "Trans-Atlantic Steamship Company," formed at Liverpool, in the summer of 1838, put two steamers on the route between that port and New York. The Royal William sailed on

the 5th of July, and arrived the 24th, making a passage of eighteen days, twelve hours. The Liverpool sailed on the 6th of November, and arrived the 23d, making the passage in sixteen days, twelve hours. The Royal William was withdrawn from the route in the winter of 1838, and the Liverpool in 1839.

Public attention in London and in New England was soon directed to the establishment of a line of steamers to ply between Boston and Liverpool; and in 1839, Mr. Samuel Cunard, a citizen of London, succeeded in effecting a contract with the British government, for the transmission of her majesty's North American mails, twice a month from Liverpool, via Halifax to Quebec. The liberal sum of £60,000 per annum for seven years, is to be paid by the government for this service. Four steamships are to be placed on this line—two of which, the Britannia and Acadia, have already made their appearance. The citizens of Boston have aided the enterprise with a spirit and liberality honorable to their character, and with a keen perception of its importance to their flourishing city. The Unicorn, the first steamship from *Old* England to *New* England, arrived at Boston on the 3d of June. She did not belong to the line, and her voyage was experimental. She made the passage in seventeen days from Liverpool to Boston. The Britannia, the first of the regular line, arrived at Boston on the 18th of July, in fourteen days from Liverpool; and the Acadia, which left Liverpool the 4th of August, arrived at Boston on the 17th, making the passage in twelve days, twelve hours—being the *shortest ever made from England to the United States.* . . .

44. The Panic and Financial Crisis of 1857

One of the most violent panics and financial revulsions which ever occurred in this or any other country has been sweeping over the United States during the last few weeks. It commenced with the suspension and failure of the Ohio Life Insurance and Trust Company, on the 24th of August, but soon extended to other banking companies, and to many merchants, manufacturers, and business men, who had large payments to make. It caused large amounts of railroad stocks and bonds, as well as State and other stocks, to be thrown upon the market to raise money; and caused a rapid and unprecedented decline in stocks and securities, and

(44) *Hunt's Merchants' Magazine,* Vol. XXXVII (1857), pp. 659–660.

particularly in the bonds and stocks of railroads owing large debts. . . .

The causes of the panic and revulsion are numerous, consisting—

First, of excessive imports of the manufactures of Europe, the accumulation of large foreign debts, and the exportation of large amounts of specie to pay the balance of trade against us, and the interest on our foreign debt.

Secondly, the immense amount invested in railroads during the last ten years—much more than our country was able to afford—a large proportion of which has been borrowed on bonds and stocks at excessive rates of interest, drawn from the mechanic, the manufacturer, the merchant, and other classes of business men, and invested in roads, the most of which have produced very little income to the stockholder.

Thirdly, extensive speculations in stocks, and the extravagance introduced and fostered by reason of fancied wealth, arising from railroads and speculations in stocks.

Fourthly, the large amount of loans made upon the pledge of stocks and bonds as security, payable on demand; by reason of which, when the embarrassments commenced, and the borrowers could not obtain new loans to pay the old ones, large amounts of stocks were thrown upon the market and sold at such prices as they would bring, to raise the moneys for which they were pledged. This caused a great and rapid depreciation in stocks and securities of all kinds, and increased the embarrassments and panic.

Fifthly, the more immediate cause of the panic, and which tended to aggravate the evils more than tenfold, is the operation of the electro telegraph, by means of which bad news, such as the failure or embarrassment of a bank, of a merchant or manufacturer, was immediately communicated to all the cities and large towns of the United States; and information of all such misfortunes was immediately concentrated in all the cities, and worked up the minds of the laboring classes, as well as those of the business men, to a fever of excitement, causing fearful apprehensions among them in every city, that their banks also would fail, and inducing many, out of prudence, to withdraw their deposits, and to convert their bank notes into coin.

And lastly, the fears and the evils resulting from them have been greatly aggravated in the States of New York and Michigan, by the unwise provision in their new constitutions, prohibiting the Legislature of each of those States from authorizing a temporary suspension of specie payments by the banks.

Chapter XVII

THE UNITED STATES IN 1860

45. A Review of Commercial and Financial Conditions

The year 1860 will long be remembered as one of the most extraordinary of the century in its commercial and financial features. No previous year has exhibited stronger indications of prosperity among merchants, manufacturers, capitalists and the great agricultural interests of the country at large. We speak of these in their aggregates. It is true that in some few portions of the country there have been this year less abundant crops, and the people thereof have not the abundance which of late years has been so remarkable. But, then, in view of all sections of the Union, and of all the important products of the soil and of labor, our people may, with truth, claim to be pre-eminently blessed.

The hay crop, which our census returns proclaim to be the most important of all, is more than sufficient to meet the wants of the country. The corn crop, it is estimated, will produce over ten hundred millions of bushels; the wheat crop will probably reach two hundred and fifty millions of bushels; thus creating a surplus of twenty-five or thirty-three per cent. for foreign export. Next in importance is the cotton crop, which has reached over four and a half millions of bales, and, at fifty dollars per bale, has added over two hundred millions of dollars to the wealth of the country. This enormous yield has supplied the manufacturing States with enough raw material for their own cotton mills, and enabled the planter and factor to export four-fifths for consumption abroad, viz.:

	Year 1858–59	*Year 1859–60*
To Great Britain	bales, 2,019,252	bales, 2,669,432
To France	bales, 450,696	bales, 589,587
To North of Europe	bales, 330,012	bales, 295,072
To other foreign ports	bales, 221,443	bales, 220,082
Total Two years	bales, 3,021,403	bales, 3,774,173

(45) *The Bankers Magazine, and Statistical Register.* New York. Vol. X (1860), New Series, pp. 417–421.

The freight on this immense crop will in itself average two dollars per bale, thus yielding some nine millions of dollars to the carrier. In New-York State alone there are upwards of ten thousand persons employed in cotton manufactures, producing annually over six millions of dollars in value. In Massachusetts there are upwards of forty thousand also employed, producing above thirty millions in value annually. . . .

A strong impetus has been given to the shipbuilding interest, and to the more active employment of American shipping from and to foreign and domestic ports. This is remarkable in the lake ports of the United States, where the demand for coasting and steam vessels is three or four times what it was in the year 1858-1859. The foreign demand for our surplus breadstuffs has fortunately been met by an immense crop, and the transportation has employed a large number of vessels hence to Europe. . . .

The Mississippi Valley participates largely in the increased products and increased traffic now noted. At New-Orleans, alone, the receipts of cotton last year were 2,139,425 bales, and the total values of domestic produce received, for coastwise and foreign export, were the enormous sum of one hundred and eighty-five millions of dollars. . . .

In former years, nearly all the products of the States bordering on the Ohio and the Mississippi were shipped to Eastern ports via New-Orleans; whereas, now, there are large quantities of cotton, tobacco, flour, &c., transported direct from producing points by rail to New-York, Boston, Philadelphia and other cities; hence one profitable source of revenue to our numerous rail-roads between the Mississippi and the Atlantic. . . .

Another evidence of the expansion of trade and commerce lies in the increased revenues of the rail-road companies throughout the country. The aggregates of receipts are fully twenty per cent. beyond those of the years 1858–1859.

The banking interest, which is one of the important ones of the country, is highly prosperous. Capital is now, and has been, throughout the year, abundant for all legitimate purposes. The government loan, at five per cent., has been freely taken at 100½ to 102. The only unfavorable result of the impetus given to business is the increase in banking liabilities, accompanied with a reduction of specie. The banks of New-York State, at the

close of September, had $22,000,000 in specie, against $33,-000,000 in June, 1858.

The only speck in the horizon is the threat of secession in the South. We would be the last to give countenance to the libel upon the South, . . . but as the financial position of the Southern States is not fully known, we present the following statement of their capital, circulation and specie, as they were in January last. It will be observed that the proportion of specie is large, being nearly half the amount of notes in circulation. At this season the Southern banks are always taxed to their utmost capacity, to make the necessary advances on the cotton shipped to the North and to Europe. It is customary, at this time of the year, for the banks in the cotton-growing States to withdraw from ordinary customers the usual facilities granted to them in order to purchase cotton bills of exchange. While current payments at the North remain unliquidated, the proceeds of the cotton bills are applied to payment of those maturing liabilities, and this season is always the one at which Southern payments are made. The refusal to discount paper by any of the banks in the South must, therefore, not be taken as an evidence of weakness, but the simple result of the fact above stated. The present condition of the exchanges indicates that the South has paid off her accrued indebtedness, and, following the laws of trade, we must soon expect to ship specie to Southern ports in moderate amounts. The accession of a few millions will soon enable the banks to expand, and resume their loans on local paper.

We must confess that this statement reflects little credit upon the managers of the Northern banks. The specie held at the South is fully equal to that of the North; while the demand at the former for coin is really inconsiderable. Even at New-Orleans, which is the best fortified city in the Union, (financially speaking,) the ordinary demand for specie is nominal: there is really no export abroad; and the unfavorable balance of trade may always be anticipated sixty or ninety days, thus giving the banks at that city ample time to prepare for paying balances in coin.

At New-York, on the contrary, we frequently ship our two millions of coin in a week. We are liable to a recurrence of

	Capital	*Circulation*	*Specie*	*Loans*
Delaware	$1,765,000	$1,000,000	$250,000	$3,150,000
Maryland	12,524,000	4,700,000	2,700,000	20,898,000
District of Columbia	1,282,000	350,000	300,000	2,000,000
Virginia	17,026,000	12,000,000	4,000,000	24,975,000
North Carolina	6,891,000	5,500,000	1,500,000	12,213,000
South Carolina	13,588,000	7,600,000	2,500,000	27,801,000
Georgia	9,302,000	10,000,000	3,000,000	16,776,000
Alabama	4,900,000	7,000,000	3,000,000	13,570,000
Florida	230,000	200,000	50,000	464,000
Louisiana	24,497,000	10,000,000	12,000,000	35,401,000
Kentucky	14,878,000	13,500,000	5,000,000	25,284,000
Mississippi	800,000	300,000	50,000	1,500,000
Missouri	11,910,000	8,000,000	5,000,000	15,461,000
Tennessee	9,438,000	6,500,000	2,800,000	11,751,000
	$129,031,000	$86,650,000	$42,150,000	$211,244,000
Northern Banks	296,051,000	104,054,000	41,908,000	473,917,000
Total United States	$425,082,000	$190,804,000	$84,058,000	$685,161,000

such shipments every season, and at every month of the year. Yet with this still pending liability—with millions of deposits for account of country banks and foreign capitalists—with an impending political crisis in Europe, our New-York banks are barely provided with cash to pay their out-of-town balances.

Boston, which is the redeeming point for thirty millions of bank circulation, and thirty-eight millions of deposits, holds less than five millions of coin—depending again upon New-York in case of need.

The above table shows that Kentucky, Missouri and Virginia are more conservative in their systems than our own; while the free (or false) paper-money systems of Illinois, Wisconsin and Indiana are based upon that which is not money, and which, in time of need, will not produce money.

The Northern banks, while apparently weaker than the Southern, are really creditors of the South to a large extent. New-York is the creditor city of the whole Union; its financial and commercial bonds with the South are of the strongest character —bonds that will effectually resist any attempts of mere politicians to remove or break them.

Virginia, North Carolina, Georgia, Florida, &c., desire the aid of Northern capital to prosecute works of internal improvement. That capital has always been freely loaned on the public

securities of those States. These considerations have gradually assumed increased importance for twenty years past; and the fact that the Southern and Southwestern States are, in their business departments, more largely represented here, from year to year, with a view to making New-York the great channel for the mutual exchange of products, is now more apparent than ever.

There is, fortunately for the vast interests of the States, a variety of staple products required for consumption by the whole. No one State, no one section of the country, is independent wholly of the others. Thus the two hundred millions of cotton produced, enter largely into the manufacturing channels of the North and West. The cotton manufactures of the United States ten years ago exceeded sixty-five millions annually; they now probably exceed one hundred millions. Ohio, Missouri, Pennsylvania, as well as New-York, are fast becoming cotton manufacturing States. Every bale of cotton used at the North is a benefit to the South. It would be well, indeed, if the North consumed annually 1,200,000 bales, instead of 700,000. The wheat and lead of Illinois, the hemp and iron of Missouri, the provisions of Ohio, the coal and iron of Pennsylvania, the manufactures of New-England and New-York, are all wanted at the South, in payment for the cotton and rice supplied so largely by the beneficence of Providence. . . .

These remarks were prepared early in the month of November, and before any serious change took place in the commercial or financial aspects of the country. Our remarks will, however, be pertinent to the flattering state of affairs up to the first of the month, when the current of commerce and finance was interrupted by causes which we hope are only temporary.

46. Hours and Wages in New York

The New York *Tribune* has an article upon this subject, from which we take the following recapitulation of the average earnings of trades and professions during the whole year. In many cases workmen lose three and four months in the whole year, while in the wintry weather, when they are employed, their receipts are reduced by reason of short hours:—

(46) *Hunt's Merchants' Magazine,* Vol. XLII (1860), p. 750.

Occupations	*Average Wages per Week*	*No. of Hours per Day*
Bakers	$6.00	17
Barbers	8.00	11
Bookbinders	9.00	10
Boot and shoe makers	5.00	15
Boot and shoe makers by the piece	7.50	15
Brewers and distillers, seven days per week	6.00	12
Bricklayers and masons	10.00	10
Cabinet makers	7.00	10
Coopers	7.50	10
Carpenters (house)	7.00	10
Carmen	7.00	10
Cigar makers	7.50	10
Drug clerks	9.00	13
Dry goods clerks (retail)	10.50	14
Domestic servants	6.00	..
Engineers	11.00	10
Fancy goods clerks (retail)	10.00	14
Folding girls (books)	4.50	10
Grocers' clerks (retail) including board	9.00	17
Gunsmiths	9.00	10
Hatters	10.00	10
Hooped-skirt makers	5.50	9
Iron-moulders	10.00	10
Machinists	11.00	10
Millwrights	11.00	10
Painters	7.00	10
Piano forte makers	7.00	10
Porters in stores	7.00	10
Pressmen (morning papers)	12.00	8
Printers (daily papers)	16.00	10
Printers (book)	10.00	10
Printers (job)	11.00	10
Pressmen (hand and machine)	11.00	10
Police captains	23.00	at call
Police sergeants	17.46	11
Police patrolmen	15.38½	11
Rope spinners	6.00	10
Railroad conductors (city) seven days per week	10.50	12
Railroad drivers (city) seven days per week	8.75	12
Stage drivers	7.58	18
Shirt sewers	3.00	20
Stone cutters	7.50	10
Teachers (in private schools)	18.00	8
Waiters (saloon) including board	6.00	10
Waitresses (saloon) including board	4.00	10
Watch makers	11.00	10

47. Wages of Agricultural Laborers

The New York *Tribune* recently published a request to have the following questions answered:—

I. What have you paid a day and a month to the laborers employed upon your farm during the present winter, with or without board?

II. What do you propose to pay a month, or a year, for farm laborers for the next season, commencing, say, April 1?

III. Are wages in your section likely to be higher or lower than last season?

IV. Is it your opinion that farmers will employ more or less laborers this year than last, as a general thing?

V. Will farmers generally employ more laborers if wages are, as many expect they will be, considerably lower the next season than they have been in past seasons?

It received replies, (published February 18, 1860), which we tabularize, as follows [see p. 635]:—

The reply to the five questions is almost universal, that present rates are as much as the farmers can afford, low as they are for the workers. That the hands are nearly all Irish—that Americans are worth $2 per month more, but are not to be had —that American females will not hire out. The table shows that wages are less at the West than in New York or Massachusetts, but yet are too high for the farmer, notwithstanding the fertility of the soil. The farmers would undertake much greater cultivation if they could get the labor at a rate which would meet market prices, but they cannot.

(47) *Hunt's Merchants' Magazine,* Vol. XLII (1860), p. 641.

	Question 1		*2*		*3*	*4*	*5*
	Board ¢ per day	No Board ¢ per day	Board $ per month	No Board $ per month			
N. Y. — Westchester Co.	....	87½	...	12½	lower	less	yes
Westchester Co.	....	100	12		lower	less	yes
Otsego Co.	62½	75	12	14	same	same	yes
Otsego Co.	50	...	12	14	same	same	yes
Otsego Co.	62½	75	12	....	same	less	yes
Onondaga Co.	37½	....	13		lower	less	yes
Oswego Co.	62½	..	13	....	higher	more	yes
Cayuga Co.	75		13	....	same	same	yes
Cayuga Co.	62½	87½	15	....	same	same	not much
Rensselaer Co.	50	75	15	...	same	same	yes
Ulster Co	50	..	12	..	lower	less	yes
Chautauqua Co	75	..	13	....	same	same	not much
Mass. — Sunderland.	75	.	18	...	more	more	yes
Conn. — Lebanon	...	75	7	...	lower	more	yes
Vermont — Springfield.	67	.	16	....	same	same	much more
New Jersey — Newark.	...	75	...	20	same	less	..
Penn. — Bucks Co.	...	....	12	...	same	more	yes
Christiana.	62½	....	12	...	lower	more	yes
Indiana Co.	50	....	13	...	same	less	no
Ohio — Richland Co.	50	...	13	..	more	more	more
Michigan — Oakland.	50	....	12	.	same	same	yes
Lenawee Co.	63	....	12	...	same	more	yes
Vergennes.	50	..	13	...	same	more	no
Wisconsin.	...	...	12	...	lower	same	yes
Illinois — Joliet.	50	75	11	....	lower	less	yes
Marshall Co.	50	....	10	...	same	more	yes
Kankakee.	50	....	12	....	same	same	yes
Indiana — Mount Vernon.	75	....	17	....	same	more	yes
Hendricks Co.	50	....	10	....	lower	more	yes
Wayne Co.	62½	...	12	....	....	....	....
Carroll Co.	50	....	13	....	same	more	yes

Chapter XVIII

THE WAR AND SOME OF ITS ECONOMIC EFFECTS

48. Financing the Confederacy

At the beginning of the war gold and silver were everywhere in use among the people, and for the sake of convenience the notes of local banks, which could always be exchanged for specie, were preferred to the specie itself. In times of public trouble, gold, an article of great value in small bulk, generally disappears from circulation, and is hoarded or buried to provide against possible contingencies. This immediately happened in the Confederacy, and bank notes came to be the only money. These the government borrowed or received in collecting its dues or in exchange for its bonds, (or future promises to pay,) though the first of its "loans" was a strictly *gold* loan, and was granted with hearty good will by the people. After that government found it necessary to issue bonds in immense amounts, to be exchanged for products in the market, or to be used in the absorption of its own issues, which were in the nature of bank notes or promises to pay amount represented at a future date. This time for payment was in general fixed at "six months after the ratification of a treaty of peace with the United States" recognizing the Confederacy, and if there was no such recognition, of course, the notes were only so much waste paper.

When the issues commenced people were greedy to receive them, and it was not until some months had passed before a dollar in gold represented more than its equivalent in Confederate money. This state of things, as might naturally have been expected, could not last, when the government was rapidly expending the most enormous sums and making no adequate provision in the way of taxes, to meet the expenditure. Politicians proved unequal to the crisis. They seemed to shrink from the responsibility of increasing the burden of taxation, and feared to meet the people squarely upon this issue until it was too late.

(48) *De Bow's Review*, Vol. II (1866)—After the War Series, pp. 573–576.

It was an error, for such was the popularity of the cause that almost any sacrifices would from the beginning have been cheerfully encountered.

There were other causes which had much to do with the regular and rapid decline in the value of Confederate notes, and these were the facility with which they were counterfeited by the enemy; the alleged bad faith at times of the authorities in practically repudiating, by taxing, the issues, and finally, and what, no doubt, was of greater consequence than either, though I admit it sadly, the general spirit of trading which came into vogue, requiring federal money, or gold, for its purposes. Distrust of the eventual success of the cause operated upon some, and even those who regarded that success inevitable when the debt assumed colossal proportions, believed that the resources of the country could never be adequate to meet it. This was undoubtedly a mistake, as the experience of the United States afterwards proved; but the fact was, our people had no idea of the prodigious energies of taxation, or of how much the national industry could bear.

It must be observed, however, that the prices of articles of home make never did rise among us in proportion to the rise in the value of gold as compared with Confederate money. Thus, when a dollar of the former was held as an equivalent for one hundred of the latter, corn and wheat, instead of being one hundred times higher than before the war, were not more than five and ten times, and in some parts of the country, as in portions of Mississippi, were not more than two or three times. Blockade goods, on the contrary, kept a close relation with gold.

It is difficult to estimate the actual amount of bonds and notes issued by the Confederate government, but it could not have reached, in all, much less than two thousand millions of dollars, and had the war continued after 1865, it would have been necessary to resort to some other expedient to maintain the finances. Paper issues, upon the old basis, were not longer practicable, and hence it began to be proposed to issue notes redeemable in future in cotton, tobacco, wheat, etc., which the government would collect in the way of tithes from the people. It is quite certain that every scheme of finance which was adopted, however plausibly advocated and ably maintained, only seemed to make matters worse—and in this department of our administration

the historian will find one of the causes of the eventual downfall of the cause. . . .

The following table will show the fluctuating value of Confederate money, as compared with gold. It brings to mind the experiences of the old American Revolution.

January, 1862,	$100 gold equals	$120	currency.
March, 1862,	"	150	"
August, 1862,	"	200	"
December, 1862,	"	300	"
March, 1863,	"	400	"
July, 1863,	"	700	"
October, 1863,	"	1,000	"
December, 1863,	"	1,700	"
March, 1864,	"	2,000	"
September, 1864,	"	3,000	"
January, 1865,	"	3,400	"
March, 1865,	"	5,000	"
April, 1865,	"	Exit.	

49. Financing of the War by the North

It was not long after the war began before it became apparent to the best financial men of the country, that a financial system adequate to the wants of the nation in time of peace, was wholly inadequate to meet the requirements of a great war; that the war was a new and great business of itself, demanding new and additional facilities, greater even than existed before the war. That the facilities for carrying on the business of the country as they existed before the war, were still necessary to carry on that business, and could not safely be withdrawn from it; and that a new currency, national in character, and to some extent a new financial system, must be *created* to meet the new and enlarged demands of the war which had been forced upon the country. This was an exigency not foreseen, and the Government was obliged to exercise all the power it possessed in passing the *war measures* detailed in the foregoing narrative.

The plan of Finance adopted in 1861–2 was successful, and proved adequate to these enlarged requirements. The Government was maintained and the Union preserved. By this plan all the men and material of war necessary to crush the rebellion were obtained without difficulty. Many mistakes were made in the conduct of the war, but the financial plan, including taxation,

(49) E. G. Spaulding, *History of the Legal Tender Paper Money Issued During the Great Rebellion.* Buffalo, 1869. pp. 208–212.

was an ample resource sufficient at all times to meet the vast requirements of the War and Navy Departments. The credit of the Government was brought into immediate action in the most available form. Some mistakes were also made by the Secretary of the Treasury in administering the Loan acts, and too large an inflation occurred in 1864, which might have been prevented by continued funding in 5–20 six per cent. bonds, yet in the main the financial management during the war was a decided success, because it carried the country through the terrible ordeal, and brought the ship of state safely into port. It is true that this plan was not at all in accordance with peace notions of finance, but by it all officers, soldiers, sailors and marines were paid in full, and all demands for supplies and material of war were promptly discharged. It was a complete success as a means of carrying into effect the war powers of the Government. These facts abundantly prove the efficiency and wisdom of the plan adopted in bringing the war to a successful termination. Although successful it was a heavy drain upon the resources of the country, and at times very embarrassing to business men, and they had to submit to many sacrifices. The withdrawal of such a large number of youthful laboring men into a vast army of unproductive labor, and the mistake made in the over-issue of paper currency, so inflated prices as to materially increase the expenses of the war. It also embarrassed the people engaged in legitimate pursuits; laborers struck for higher wages, and the price of commodities greatly increased, causing considerable difficulty in keeping up the productive energies of the country, especially in establishments where large gangs of men are employed.

Nor can it be denied that the management of the fiscal affairs of the Government, both legislative and executive, during the war, was a material departure from sound political economy, applicable to ordinary times of peace. The demand for money means forced upon the country by such a gigantic rebellion, was wholly unprecedented—nothing ever recorded in history equaled this demand—and reached to such overwhelming amounts, so vastly beyond any former financial requirements, that the careful observer cannot but look back with wonder and amazement that the Government was at all able to pass successfully through such an extraordinary crisis. The authorization

of a loan of $900,000,000, in one act, and an increase of the public debt in one year of over $940,000,000, over and above custom duties and internal taxes, are matters of history. The amount of the issue of paper currency and temporary obligations in various forms was almost appalling. Considerably over one million of men were at one period of the war withdrawn from productive labor. The strain upon the credit of the Government, with eleven States practically out of the Union, was very great. It would seem that no other country could have borne up under such a sudden expansion of the credit circulation, and the changing of so many men from producers to destroyers of life and property. This great inflation of the paper medium had, however, some compensating advantages. It stimulated into wonderful activity all the productive energies of common labor, skilled labor, and machinery of all kinds. War material was produced with amazing rapidity, and in abundant quantity, for equipping, supporting and moving all the great armies in the field and navies afloat. The people never flagged, hesitated, or faltered in producing and furnishing all these vast war materials, and receiving in exchange for it the promises issued to them by the Government. They *seemed* to be getting rich by the operation, and although it was to some extent unreal, yet this stimulus, aided by patriotic determination to maintain the Union, was great enough to induce the people to furnish every thing necessary to supply the army and navy to crush the rebellion, at the mouth of the cannon and point of the bayonet. No compromise was made. Superior force, backed by powerful and abundant resources, accomplished this great achievement. The army and navy were powerful and victorious, because they were sustained by all the vast resources of the country, brought to their aid voluntarily, and by the superior power of the Government which commanded these resources. These bold and decisive financial measures gave power and dignity to the Government, and although it operated upon the unwilling as a forced loan, the crisis demanded it; it was the price of the national Union; the national faith is pledged, and every dollar of this debt must be paid, principal and interest, in gold and silver. . . .

Immediately after the war began we commenced our departure from the gold standard, for the reason that every dollar expended for the waste of war was expended for a pecuniarily

unproductive purpose. Every dollar expended took out of existence a dollar of value for which the Government gave its promise to pay. Every dollar of property thus destroyed led us farther and farther away from the specie standard, and has to be produced again by labor before the value is restored. In one year, from July 1, 1864, to July 1, 1865,

The Expenditures of the War Department were	$1,031,323,360.79
For Navy Department	122,567,776.12
Total waste of War in one year	$1,153,891,136.91

The history of the human race shows no such consumption and waste in any war during a single year. *One billion, one hundred and fifty-three million, eight hundred and ninety-one thousand, one hundred and thirty-six dollars and ninety-one cents* expended in one year! At the close of this year, July 1, 1865, and the close of active hostilities, one dollar in gold was worth, in greenbacks, 1.41, at the Broker's Board in New York. All the bonds and greenback promises to pay dollars, now outstanding, do not represent tangible property or means owned by the Government, but property in the possession of the people under its jurisdiction, and from which all this waste must be reproduced again, and the value restored, in order to bring us to the specie standard and enable us to pay the debt. In short, the debt must be paid from the earnings and income of the people, in some form of taxation to be enforced by the Government.

It was fortunate that the debt, during the war and since, was distributed to a large extent among all classes of people. In fact, this was the only way in which the resources necessary to sustain the war could be obtained. The legal tender notes were paid out and distributed to the army and navy and for supplies and material of war. Certificates of indebtedness and interest-bearing Treasury notes, were also paid out to contractors and others. The loans were negotiated by direct appeals to the people to subscribe in large and small amounts. The great body of the people in the loyal states took up the loans, and became directly interested in sustaining the Government, and the great diffusion of the notes, bonds and certificates all over the country, was the only way in which the enormous debt so suddenly created could be carried through to the close of the war. The greenback notes were very popular among the people. It was a currency

in daily use, uniform in value, and passed freely in every state. It was the people's loan to the Government, without interest, and was at the same time advantageous to them, because it was money in all business transactions. . . .

Chapter XIX

THE PEOPLE AND THEIR WEALTH

50. Trends in Immigration

From 1820 to June 30, 1910, 27,918,992 immigrants were admitted to the United States. Of this number 92.3 per cent came from European countries, which countries are the source of about 93.7 per cent of the present immigration movement. From 1820 to 1883 more than 95 per cent of the total immigration from Europe originated in the United Kingdom, Germany, Scandinavia, the Netherlands, Belgium, France, and Switzerland. In what follows the movement from these countries will be referred to as the "old immigration." Following 1883 there was a rapid change in the ethnical character of European immigration, and in recent years more than 70 per cent of the movement has originated in southern and eastern Europe. The change geographically, however, has been somewhat greater than the change in the racial character of the immigration, this being due very largely to the number of Germans who have come from Austria-Hungary and Russia. The movement from southern and eastern Europe will be referred to as the "new immigration." In a single generation Austria-Hungary, Italy, and Russia have succeeded the United Kingdom and Germany as the chief sources of immigration. . . .

The old immigration movement was essentially one of permanent settlers. The new immigration is very largely one of individuals a considerable proportion of whom apparently have no intention of permanently changing their residence, their only purpose in coming to America being to temporarily take advantage of the greater wages paid for industrial labor in this country. This, of course, is not true of all the new immigrants, but the practice is sufficiently common to warrant referring to it as a characteristic of them as a class. From all data that are available it appears that nearly 40 per cent of the new immigration

(50) *Reports of the Immigration Commission.* Washington, 1911. Vol. I, pp. 23–25, 37–38.

movement returns to Europe and that about two-thirds of those who go remain there. . . .

The old immigration came to the United States during a period of general development and was an important factor in that development, while the new immigration has come during a period of great industrial expansion and has furnished a practically unlimited supply of labor to that expansion.

As a class the new immigrants are largely unskilled laborers coming from countries where their highest wage is small compared with the lowest wage in the United States. Nearly 75 per cent of them are males. About 83 per cent are between the ages of 14 and 45 years, and consequently are producers rather than dependents. They bring little money into the country and send or take a considerable part of their earnings out. More than 35 per cent are illiterate, as compared with less than 3 per cent of the old immigrant class. Immigration prior to 1882 was practically unregulated, and consequently many were not self-supporting, so that the care of alien paupers in several States was a serious problem. The new immigration has for the most part been carefully regulated so far as health and likelihood of pauperism are concerned, and, although drawn from classes low in the economic scale, the new immigrants as a rule are the strongest, the most enterprising, and the best of their class.

While social conditions affect the situation in some countries, the present immigration from Europe to the United States is in the largest measure due to economic causes. It should be stated, however, that emigration from Europe is not now an absolute economic necessity, and as a rule those who emigrate to the United States are impelled by a desire for betterment rather than by the necessity of escaping intolerable conditions. This fact should largely modify the natural incentive to treat the immigration movement from the standpoint of sentiment and permit its consideration primarily as an economic problem. In other words, the economic and social welfare of the United States should now ordinarily be the determining factor in the immigration policy of the Government. . . .

Another important agency in promoting emigration from Europe to the United States is the many thousands of steamship-ticket agents and subagents operating in the emigrant-furnishing districts of southern and eastern Europe. Under the

terms of the United States immigration law, as well as the laws of most European countries, the promotion of emigration is forbidden, but nevertheless the steamship-agent propaganda flourishes everywhere. It does not appear that the steamship lines as a rule openly direct the operations of these agents, but the existence of the propaganda is a matter of common knowledge in the emigrant-furnishing countries and, it is fair to assume, is acquiesced in, if not stimulated, by the steamship lines as well. With the steamship lines the transportation of steerage passengers is purely a commercial matter; moreover, the steerage business which originates in southern and eastern Europe is peculiarly attractive to the companies, as many of the immigrants travel back and forth, thus insuring east-bound as well as west-bound traffic. . . .

A large proportion of the southern and eastern European immigrants of the past twenty-five years have entered the manufacturing and mining industries of the eastern and middle western States, mostly in the capacity of unskilled laborers. There is no basic industry in which they are not largely represented and in many cases they compose more than 50 per cent of the total number of persons employed in such industries. Coincident with the advent of these millions of unskilled laborers there has been an unprecedented expansion of the industries in which they have been employed. Whether this great immigration movement was caused by the industrial development or whether the fact that a practically unlimited and available supply of cheap labor existed in Europe was taken advantage of for the purpose of expanding the industries, can not well be demonstrated. Whatever may be the truth in this regard it is certain that southern and eastern European immigrants have almost completely monopolized unskilled labor activities in many of the more important industries. This phase of the industrial situation was made the most important and exhaustive feature of the Commission's investigation, and the results show that while the competition of these immigrants has had little, if any, effect on the highly skilled trades, nevertheless, through lack of industrial progress and by reason of large and constant reinforcement from abroad, it has kept conditions in the semiskilled and unskilled occupations from advancing. . . .

Chapter XX

RURAL UNREST

51. Number and Size of Farms, 1850–1900

The census of agriculture of 1850 reported 1,449,073 farms, and that of 1900, 5,739,657, an addition in fifty years of 4,290,584 farms, or nearly three times as many as had been established in the preceding two hundred and fifty years of settlement. . . . In proportion to population, therefore, there were 6 farms in 1900 where there were only 5 in 1850, representing an addition of 1 farm for every 12.4 persons added to the national population.

If only the population outside of cities with 8,000 inhabitants and over be considered, the following figures are obtained: In 1850 there was 1 farm for every 14 of the 20,294,290 persons composing this population, while in 1900, when the corresponding population was 51,271,882, there was 1 farm for every 8.9 persons. In proportion to the nonurban population, there were 7 farms in 1900 where there were only 4 in 1850, representing the establishment of 1 farm for every 7.2 persons added to the population outside of cities of 8,000 inhabitants and over. Compared with the nonurban population there were nearly twice as many farms established during these fifty years as in the period between the settlement of Jamestown and the middle of the Nineteenth century. . . .

From 1850 to 1900 the reported area of farm land increased from 293,560,614 acres to 841,201,546 acres. The new land opened for agricultural uses was 547,640,932 acres, or nearly twice as much as that converted from the wilderness into farms prior to the middle of the century. The improved land in farms, which was only 113,032,614 acres in 1850, advanced to 414,793,191 acres in 1900, an increase during the half century of 301,760,577 acres, which increase represents nearly three times the area under improvement in 1850. . . .

For the United States the average size of farms decreased

(51) *Twelfth Census,* 1900. Vol. V, pp. xvi, xix, xxi.

from 1850 until 1880, since which year it has steadily increased. This was true, also, in the North Central and Western divisions, but in the North Atlantic states there was a decrease until 1890, a gain being shown for the last decade only. . . . In the South Atlantic division there was a constant decrease from 1850 to 1900, and in the South Central, from 1860 to 1890. The average for this latter group was greater in 1860 than in 1850, and in 1900 than in 1890.

An examination of the average size of farms for the individual states . . . discloses in many of the older settled communities a decrease in the average size of farms. This is most marked in the cotton-growing states, where it is the result of a subdivision of the larger holdings and the leasing of smaller areas to tenants, the size depending upon the amount of land which the tenant can properly cultivate by his own labor. This movement began shortly after the close of the Civil War, and is still in progress in most sections where large areas are devoted to the growing of cotton. Its extent may be measured by the reduction in the average area of farms in the South Atlantic states from 376.4 acres in 1850 to 108.4 acres in 1900.

Nowhere in the Northern states has there been a like decrease in the average size of farms. . . .

52. Factors Affecting Farm Values in the North and West

The decade 1850 to 1860 was a period when American inventors were earnestly endeavoring to improve all classes of farm implements and machinery. It witnessed the beginning of the practical use of horse-driven machinery for cutting and threshing grain, the first of a series of changes that subsequently revolutionized the methods of work on all farms in the United States outside of those devoted to cotton growing. During the decade, transportation by rail from the Central West to Chicago and Milwaukee, and thence by lake and canal to the seaboard, reached such a stage of development as to enable the farmers of that section to compete successfully in the markets of the world. These factors stimulated the settlement of the North Central states and assisted in opening a market for our breadstuffs in Europe. The repeal of the corn laws in Great Britain

(52) *Twelfth Census,* 1900. Vol. V, pp. xxvi, xxvii, xxviii.

and the rapid development of manufacturing in that country contributed to the same end; and the growth of manufacturing in this country and abroad also created a demand for cotton, which, with the increasing demand for grain, gave a greater impetus to American agriculture than had ever before been experienced.

Moreover, the discovery of gold in California and Australia, and the resulting vast increase in the production of that metal affected the whole scale of prices and became a factor in increasing farm values and in bringing to this country great numbers of immigrants. The potato famine in Ireland and the revolution of 1848 in Germany also assisted in setting in motion an important movement of population toward America. These immigrants settled in all the Northern states, westward as far as Wisconsin. As a rule, they were thrifty, industrious, and experienced in European methods of agriculture. The cheapness of the new lands of the West and the growing markets for American agricultural products caused great numbers of people to move from the New England and other Eastern states to the Middle West and Southwest. . . .

In the decade from 1860 to 1870 the Civil War directly and indirectly wrought great changes in the agriculture of the country. The organization of great armies increased the market demand for food products in the North. The supply of labor was diminished, for the time being, but was increased later by the great immigration movement that had begun in the preceding decade. Agricultural production in the North was greatly extended, and land values continued to rise. Thousands of miles of railroad were constructed, and the Union Pacific, completed in 1869, opened a new pathway to the Pacific coast. The passage of the homestead law in 1862, granting land to the actual settler on the public domain, made it easier for all, and especially for those having little or no capital, to obtain farm homes, and improving transportation facilities made agriculture on the new farms profitable.

As a result, many persons, and especially soldiers of the Northern Army, moved at the close of the Civil War from the East to the West. Land values in that section advanced more rapidly than elsewhere. In fact, the westward movement of the younger farmers and the increasing competition of the cheaper and more fertile grain fields of the West, caused land values

in some parts of New England to suffer a slight decrease. The growing demand for American breadstuffs and meat products in Europe checked, for a time, the tendency toward further decrease in land values in the East by maintaining high prices for agricultural products in all parts of the country. The extent of that demand and its influence in stimulating production and settlement in the West, and its temporary influence in the East, are shown by the fact that agricultural exports increased from $256,560,972 in 1860 to $361,188,483 in 1870, although by 1870 cotton exportation had not attained the proportions which were reached a little later. . . .

The panic of 1873, brought about by the excessive construction of railroads and by over speculation, checked many lines of industry, and for want of remunerative occupations in the towns and cities a proportionally greater movement of population toward the farming sections followed. The panic resulted in the reorganization of many railroads, and in lower transportation rates, which in turn assisted in encouraging settlement on the new farm lands of the West.

During this decade, the cost of transporting agricultural products from the West to the seaboard constantly decreased, and the competition between the cheap, fertile prairies of the West and the less productive lands of the East became very apparent. The grain-raising sections of the East suffered most, and land values declined there, while in the West they greatly increased. Sections of the East devoted to dairy farming, market gardening, and fruit growing suffered less, as it was impracticable, except during a limited portion of the year, to bring the products of these industries from the Western states and deliver them in good condition in Eastern markets.

In this decade, then, land values in the South advanced, and the effects of the Civil War were partially overcome; there was a still greater advance in the North Central and Western states; but the East began to be adversely affected, and in many sections there was a marked decline in the average as well as the total value of farm lands.

The actual decrease in value was nowhere so great as would appear from a comparison of values in 1870, expressed in legal tender, with those in 1880, after the resumption of specie payment. The only proper comparison is with the gold values for

1870. . . . Further consideration should also be given to the fact, already discussed, that in 1880 there was in the North Atlantic states an excess of at least 2,500,000 acres in the area of land reported, with no corresponding excess of land values. This is responsible for an apparent decline in average values per acre in some states of that division. This is plainly shown in the case of Pennsylvania for which the census figures indicate a gain even over the values of 1870. The greater change in average values in New York from 1870 to 1880 than in the next decade was due to the same cause. . . .

During the decade 1880 to 1890 there was continued development of all the factors which, in the preceding ten years, had caused land values to advance in the West and South and to decline in the East. Thousands of miles of railroad were constructed and freight charges were constantly reduced. The introduction of new farming machinery cheapened production in the West, and land values rose generally there and in the South, but showed a continued tendency to decline in the East. The introduction of refrigerator cars, about 1878, rendered dairying in the West more profitable by furnishing the means of marketing the produce in good condition in the East. The local monopoly of eastern dairy markets was broken, and the value of grazing land in New York and in New England declined as that of wheat-growing land had done in the preceding decade.

While the introduction of refrigerator processes had a depressing effect upon land values in the old dairy sections of the East, it proved a powerful factor in increasing values all through the central and far West. It assisted in opening new markets in Europe for American meat, and this stimulated cattle interests in the far West and in the corn-growing and cattle and hog-raising sections of the central West. The great demand for wheat in Europe in the early eighties and the continuously increasing demand for cotton combined to give to land everywhere, except in the North Atlantic states, values in excess of those reported in 1880. . . .

53. Factors Affecting Farm Values in the South

The conditions in the South in this decade were radically different from those in the North. As a result of the war, the

(53) *Twelfth Census*, 1900. Vol. V, pp. xxvii–xxviii.

markets of the South were destroyed, investments in slaves were lost, and land improvements deteriorated. The close of the war found the planters bankrupt, their credit destroyed, and agriculture and all business paralyzed by lack of working capital. Vast areas of land went out of cultivation, the reported acreage of farm land in all the Southern states was less in 1870 than in 1860, and the total and average values of land everywhere decreased.

The inflation of the currency during the war affected values expressed in paper money, exaggerating advances and concealing declines. The real change during the decade is therefore better indicated by comparing the gold values of 1870 with those of 1860. The average increase in land values in the North Atlantic, North Central, and Western divisions was over $5 per acre, while in the two Southern divisions there were decreases of from $3 to $5 per acre. . . .

With the readjustment which took place during this decade in the labor conditions of the South, agricultural operations in that section began to assume their old proportions. The growing demand for cotton in the factory centers of the world stimulated its cultivation, and soon resulted in a great increase in production. The extent and rapidity of the recovery from the condition of demoralization following the Civil War are shown by the fact that, while in 1860, the last year of uninterrupted slave labor, 5,387,052 bales of an average weight of 445 pounds were produced, in 1880 the product was 5,755,359 bales of an average weight of 453 pounds. The reestablishment of Southern agriculture on a solid basis assisted in restoring the values of the old farm lands of the South.

The increased demand for cotton resulted in a great movement of population from the South and elsewhere to the new cotton lands of Texas and the Southwest. Large areas were settled, and land values advanced there as in the South and West.

The growing European demand for American beef, and the increasing consumption of wool in American factories, encouraged the keeping of live stock on the public domain of the West, and especially in Texas. Steers and sheep began to take the place of buffaloes, and the rapid development of the range industry assisted in enhancing the values of the Western farm lands reported by the census of 1880. . . .

54. The Use of Machinery in Agriculture

The year 1850 practically marks the close of the period in which the only farm implements and machinery, other than the wagon, cart, and cotton gin, were those which, for want of a better designation, may be called implements of hand production. The old cast-iron plows were in general use. Grass was mowed with the scythe, and grain was cut with the sickle or cradle and thrashed with the flail. The cost of the simple farm machinery then in use was relatively much higher than at the present time. The last half century has witnessed a revolution in agricultural methods, and the new implements and machines introduced would require more than a page to catalogue. . . .

The values of farming implements on hand at the date of census enumeration increased in each decade since 1850 in the North Atlantic, North Central, and Western divisions, while in the South Atlantic and South Central states they showed a tremendous decline in the decade 1860 to 1870, again reflecting the disastrous effect of the Civil War. . . .

During the period from 1850 to 1900 the average value of implements and machinery per farm increased to a greater extent in the North Atlantic and Western divisions than elsewhere. The high figures in the North Atlantic division are probably due to a considerable extent to the larger relative number of wagons and carriages in use by the farmers in that section, while the high average for the Western states reflects merely the larger average size of farms. . . . The decrease in the average value of implements and machinery per farm in the South Atlantic and South Central states during the last fifty years was due to the subdivision of farms in those sections, and to the fact that in the production of cotton, the great staple of that region, but few costly implements are used. It was caused in part, also, by the fact that a great portion of the cotton is now ginned in establishments not on farms, so that the value of ginning machinery does not appear to as great an extent in the farm reports as it did in earlier years.

The average value of farming machinery per acre of farm land increased steadily in the North Atlantic and North Central divisions from 1850 to 1900; in the Western division, except

(54) *Twelfth Census*, 1900. Vol. V, pp. xxix–xxxi.

from 1890 to 1900; and in the South Atlantic and South Central divisions, since the Civil War. . . .

The number of acres of leading crops per male worker steadily increased, while the number per working animal was substantially the same in 1900 as in 1880. The increase in the productiveness of man's labor, therefore, is secured by the increased utilization of the power of the horse and the mule in driving farm machinery. . . . From these figures it appears that in the last twenty years, by the aid of machinery, and the substitution of horse power for hand labor, the effectiveness of human labor on farms has been increased to the extent of about 33 per cent. The special investigations of the Bureau of Labor have led to the conclusion that by the use of machinery the effectiveness of human labor has been nearly, if not quite, doubled since the middle of the century. . . .

Chapter XXI

STRENGTHENING THE FINANCIAL SYSTEM

55. The Panic of 1873

The most important feature of the early months of the year was the continued excessive stringency in money which affected, to a greater or less degree, every branch of business. In regard to railroad loans, this monetary pressure, of such extraordinary severity and so long continued . . . had a most direct influence in precipitating the panic of the following autumn. The Grangers' movement, also, coming at a time when it was already too difficult for railroads to carry the burden which they were staggering under, exerted a most pernicious influence upon railroad credit, and prejudiced the minds of capitalists both in this country and Europe, against a species of property which was thus subjected to a popular crusade as violent as it was unwarranted. The sale of new bonds was virtually stopped, and, after struggling against these adverse influences for a long time, and making the largest possible advances to their respective enterprises, it finally became impossible for the bankers who were financing for new railroads, to bear up any longer, and they were obliged to succumb to the pressure, with the disastrous results now too well known to our readers. . . .

The panic of 1873 may be said to have commenced with the failure of Messrs. Jay Cooke & Co. on the 18th of September; on the 19th came the suspension of Messrs. Fisk & Hatch; and on the 20th of the same month the failures of the Union Trust Company, the National Trust Company, the National Bank of the Commonwealth, and three other well-known banking houses were announced. On the same day the New York Stock Exchange, for the first time in its existence, closed its doors, and they were not again opened for ten days, during which period legal tender notes commanded a premium over certified checks of from one-fourth of one per cent to three per cent. An active

(55) *The Commercial and Financial Chronicle and Hunt's Merchants' Magazine.* January 10, 1874, pp. 28, 29.

demand for deposits had commenced on the 18th, and increased rapidly during the 19th and 20th, chiefly from country correspondents of banks and bankers, and their drafts continued to such an extent that deposits and reserves were alarmingly reduced. The "call loans," amounting to more than sixty millions of dollars, upon which the banks relied to place themselves in funds in such an emergency, were almost entirely unavailable, because the means of the borrowers were, to a great extent, pledged with the banks, upon the sale of which they relied to replenish their funds. These collaterals in ordinary times could have been sold, but at that moment no market could be found except at ruinous sacrifices. The Secretary of the Treasury purchased about $13,500,000 of five-twenties from the 20th to the 25th of the month, disbursing the currency therefor, and this was considered by him to be all that he could do to relieve the financial pressure, and keep within the limit of the law.

It is impossible in this place to go into every detail of the exciting weeks which followed. The Stock Exchange reopened on the 30th of September, with less excitement than had been expected, but great depression in prices. The most discouraging features which afterwards followed were the successive relapses occasioned at different periods—once by the failures of Messrs. A. & W. Sprague, and the reported embarrassments of H. B. Claflin & Co.; subsequently by the troubles of the California & Texas Construction Company, in which some of the leading railroad financiers of Philadelphia were heavily interested; and again by the threatening of a money panic in London, and the advance of the Bank rate to 9 per cent November 7. The banks reached their lowest point on the 14th of October, when they only held $5,800,000 legal tenders, against $32,278,530 when the panic began. Finally, the turn towards an active and decided improvement began after the middle of November, when stocks commenced to make a permanent advance, from which they did not afterwards recede.

The Bank movements of the year will be referred to with the utmost interest. The banks were frequently below their 25 per cent reserve during the early months of the year in consequence of the excessive stringency in money, and even if the subsequent panic had never occurred the question of maintaining reserves

inviolate under all possible circumstances would have been brought up very prominently for consideration. . . .

The suspension of currency payments followed, and was at first confined to the banks of New York City, but afterward extended to other large cities because the New York banks could not respond to the demands of their correspondents in those cities, and these in turn could not respond to the demands of *their* correspondents. Exchange on New York, which would otherwise have commanded a slight premium, was at a discount, and to a considerable extent unavailable. The suspension of the banks in other leading cities, almost without exception, therefore followed, and their partial or entire suspension continued for forty days, until confidence was in a measure restored by the resumption of the New York City banks on the first day of November. . . .

56. The Panic of 1893

During 1893 the United States passed through a financial crisis of appalling severity. It was much more than a crisis arising from overstrained mercantile credits like that of 1857, or from excessive industrial development like that of 1873; the distress of the past year came at the end of the silver inflation period which began in 1878, and it marked the culmination of events in that disastrous era. The crisis terminated with a great historic change in the currency standard of the country, by the virtual adoption of gold as the only measure of values when the silver purchase law of 1890 was finally repealed on the first day of November. The new policy of the Government of India in discontinuing the free coinage of silver for individuals was announced here on the 27th of June. The World's Fair at Chicago was a prodigious success in its later months and served a good purpose in diverting the attention of the people from the gloomy financial situation. An outline of the new Wilson tariff bill was first published in Washington in November 27. The course of the year was strewn with the wrecks of great corporations, which had a deadly effect on prices at the Stock Exchange. On February 20 came the Philadelphia & Reading receivership; on May 4, National Cordage; on July 25th, Erie; on August 16th, Northern Pacific; on October 13th, Union Pacific; on

(56) *The Financial Review.* New York, 1894. pp. 1–2.

December 23d, Atchison, and on the 27th, New York & New England. . . .

But the crisis of 1893 was emphatically a banking and currency crisis, and the bank failures of the year surpassed all previous records since the national banking system was inaugurated. In the first ten months of the year there were altogether 158 suspensions of national banks, having a capital of $30,300,000, though some of these were very small and weak concerns like the Dwiggins banks in Illinois. Out of this number the Comptroller reported that 86 had resumed by October 31; 65, with a capital of $10,885,000, went into receivers' hands, and 7 remained in examiners' hands, with a good prospect of resumption. . . .

Merchants in general stood the test of 1893 remarkably well. They were not shown to have been too largely extended in credits, and the failures were less than might have been expected considering the paralysis for a time in the demand for goods, and the strangulation caused by the closing of banks. Manufacturing and industrial establishments fared badly and the great closing down in July and August was one of the characteristics of this panic year. Weak concerns were obliged to suspend, but the great vitality of others was remarkably shown by the test, and after a period of enforced idleness they resumed business in large numbers after the silver question was regarded as practically settled by the vote of August 28th.

The Stock Exchanges in New York and other cities had to bear the shock not only of the general difficulties arising from the silver agitation, currency troubles and bank suspensions, but also successive cyclones of depression coming with the collapse of each of the great corporations that went down, viz., Reading, National Cordage, Erie, Northern Pacific, Union Pacific, Atchison and New York & New England. The shrinkage in prices was enormous, but the strength and vitality of bankers and brokers was again wonderfully shown and great as were the losses failures were very few and those that occurred were chiefly among brokers of speculative firms largely interested in the securities of some of the failed corporations. . . .

Chapter XXII

THE PROBLEMS OF INDUSTRY

57. The Combination Movement

Until after the close of the civil war business in the United States was so much localized, on account of the lack of facilities for transportation and the relative smallness of the capital invested, that no large combinations were made.

The rapid development of business in the years following the war, together with the artificial stimulus given to certain lines of industry, either by internal-revenue legislation, as in the case of manufacture of spirits, or by the special demand created by the war itself and by the reaction following it, led to several combinations of a wider reach. The spirits business especially had attracted very large sums of capital, and the producing capacity had become far beyond that required to meet the country's normal demand at reasonable prices. The result was cutting of prices, in order to dispose of the surplus stock, so that the business often became unprofitable. To avoid this the manufacturers met from time to time, and entered into agreements to limit the annual output to a certain percentage of the producing capacity of the various establishments. At one time this limit was placed at 40 per cent; at another time even as low as 28 per cent. . . .

These pools in various lines of business, including agreements upon output and prices, were found to be in each case only temporarily effective. Whenever prices were remunerative, each competing manufacturer naturally found it desirable to extend his sales, and the agreement was likely to be broken.

The application by the courts of the common law regarding restraint of trade also tended to weaken these pools. Under the common law, both in England and in this country, contracts in restraint of trade have been held invalid. It is true that, when the limitation has covered only certain sections of the country

(57) *Final Report of the Industrial Commission.* Washington, 1902. pp. 596–604.

or short times, contracts in partial restraint of trade, if considered reasonable, have been regularly upheld by the courts.

For short periods these pools and other forms of price and selling agreements were very common.

In the sixties, refiners of petroleum found that competition among themselves was lessening their profits. In the next decade an important group of them, under the leadership of Mr. John D. Rockefeller, had reached certain understandings regarding output and prices, which made competition in that industry less severe.

During the seventies and eighties railroad consolidation had not taken place to any great extent, but the various lines usually competed vigorously for traffic to and from common points. The railroads, like some of the manufacturing industries, had found excessive competition unprofitable, and often ruinous. They, therefore, entered into various understandings, providing for a division of traffic, and in some cases for a pooling of earnings on agreed percentages.

Large shippers, through the desire of railroad managers to secure traffic, often succeeded in obtaining special concessions. At competing points it was the rule rather than the exception that the large shippers received either special rates or rebates from the published rates. Among the most active of such shippers favored by rebate arrangements was the Standard Oil Company. The practice was begun by other oil companies preceding it, which were organized and managed largely by the same men who afterwards became so prominent in connection with the Standard Oil Company. The Standard and these earlier companies not only received rebates upon their shipments over certain lines of railroad, but, in some instances, were paid a percentage upon all shipments of oil over the road, including even those of their rivals. In return for these favors given by the railroads, the Standard Oil Company rendered certain services, both by providing special facilities to the railroad for its shipments, and by acting as an evener in connection with some of the railroad pools; that is, when several railroads had agreed upon a division of traffic, this company, by virtue of its large shipments, could turn its traffic from month to month to either one road or another as occasion required, in order to give to each road its proper percentage of shipments.

Whatever the services rendered by the Standard to the railroads may have been, it is clear that they were performed at comparatively little, if any, additional expense to itself, and that it derived so great an advantage therefrom, that its rivals found it impossible to stand in the face of competition of this nature. . . .

The rapid growth of capital, with the advantages for its use which were shown to follow combination, has accelerated consolidation in recent years. When goods were in general demand over wide sections of the country, when these goods were of a certain standard uniform quality, and when the goods were bulky, so that the freight charges formed an essential part of the cost, it was found that a combination in the production of such goods might readily secure so great an advantage over its smaller rivals that the tendency toward monopoly became strong. Combinations in the oil, sugar, salt, and similar industries were organized early, and they became powerful. When large establishments were necessary in order to produce at the lowest cost, a combination had a decided advantage over an individual competitor of small financial strength. Experience further showed that when expensive advertising was necessary to popularize special brands or trade-marks, combinations had an advantage over smaller concerns.

These three influences—a standard product, very large capital, and popular trade-marks—seem to have been particularly powerful in bringing about the most successful combinations. On the other hand, whenever it is necessary for the producer to cater to the taste of the individual consumer, it is much more difficult to form efficient combinations. It is true that in some cases the combinations may buy up individual talent or genius, and in that way secure some control; these, however, are exceptional, and the combination can never expect to secure entire control of special talent.

The fever for organization which was so evident two years ago seems largely to have run its course. Bankers and other financial supporters of the combinations have become more conservative, and at present an organizer can hardly expect to find the capital for floating his plan, unless he has ready to back it a thoroughly well-established business that is showing good profits through its separate plants. Besides, it is now generally expected

that owners of the old establishments, having shown themselves competent, will be the managers of the new.

There is reason to believe that the movement toward concentration of industry will go steadily on, but there is no reason for thinking that within measurable time the combinations will cover the entire field of industry. There will still be left abundant opportunity for individual ownership and management.

The only available statistics regarding industrial combinations in the country as a whole are those presented by the United States Census in a bulletin issued December 30, 1901, which is subject to some slight revision. . . .

The total number of industrial combinations reported by the census is 183, controlling 2,029 plants which were active and 174 plants which were idle at the time of the census enumeration. The rapidity of the recent movement toward combination is shown by the fact that only 63 of these corporations were organized prior to 1897, while no less than 79 were organized in 1899 alone.

The nominal capitalization of the corporations covered by the census bulletin was $3,607,539,200, and the capital actually issued $3,085,200,868. . . .

The census figures do not permit a comparison of the proportion of any particular industry which is controlled by industrial combinations, and therefore give no clue as to the extent to which such combinations are able to monopolize any industry. In many of the most important lines of industry combinations have secured control of a large percentage of the country's production. In many articles of steel a single combination controls 75 to 80 per cent of the output, and in some lines even more; in sugar, about 90 per cent; in petroleum, at least 82 per cent. In other industries, although the percentage of the entire output controlled by combinations is not so large, still there are organizations with very large capital. In the raising or distribution of agricultural products such combinations, though not unknown—e. g., the United Fruit Company—are still rare. While a beginning has been made toward the combination of mercantile industries, not merely in department stores, but also in the union of several large establishments along similar lines, such as the combination organized by H. B. Claflin, yet by far the largest proportion of our mercantile business is still owned and managed

by relatively small concerns. Many manufacturing industries, such as clothing, dressmaking, millinery, small tools, electrical specialties, house-furnishing materials, the textiles, and numerous other articles, are substantially free from large combinations. The manufacture of cotton is perhaps the most important in which no combination of large size exists. . . .

58. Formation of the Steel Corporation

The basic industry of steel-making affects the whole people of the United States. Its organization is a matter of public concern (not merely of private interest), and a great national resource, iron ore, lies at the foundation of the business.

The dominant concern is the United States Steel Corporation. . . .

The Steel Corporation was the culmination and the result of a remarkable and even dramatic period in the steel industry. Until about 1898 the bulk of the business was distributed among a very considerable number of concerns. There was sharp competition, modified by frequent pools and price agreements of greater or less duration and effectiveness. . . .

The situation in 1899–1900 was as follows: There were three great companies—the Carnegie Company, the Federal Steel, and the National Steel—dominating the production of crude and semifinished steel. This may be called the "primary" group. Six other large concerns—the American Steel and Wire, American Tin Plate, American Steel Hoop, American Sheet Steel, National Tube, and American Bridge—severally controlled these lighter finished products. These formed the "secondary" group.

But, large as these concerns were, no one of them was entirely self-sufficient. The "secondary" group was dependent on the "primary" for its crude steel; the "primary" largely dependent on the "secondary" for a market for its products. Few were completely "integrated"; that is, few carried through under one control, with the accompanying advantages, the entire industrial process from the ore to the finished product, linking up ore and coal mines, transportation, blast furnaces, steel works, rolling mills, and finished manufacture.

Immediately, however, came the next step. These great con-

(58) *Report of the Commissioner of Corporations on the Steel Industry.* Washington, 1911. Part I, pp. xvii-xix.

cerns almost simultaneously began the final linking up of the chain of production. Once begun by one concern, others followed in self-defense. The "secondary" companies began to reach back, acquiring ore reserves and crude steel plants. For example, in 1900 the Steel and Wire Company, whose supply of materials had previously been purchased mainly from the Carnegie or the Federal company, planned to make its own steel; likewise the National Tube Company. The "primary" concerns, finding these their chief customers turning into rivals, retaliated by reaching forward to the manufacture of finished products.

Paramount in importance was the ore. The recognition of that importance came strangely late, but, once recognized, it became an axiom that no large concern could stay in the business unless fortified by its own ore reserves. By 1900 the bulk of the Lake ores was in the hands of less than a dozen companies, with a similar concentration in coking coal.

Such efforts on the part of these great concerns, in striving each to "integrate," to make itself wholly independent, threatened to result in a great and sudden increase and duplication of the steel producing and finishing capacity of the country, and to involve them also in an invasion of each other's business.

Thus there was suddenly revealed to the industry what the trade press at the time called "the impending struggle of the giants," a contest between great concerns who under such circumstances might be forced to work out, in rigorous competition, the survival of the fittest.

Such were the conditions in the steel industry in 1900. The spark that lighted the train was the threat of the Carnegie Company to erect a great tube plant near Cleveland, thus invading the field of finished manufacture.

Steel men and the various associated financial interests regarded this situation with much alarm. In such competition they saw a great danger to their businesses, especially to the profitable quasi monopolies in certain branches of the trade. In averting it they also saw a great opportunity. The extraordinary era of industrial expansion was still on; the public were still eagerly absorbing large issues of securities. By merging these conflicting interests into a great corporation, the threatened "steel war" would be averted, and great profits realized from the flotation of securities.

With amazing swiftness, in a few weeks, the United States Steel Corporation was thus organized, and began business on April 1, 1901. Its total capitalization was a little over $1,402,000,000 (including bonds). It is strictly a "holding" company —that is, it does not mine, manufacture, transport, or sell; it simply owns the stock (as a rule all the stock) of its constituent concerns. The concerns acquired were as follows:

Acquired 1901	*Acquired subsequently*
Carnegie Company (of New Jersey).	Union Steel Company (1902).
Federal Steel Company.	Clairton Steel Company (1904).
National Steel Company.	Tennessee Coal, Iron and Railroad Company (1907).
American Steel and Wire Company.	
American Sheet Steel Company.	
American Tin Plate Company.	
American Steel Hoop Company.	
American Bridge Company.	
National Tube Company.	
Bessemer Steamship Company.	
Shelby Steel Tube Company	
Lake Superior Consolidated Iron Mines.	

At its formation the United States Steel Corporation . . . controlled about two-thirds of the country's production of crude steel, and from one-half to four-fifths of the principal rolled steel products. It comprised ore, coal, limestone, natural gas, railway and steamship companies, blast furnaces, steel works, rolling mills, finishing plants, and various other properties. It was thus a thoroughly integrated concern, from ore to finished products. . . .

Chapter XXIII

THE ORGANIZED LABOR MOVEMENT

59. The Knights of Labor

Q. You will please state your name.—A. J. G. Schonfarber; . . .

Q. What position do you hold in the Knights of Labor?—A. At the present time I am a member of the special committee. Up to last year I was a member of the general executive board of the Knights of Labor. . . .

Q. Are you familiar with the rise of the order of the Knights of Labor?—A. Yes.

Q. And their subsequent history?—A. Yes.

Q. Will you state to the commission in your own way how they originated and what the objects were?—A. I can not state of my own knowledge how they originated, because the origin was far back before I joined it. I only know that from reading and hearsay. The organization, I think, commenced in 1869 in secret, and went along in secret from 1869. The secret part of it, of course, I could not say anything about up to the time I joined it. We remained in secrecy until 1886, when the veil was lifted from our organization. While we had previously made some public declarations as to our existence and our work, we did not openly espouse various kinds of legislation and various kinds of movements until probably 1885 or 1886, and then it was mostly open work. The organization up to 1888, I think, had in the neighborhood of 1,200,000 members.

My experience in a labor organization is that it is like the tide, it has ebbs and flows; all of them do, and the organization is up and down, not only the Knights of Labor, but the other organizations of which I am also a member. . . . I think a great many men came into it in 1885, and 1886 and 1887, with the flood, with the expectation of having immediate benefits conferred on

(59) *Report of the Industrial Commission on the Relations and Conditions of Capital and Labor Employed in Manufactures and General Business.* Washington, 1901. Vol. VII, pp. 419–421.

them by increase of wages or lessening of the hours of labor, and that surplus, that ephemeral growth, drifted off just as fast as it came in. They found that our processes were of an educational character, rather than of a radical character. I think, in that connection, it is fair to the organization to say that its real work has never been properly appreciated by the general public, in my judgment. That is, that its work primarily, and all through its 31 years of existence and to-day, is more of an educational work than anything else; that it was never intended to be a striking machine, but it was forced into that position by the great influx of members in 1884, and 1885, 1886, and 1887; and some of the strikes resulting disastrously, took men out. Men have gone out for other causes, that I first assigned—not receiving the great returns that they expected. I might say that there were other causes that militated against the organization, the petty jealousies that arise in all organizations, and an individual opinion of mine is that we did not have, probably, the proper kind of leadership; that is, a leadership broad enough to grasp a great big, unwieldly organization and utilize it with proper care in the proper direction of securing legislation which the organization was pledged to secure; but even in that failure or in the failure of our leaders to do that, there was some education for those who left. Of course it is useless for me to say to you that the organization to-day is not as strong as it was in 1886. I have taken the trouble here recently, in the past 4 months, to try to ascertain the membership of labor organizations, and, as a member both of the Federation of Labor, by reason of being connected with the Typographical Union, and of the Knights of Labor, I am frank to say that there is not as great a number of men in all the organizations of labor put together as there was in the Knights of Labor in 1886 and 1887.

Q. About how many do you estimate there were in the organization then and now?—A. I calculate that we had at least 1,200,000 men then in good standing, with a floating membership of 300,000. I mean by the floating membership the men who fall in arrears. There are men who go into an organization and pay their dues for 3 months and then fall in arrears for 6 months; and then you have to put them back; you have to get them back. They are always kept on the books until they are

suspended or expelled. Suspension does not entirely sever their connection with the Knights of Labor. . . .

60. The American Federation of Labor

Q. . . . What is your name and . . . official position? —A. Samuel Gompers, president of the American Federation of Labor. . . .

Q. Is the American Federation of Labor an organization that grew from its own genesis, or was it the successor of any other organization in the United States?—A. It was the successor of the National Labor Union, which went out of existence in 1868; rather, that was the last convention of that organization that was ever held; and from that day until 1881 there did not exist a general organization of labor in the United States, not at least on the trade union basis of organization. In 1881 a conference was held at Terre Haute, Ind., where the subject of the formation of a new national labor movement—ought to be inaugurated, or called into existence; and a call was issued for a congress to take place at Pittsburg, Pa., in November, 1881. It was there that the organization then known as the Federation of Organized Trades and Labor Unions of the United States and Canada was formed. It continued in existence from then under that name until 1886, when the convention, instead of being held at St. Louis, as the previous convention determined it should be held, a general vote of the members of the organization was taken, and Columbus, Ohio, was substituted for the place to hold the convention; and this change was made in order that the various national unions unaffiliated with the old organization might have an opportunity of meeting with the affiliated organizations and forming an amalgamation under some new name and greater activity and opportunity. The amalgamation was effected, and the name American Federation of Labor adopted.

Q. How many years have you been president of the American Federation of Labor?—A. I have been president, with the intermission of 2 years only, in 1885, and 1, in 1895, since 1882. In 1881 I was nominated for the presidency, but withdrew and was elected vice-president unanimously, and the following year

(60) *Report of the Industrial Commission on the Relations and Conditions of Capital and Labor Employed in Manufactures and General Business.* Washington, 1901. Vol. VII, pp. 596–597.

president, and continued in the position with the exception of the times just stated. I should add, if I may be permitted, that there was no salary of any kind, or emolument of any character from the formation of the organization in 1881 until May 1887. . . .

Q. Have you any knowledge of the number of members in your organization when you first formed, and the number of members to-day, the men that are represented in your body?—A. Only approximately, and I can not give figures as absolute, for there were different methods by which the numerical strength was ascertained. . . . But I should say approximately that there were about 200,000 workers represented in 1881. There are now in the American Federation of Labor, I should say, more than 600,000.

Q. Your federation is on the trades-union system, is it not?—A. Yes; it is, as its term implies, a federation of trades unions. It is a volunteer association and depends more largely upon the consent of the governed than any other organization on earth. . . .

Q. How many international unions of trades have you in the association? How many national, or State, or whatever subdivisions you have?—A. We have now affiliated with the American Federation of Labor 71 national and international unions. . . . There are about 11,500 local unions attached to these national and international unions; there are 10 State branches; there are 87 city central bodies; central labor unions known under several technical names; and there are a little more than 600 local unions which have no national or international unions of their own, and are directly attached to the American Federation of Labor by charter. . . .

61. Wages

Q. That next topic (21), "relative rates of wages during the past fifty years," can you give the commission any sources of information on that subject—rates of wages as compared with ten and twenty years ago? . . . Taking the census for a period of years, you can get at the aggregate of wages paid, and secure

(61) *Report of the Industrial Commission on the Relations and Conditions of Capital and Labor Employed in Manufactures and General Business.* Washington, 1901. Vol. VII, pp. 15–16.

a quotient, of more or less value, representing the earnings under different industries at the different periods. This is rather of a vicious quotient at times, but at the same time it is indicative. The rates of wages of skilled laborers, carpenters, bricklayers, painters, etc., have been stated in our bulletin No. 18 from 1870 to 1898, a period of twenty-eight years, showing that, so far as that class of labor is concerned, and for a few cities, the increase since 1870 has been about 10 per cent. That must not be applied to all the industries of the country, but only to what it professes; but, so far as I know, I am inclined to think that it is very nearly correct. There has been a constant decrease in wages for the last five years.

Q. Decrease?—A. Decrease since 1893; since the depression began; and in some trades there is going on a recuperation of that wage, but it has not been general yet. There has been an increase in many trades during the last two or three years, especially in productive employments, while skilled trades, like those applied to building, etc., have not yet felt that so much; so that while this shows only a 10 per cent increase since 1870, and a slight decrease since 1893 in productive industry, there has been more or less increase.

Q. Would this commission be warranted, on the basis of existing information, in making a positive statement in any report that there had been, on the whole, an increase of wages in ten years, as compared with twenty years?—A. I think so. I do not think that can be gainsaid at all.

Q. . . . Is it a fact that in the printing offices in the large cities, in the newspaper offices in Chicago, New York, Philadelphia, St. Louis, and other large cities that the scale of wages that is now in existence is the same scale that was in existence at the beginning of the late depression in 1893, and that there has been no change? If the scales have been maintained in all those places, do you know of any other reason to give for that than the fact that the printers in those places are thoroughly organized?—A. Those two things exist. Whether one is the cause of the other or not I can not say. The fact that the printers are thoroughly organized must be accepted as a powerful influence in keeping that scale up. Whether it is the sole influence or not of course would be outside of any human wisdom to say. . . .

62. The Eight Hour Day Movement

Q. . . . What views have you to present to the commission on the hours of labor in the different trades and the shorter-workday movement? . . .—A. I will repeat, in my judgment, the average hours of labor of the American worker are about 9½ per day, and this average has very much improved within the past 15 years, particularly due to the never-ending, persistent effort at concentrating the attention of the American working people upon the demand to shorten the working day. That movement has been inaugurated and regarded as the leading feature of achievement by the American Federation of Labor, and there has not been a meeting or convention of the American Federation of Labor or its affiliated organizations and its local unions throughout the country where the question of the reduction of the hours of labor has not had the preferred place. In 1881, at the first convention of the American Federation of Labor, a resolution was passed urging the workers to concentrate their efforts upon the achievement of a shorter workday, 8 hours being then stated. In 1884 a resolution was adopted by the American Federation of Labor referring to the affiliated unions the question of making a universal or a general demand for the establishment of the 8-hour workday May 1, 1886. At the following convention the executive officers were instructed by the delegates coming fresh from their own workshops and benches to promulgate a notice to the workers to the effect that they are asked to make every effort to secure, by conference with their employers, the 8-hour day for May 1, 1886. There were thousands and thousand of circulars sent to large employers asking them to concede the 8-hour workday, and it went forth that where it could not be secured by arrangement with the employers the workers were requested to make the demand for the 8-hour workday, the alternative being that they might cease work until the demand was granted. Perhaps never before on an economic question were the people of the United States so much a unit as upon the achievement of the 8-hour workday. A large number of employers conceded a shorter workday. Where hours of labor were 12 they were reduced to 11; those from 11 to 10.

(62) *Report of the Industrial Commission on the Relations and Conditions of Capital and Labor Employed in Manufactures and General Business.* Washington, 1901. Vol. VII, pp. 622–623.

A still larger number conceded a 9-hour day rather than incur an extensive and perhaps prolonged strike. A few trades inaugurated the 8-hour day; and the hours of labor were therefore, about 1886, generally reduced some. I have no hesitancy in expressing my conviction that the movement of 1886 resulted in a reduction of fully 1 hour's labor of the working people of the United States. It was during the first few days of several strikes that were taking place throughout the country when we saw the meeting of the anarchists at Haymarket, in Chicago, and when that bomb was thrown, killing so many policemen. The effect of that bomb was that it not only killed the policemen, but it killed our 8-hour movement for that year and for a few years after, notwithstanding we had absolutely no connection with these people—none whatever; in fact, they had antagonized our philosophy, our thought, our methods. The bomb was thrown. I am not prepared to say they threw it. They may have; I do not know; it has not yet been established, but whether they threw it or not, it had the same effect upon our movement that year and, as I say, for a few years thereafter. Of course every man wanted to disassociate any connection of his name or his union in the public mind with anything of such a character as throwing a bomb and taking the lives of people—wanton destruction of life—and, as I say, our strikes were abandoned. It was fully 4 years before the subject was again taken up and pressed to any definite action. It was always discussed and prepared for. It was in 1889 that the American Federation of Labor decided that some concerted movement should again be had for the enforcement of the 8-hour day. The executive officers were directed to select any one organization, national, which of its own accord applied to be selected. You will observe it still maintained a principle of trade autonomy and independence. We could select one of the trades which applied. We could not select any trade which had not applied. And, as I may parenthetically say, one of the causes which have contributed to make our organization so successful is that it rests upon the consent of the governed. It was then that the Brotherhood of Carpenters and Joiners was selected by the executive council of the American Federation of Labor to lead in the contest for the establishment of the 8-hour day; and all the other organizations were, by their own direction, of course, called upon to levy a contribution to the financial

assistance of the carpenters. The result of it was that the 8-hour day was established in, I believe, over 100 cities, and the 9-hour day in the remainder of the places. There are perhaps very few places where those hours of labor are exceeded by the carpenters. It was the policy of the American Federation of Labor at that time to select one trade after the other; and the trade which had applied to be next selected was the miners, but the miners in Pennsylvania, contrary to the wishes and the advice of their executive officers, engaged in a local dispute concerning wages, and, I think, also the hours; but it was several months before the time set for the miners generally to make the demand. The consequence was that they were defeated, and that defeated the movement for the miners at that time to establish the 8-hour day. With it came the abandonment of the concerted movement for the establishment of the 8-hour day for that year. The plans of the whole movement had been upset by the miners' local in part of Pennsylvania. The movement of 1898 for the establishment of the 8-hour workday was fairly successful. . . .

63. Child Labor

Q. Can you give the commission some points as to the condition of factory labor in that State and the efficiency of the laws governing factory labor, especially as it relates to women and children?—A. The conditions in the glass factories, which are quite numerous in our State, owing to natural gas—that is one of the industries that can use child labor perhaps more than any other outside of textile work. They were using child labor to such an extreme there that it had become unbearable. They work night and day, you know, and you would see these factories full of little boys from 8 to 13 and 14 in that factory all night. It was a horrible thing to look at. Of course the factory inspector has wrought quite a change in that. He has eliminated the boys and girls from the factory, and out of his work has come a better, a higher, education of the people, so that the families now are not anxious to have their children in the factory. They have had the bad effects pointed out to them, and the newspapers have fallen in line, and the churches, and they have

(63) *Report of the Industrial Commission on the Relations and Conditions of Capital and Labor Employed in Manufactures and General Business.* Washington, 1901. Vol. VII, pp. 748–749.

all had an effect. So now, for the last year or so, they can not get boys enough, and the little fellows have gone to striking. We have several times had to do with settling some of these strikes where the strikers were boys and girls. One of the big factories is going to Chicago, where he acknowledges he can get boys; can't get them in Indiana. They were going to replace these boys, because they struck, with girls, but that brought on a strong public sentiment against the employment of girls in the factories, and the girl business is done for entirely; public sentiment will not allow it at all. Before the factory inspection law brought out that sentiment it was done, but there has been a wonderful change in the boys and girls working in the factory. Then the sanitary condition of the factory has been wonderfully improved during the time the factory inspector has been in there. We have only had him going on 3 years, and we think the outcome of his work, when he gets the factories properly adjusted, will be one of the best things done under the factory laws.

Q. You have no law, then, regulating the hours of labor for children and their ages?—A. Yes; we have for children; and a law that pertains to larger ones, up to girls about 17 and boys up to about 16, I think. It fixes the hours that they shall work. They can not work over 45 hours a week, I think.

There is one thing indeed that is hard to reach with these laws. We try to overcome it, but can not. The father and mother are frequently anxious for the boy or girl to work in the factory, and feel the absolute necessity of their earnings to support the family. The tendency with them is to claim their children are older than they are, and they go into court and make affidavit, where it is necessary, that they are dependent on the earnings of the child, and of course some are kept in the factory in that way; you can not reach them.

Q. Have you a compulsory education law in Indiana?—A. Yes; and a full set of officials whose duty it is to compel the attendance of children in school.

Q. But your factory labor laws contain nothing in respect to education in connection with the hours of labor of the children?—A. No; nothing that is of any value. . . .

Chapter XXIV

THE GROWTH OF COMMERCE

64. The American Commercial Invasion of Europe

I met M. de Witte, as I met all the other finance ministers of Europe, on a tour which I made last year to obtain the European point of view regarding America's industrial expansion. The European view of the competitive positions which the great nations occupy in the struggle for international trade development is just now a matter of keen interest to the people of the United States. As an officer in the financial department of the Government, during the period of the most extraordinary development in the whole history of our foreign trade relations, I was especially interested in this subject. I wanted the point of view and conclusions of some of the men who were equally interested observers, but who were looking at the development from without rather than from within. For four years I had seen at close range the growth of a favorable trade balance which had assumed a total in that brief period greater than had been the net trade balance from the founding of the Government up to that time. That was a phenomenon which had had few parallels in our economic history, and the desire to study it from the European point of view led me to visit nearly all the countries of Europe. I was offered rather unusual facilities for obtaining the views of men most influential in political life and commercial affairs. The diplomatic representatives at Washington introduced me to the finance ministers of their home governments, and through the foreign treasury officers I was able to meet the heads of all the imperial and state banks; through other channels, prominent bank officers and industrial leaders. It is my purpose to give some of the observations and deductions which resulted from this tour.

The subject I discussed with these distinguished foreigners is one regarding which our public has been pretty thoroughly en-

(64) F. A. Vanderlip, *The American "Commercial Invasion" of Europe.* 1902. pp. 4–11.

lightened in the last five years, and it is one of which the European public has heard almost as much in the English and Continental newspapers, but from quite an opposite point of view. When the amount of our sales to foreign countries passed the $1,000,000,000 mark in 1897, we began to congratulate ourselves on the strides we were making in the markets of the world. The record was followed by steadily growing totals, until now we have, in a twelvemonth, sent to other nations commodities to the value of $1,500,000,000. The meaning of that total is emphasized if we look back and find it compares with an average during the ten years ending 1896 of $825,000,000.

While our sales to foreign countries have grown so prodigiously, the other side of our financial account during these last five or six years has shown no proportionate increase. We have bought from the foreigners an average of only $800,000,000 a year, and that total has shown little tendency to expand. It was this fact, this mighty development of our sales, while our purchases were, comparatively, on a declining scale, which piled up in half a dozen years a favorable trade balance so enormous as to startle the world. In the last six years we have sold in merchandise, produce, and manufactures $2,000,000,000 more than we have bought; while in all our history, from the beginning of the Government up to six years ago, the foreign trade balance in our favor had aggregated a net total of only $383,000,000.

The significance of these surprising totals was recognized on both sides of the Atlantic. An analysis of them brought out features more important than the vastness of the aggregate. Heretofore our sales had been made up almost wholly of foodstuffs and raw materials. Europe was the workshop. But that has changed, and we find, year after year, an astonishing increase in our exports of manufactured articles, an increase that in the last two or three years reached totals which gave ample basis for the popular talk of our invasion of the European industrial fields. Our exports of manufactured articles in the decade prior to 1897 averaged $163,000,000 annually. In 1898 our sales of manufactured articles to foreign customers jumped to $290,000,000, the next year to $339,000,000, the next to $434,000,000. . . .

One can turn from a contemplation of these great totals to an examination of the records made in recent years by individual

industries, and find in detail facts upon which to base a belief that the United States has acquired, or is acquiring, supremacy in the world's markets. So many industries have been sending rapidly increasing contributions to swell the rising tide of our foreign commerce that it is difficult to tell any detailed story of American commercial expansion without making it read like a trade catalogue. The increase in our exports of manufactured articles can, in the main, be traced to advances made in the manufacture of iron and steel, and to the display of inventive talent in the making of machinery. The development of our grasp on the world's markets for articles manufactured from iron and steel has been no surprise to those who early recognized the position of America in respect to the raw materials from which those articles are produced. America unquestionably possesses advantages, in respect to her iron ore and her coal mines, far superior to those of any other country, and, based solidly upon that superiority, has already become the greatest producer of iron and steel in the world.

American locomotives, running on American rails, now whistle past the Pyramids and across the long Siberian steppes. They carry the Hindoo pilgrims from all parts of their empire to the sacred waters of the Ganges. Three years ago there was but one American locomotive in the United Kingdom; to-day there is not a road of importance there on which trains are not being pulled by American engines. The American locomotive has successfully invaded France. The Manchurian Railway, which is the real beginning of oriental railway-building, bought all its rails and rolling-stock in the United States. American bridges span rivers on every continent. American cranes are swinging over many foreign moles. Wherever there are extensive harvests there may be found American machinery to gather the grain. In every great market of the world tools can have no better recommendation than the mark "Made in America."

We have long held supremacy as a producer of cotton. We are now gaining supremacy as makers of cloth. American cottons are finding their way into the markets of every country. They can be found in Manchester, as well as on the shores of Africa and in the native shops of the Orient. Bread is baked in Palestine from flour made in Minneapolis. American windmills are working east of the Jordan and in the land of Bashan.

Phonographs are making a conquest of all tongues. The Chrysanthemum banner of Japan floats from the palace of the Mikado on a flag-staff cut from a Washington forest, as does the banner of St. George from Windsor Castle. The American type-setting machines are used by foreign newspapers, and our cash-registers keep accounts for scores of nations. America makes sewing-machines for the world. Our bicycles are standards of excellence everywhere. Our typewriters are winning their way wherever a written language is used. In all kinds of electrical appliances we have become the foremost producer. In many European cities American dynamos light streets and operate railways. Much of the machinery that is to electrify London tram lines is now being built in Pittsburg. The American shoe has captured the favor of all Europe, and the foreign makers are hastening to import our machinery that they may compete with our makers. In the Far East, in the capital of Korea, the Hermit Nation, there was recently inaugurated, with noisy music and flying banners, an electric railway, built of American material, by a San Francisco engineer, and now it is operated by American motormen. . . .

65. The Elimination of the Middleman

One thing is made clear by the investigation of the Commission. The importance of the middleman between the producer and the retail dealer is diminishing, and in some instances retail dealers themselves are being displaced by the practice of direct selling by manufacturers. In the days when manufacturing establishments were for the most part small and when retail stores were likewise small, it was almost out of the question for the manufacturer and the retailer to deal directly with one another. The manufacturer would have had to incur an expense which would be enormous in proportion to the value of his goods, if he sought to bring them to the notice of scattered small retail dealers. Most classes of manufactured products were therefore handled by jobbers or commission men. The jobber bought goods outright from the manufacturer, assuming the risk of sale as well as enjoying a considerable part of the profit coming from fluctuations in the market. The commission dealer acted rather

(65) *Final Report of the Industrial Commission.* Washington, 1902. Vol. XIX, pp. 546–549.

as an agent of the producer, receiving a percentage upon the sales which he effected.

At present there seems to be a very marked decline in the jobbing business and, to a less extent, a decline also in the commission business. The latter suffers less, because under modern methods goods ordered through a commission broker can be shipped directly from the producer to the retailer or consumer, without the expense of rehandling and double freighting, which is usually incurred in the jobbing business. Both classes of middlemen are, however, to a considerable extent being displaced. The increase in the size of manufacturing establishments makes it possible for many producers to maintain regular selling departments, the expense of which is distributed over so large a business as to become less than that of employing middlemen. In some cases manufacturers are selling, to a considerable extent, directly to small consumers without even the aid of retail dealers. Sale direct from the factory, often by delivery on approval, is increasingly common, while not a few large manufacturers maintain retail stores in various cities.

The practice of making direct sales to retailers or consumers has been especially common in the case of the great industrial combinations. The Standard Oil Company long ago adopted the system in most of its markets. The Pittsburgh Plate Glass Company, which has a large control of the plate-glass business in this country, has established distributing branches which have tended largely to drive out the jobbers. It is asserted by the officers of the company in this case that their action was forced by the dictatorial conduct of the jobbers, who had a national association and endeavored to dictate to the manufacturers to what jobbers they should sell. In other cases the elimination of the jobber is merely a matter of evolution, of simplification. One witness, however, who has had large experience in wholesale business, as well as in the management of various industrial combinations, points out that producers must exercise great care in endeavoring to economize by doing away with middlemen. Some kinds of business permit this method of selling more readily than others. Especially where goods are sold on the basis of popular trade-marks and brands, the method of direct sales to retailers is likely to prove advantageous.

Another powerful influence which has tended to reduce the

importance of the wholesale dealer has been the great increase in the size of retail establishments in many cases. Department stores buy goods of many classes, often in exceedingly large quantities, in some cases purchasing the entire output of mills. Moreover, many stores dealing in special classes of articles have so developed that their purchases are on a scale much larger than before. These large retailers, therefore, tend more and more to deal directly with manufacturers, in fact often ordering in advance of actual production the particular styles which they desire. This latter practice relieves the manufacturer of risk, minimizing the time between the production and the consumption of goods. The large retail dealer knows, at least so it is claimed by the representatives of department stores, more accurately than the jobber just what the wants of consumers are, and the danger of producing unsalable commodities is therefore reduced by this change in the methods of business.

It is very generally asserted that the consumer benefits largely by the increased directness of the process by which goods are brought to him from the manufacturer. The elimination of the middleman is an elimination of expense. This same tendency to eliminate the middleman is seen in the handling of agricultural products as well as of manufactured commodities, and it is probable that a saving to the entire community has been effected.

Accurate information regarding the extent to which middlemen have already been displaced can not be secured. One witness asserts that the number of dry-goods jobbing houses in New York a few years ago was twenty-eight, and that they have now been reduced to four, which, while larger than the average of the former establishments, do much less total business than they did. A similar condition obtains in the Boston dry-goods business. Again, it is said that the larger part of the cotton goods produced in New Bedford is sold directly to retailers, although commission houses still do a large business in cottons produced in New England.

Somewhat in advance of the movement toward consolidation on the part of producers came the concentration of retail business in large stores. The department store, which is really a consolidation of smaller stores handling different lines of goods, dates back to the period immediately following the Civil War, and seems to be due to the changes in the methods of conducting

business which developed about that time. Prices were falling, the margin of profit was growing smaller, and it became necessary for merchants to turn over their stocks rapidly. They thus needed larger capital and new sales methods.

While, from the nature of things, there can not be such concentration in retail trade as in production or in wholesale trade, and while for that reason department stores have not multiplied with the same remarkable rapidity as have industrial combinations, there nevertheless seems to be a constant movement toward the concentration of retail trade, and department stores are to be found in all parts of the country.

A feature connected with the establishment of such stores, which has been the subject of more or less complaint, has been the introduction of mail-order departments, by means of which customers living at a distance, who are unable to avail themselves in person of the advantages of the department stores, with their large and varied stocks, are enabled to make purchases by mail.

There can be no doubt that the establishment of the mail-order system tends to decrease the sales of the local dealer, and that he has reason to view its growth with a certain degree of apprehension. Manifestly, there must be somewhat narrow limits to the growth of the system, since in the case of a very large majority of the lines of goods carried by department stores, satisfactory purchases are possible only after personal inspection of the goods. In so far as the mail-order system exists, however, it must exist because the people in the small towns can not be served so satisfactorily by their home stores as they can be by the department stores in the large cities. The first consideration is doubtless the greatest good to the greatest number, and if customers find the mail-order system of advantage there is every reason for its continuance. It is claimed by some of the department stores that the mail-order branch is maintained merely for the purpose of accommodating outside customers, and that it is, on the whole, not a source of profit to the store.

There seems to be no doubt that the department stores are tending to eliminate the jobbers, and are, to a considerable extent at least, crowding out the small retail dealers. There are apparently few instances in which the department store has destroyed the business of the retailers by unfairly lowering prices, only to raise them again when a monopoly has been secured.

In the smaller towns or cities, where but one department store is to be found, the crowding out of the small retailers might result in monopoly on the part of the department store. In the larger cities, where several department stores are to be found in competition with each other, there can be no element of monopoly in the business, and the success of the department store must be attributed to the fact that the public finds it more to its advantage to trade at the large stores than at the smaller stores. The department store, with the large capital at its command and with the large purchases it must necessarily make at one time, is no doubt able to buy goods at lower prices than the small dealers. Furthermore, if rightly managed, the department store must be able to make great economies in rent, cost of superintendence, office expenses, and, possibly, in clerk hire. If these advantages are shared with the public, the result must of necessity be lower prices and consequent benefit. In the absence of monopoly, which in general seems to be the situation to-day, the establishment of department stores must be regarded as being on the whole advantageous to the consuming public. . . .

Chapter XXV

TRANSPORTATION AND COMMUNICATION

66. The Expansion of the Railroad System

The development of American railroad systems down to 1898, as judged by magnitude alone, may be roughly divided into three periods. In the first—that is, down to 1870—a few hundred miles in length constituted the maximum for efficient operation. The Illinois Central, with 700 miles of line, was long considered one of the greatest railroads in the world. Until after the civil war there was only one road with a length aggregating more than 1,000 miles. This growth began early in the fifties, at which time the Pennsylvania system first surpassed 500 miles in length, and in 1853 to 1858, when the New York Central nucleus was formed by the consolidation of some sixteen independent corporations. In the territory west of Chicago the Chicago and Northwestern road operated but 119 miles in 1859, a figure which rose to upward of 500 in 1866. The inconvenience, both for freight and passenger traffic, incident to these small systems is of course obvious. It is stated that, for instance, a journey from New York to the Mississippi in the fifties involved not less than seven bodily transfers from one car to another.

Second Period—1870–1890.

The second period in the growth of consolidation extended to about 1890, at which time 5,000 miles represented about the maximum length of a single railroad in the United States. The Pennsylvania road had grown to about 4,000 miles in length by 1880. The absorption of the Nickel Plate road by the Lake Shore and Michigan Southern in 1882, followed by absorption of the West Shore road by the New York Central in 1885, very considerably increased the length of systems under common control. In the West the Chicago and Northwestern road had

(66) *Final Report of the Industrial Commission.* Washington, 1902. Vol. XIX, pp. 304–306.

grown by 1886 to about 3,500 miles, to which was added some 1,500 miles by the control of the Chicago, St. Paul, Minneapolis and Omaha, and the Fremont and Elkhorn roads. By 1889 the Union Pacific road owned 2,000 miles of line, but controlled nearly 4,000 more. It is difficult to determine whether the enactment of the act to regulate commerce produced any effect upon this growth of large systems. Upon the one hand it appears, from investigation by the Interstate Commerce Commission itself, that consolidation was rather lessened after 1887 as compared with preceding years. Thus, from their data it appears that an average of twenty-seven companies per year were consolidated in 1886, 1887, and 1888, as compared with eighty-six companies annually consolidated in 1880, 1881, and 1882. On the other hand, judged by mileage, 1880 witnessed a consolidation of about 4,000 miles, followed in 1889 by 6,600 miles, and in 1890 by about 3,000 miles of line. It does not appear from this evidence that any specific influence was immediately traceable. Judgment should be based upon a considerable term of years, in order to eliminate the direct effect of prosperity or depression in any case.

Third Period—1890–1898.

The decade after 1890 for the first time witnessed the growth of systems aggregating as high as 10,000 miles under single control. The Pennsylvania road rapidly increased its mileage to upward of 7,000, for example. The interchange of business at Chicago between trunk lines and the Western system had already begun to foreshadow alliances covering both territories. Typical of these were the close working agreements between the Vanderbilt system and the Chicago and Northwestern and the Union Pacific in the Far West. The growth in size of the roads, for purposes of operation at least, although not all of them were necessarily consolidated, is shown by the following statement: in 1867, one road alone exceeded 1,000 miles, constituting about 7 per cent of the total mileage of the country. Ten years later, in 1877, 11 roads exceeded this figure, constituting 20 per cent of the mileage. In 1887, 28 companies, with 44 per cent of the mileage of the United States, were over 1,000 miles in length; and in 1896, 44 companies, or 56.9 per cent of the mileage, exceeded this size. In 1900 over 60 per cent of the mileage of the

United States was included in systems larger than 1,000 miles. This statement illustrates the rapid development which took place after 1890. A comparison of 1880 with 1900 shows that in the former year there were 2,085 railroad companies in existence, either operated independently or under lease, aggregating 93,000 miles in length. In June, 1900, the mileage had more than doubled, with a total number of 2,023 corporations; but of these only 847 were independently operated, the rest being either leased or subsidiary.

It is significant as bearing upon the growth of railroad systems that the period of depression of 1893–1897 retarded for some years the progress of its development. More than this, several important systems were dismembered as a result of the reorganizations effected during that period. Thus, for instance, the Atchison road lost the St. Louis and San Francisco; and the Union Pacific system lost the Oregon Short Line. In fact, the latter road was entirely dismembered. The Erie Railroad alone, among the important ones which were subject to reorganization, was able to resist the disrupting tendency of financial readjustments. The low-water mark in consolidation occurred in 1898, when only 174 miles were actually consolidated, though others were merged or leased. The entire reorganization of such roads as the Richmond and West Point Terminal opened the way to the formation of newer and more important systems, such as the Southern Railway, in the subsequent years. This latter has, for example, at the present time absorbed almost forty minor corporations in a system aggregating between 6,000 and 7,000 miles.

The Consolidations of 1898 to 1900.

Since the return of prosperity in 1898, railroad consolidation upon a scale hitherto unequalled has been under way. The earlier systems, which during the nineties rose to a maximum of 10,000 miles of line, have now been superseded by the organization of systems under common control which include from 15,000 to 20,000 miles apiece. The extent of this movement may be judged from the statement of the Interstate Commerce Commission that "disregarding mere rumors and taking account of well authenticated statements, there were absorbed in various ways between July 1, 1899, and November 1, 1900, 25,311 miles

of railroad. There are in the whole United States something less than 200,000 miles of road; more than one-eighth of this entire mileage was, within the above period, brought in one way and another under the control of other lines." Since the 1st of November, 1900, this rate of consolidation has been still further exceeded, while at the same time the character of the changes has become noticeably different. Forces are apparently at work which may within the immediate future bring the railroad system of the United States under the control of comparatively few dominating financial interests. It is highly important that the character of this change should be thoroughly understood, inasmuch as it involves not alone the consolidation of hitherto independent railroads, but the amalgamation of entire systems. . . .

67. The Decline of Mississippi River Traffic

Steamboat transportation on the lower Mississippi from the fifties until the early eighties was the chief agency upon which the people of the Mississippi Valley depended for the carriage of freight and passengers. Through boat lines running from Cincinnati, Louisville, and St. Louis to New Orleans brought down the products of the upper rivers, returning with sugar, molasses, and other products from the lower river. The river was also the main artery of passenger traffic, and receipts from that source and from the carriage of the mail were great. One boat sold its bar privilege for the lifetime of the boat for $27,000, a sum that built the hull of the steamer. The river traffic was interrupted by the war, but sprang up after its close. Besides the through lines to the northern cities, there was equally important trade from Memphis, Greenville, and Vicksburg to New Orleans, the carriage of cotton being of especial importance, as it was also to steamboats running up the Red, Arkansas, White, Ouachita, Yazoo, and other streams.

From the later sixties until the early eighties the river business enjoyed its greatest importance, and finely equipped steamboats were in the service.

One of the earlier lines was the Merchants Line, running from St. Louis to New Orleans. The fleet was not organized into a

(67) Preliminary Report of the Inland Waterways Commission. *Senate Document Number 325, 60th Congress, 1st Session.* Washington, 1908. pp. 133–136.

company, but represented a group of separately owned steamboats. The boats ceased operations many years ago.

Probably the most famous line that operated on the lower Mississippi was the Anchor Line, whose boats ran south from St. Louis. At its organization the boats of this line acquired the trade to Memphis, and finally extended operations to Vicksburg and subsequently to New Orleans. The building of railroads along the river diverted the passenger traffic and was a serious blow to the freight business. The owners of the Anchor Line were unable to cope with the railroads and let their boats run down. In 1895 the company sold out to a New York company, which had the backing of Austin Corbin & Company.

All the Anchor Line boats have now disappeared, except the *City of Providence,* which still runs at St. Louis as an excursion boat. At one time the line owned as many as 19 fine steamboats, operating from St. Louis to Memphis, Vicksburg, and New Orleans.

Much cotton formerly went to Vicksburg out of the Yazoo Valley. The Parisot Line of steamboats ran seven or eight boats in this trade, having three or four boats leaving each week. This line operated only to Vicksburg from up the Tallahatchie, Sunflower, and Yazoo rivers. Two or three of its boats were built for the through trade to New Orleans, but this service did not last long, the line finding it more profitable to ship to Vicksburg and there reload the cotton on boats to New Orleans. Some of the Parisot boats carried as many as 4,000 bales of "big" cotton, while most of them had a capacity of 1,000 to 2,000 bales in seasons of good water. When the water was low the steamers towed barges for lightering their loads over shoal places. This line was known as the "P" Line.

The competition of the Yazoo and Mississippi Valley Railroad put the Parisot Line out of business. The boat rate of $1 per bale from points on the Yazoo River to New Orleans was adopted by the railroad at points where river and rail met in competition. At points back from the river the rail rate was more. Even at the same freight rate from competitive points the railroad had the advantage in the matter of insurance. The Parisot Line was sold to the Yazoo and Tallahatchie Transportation Company about 1888. The latter company ran about ten years, finally succumbing to rail competition.

The Mulholland Line ran between Vicksburg and Greenville, operating one or two boats. The property of the line was owned by Capt. J. J. Powers, of Vicksburg, who, with Capt. A. F. Nimtz, formed a new company for the same service, calling it the Vicksburg and Greenville Packet Company, which is still in existence. Up to about a year or so ago this company encountered severe competition from the Arkansas River Packet Company, which put in a boat leaving on the same days as the *Belle of the Bends,* the boat of the Vicksburg and Greenville Packet Company. Finally an agreement was reached by which the Vicksburg and Greenville Packet Company still survives, but its steamboat the *Belle of the Bends* is operated by the Arkansas River Packet Company. The incorporators and stockholders of the two companies are distinct, but Captain Nimtz has become the representative of the Arkansas River Packet Company at Vicksburg.

Another important company engaged in carrying cotton seed from the Bends above Vicksburg to New Orleans was the Interstate Transportation Company, owning five or six towboats and some thirty or forty barges. This company was in its prime in the eighties, but went out of existence twelve or fifteen years ago.

One of the most famous lines that operated on the Mississippi in former days was composed of boats running to New Orleans from Vicksburg and Greenville, two a week from Vicksburg and one from Greenville. These were the *Robert E. Lee, J. M. White, Natchez, Frank Pargoud,* and the *Katie.* They were separately owned, but were generally run in harmony by agreement, leaving on different days. They were never organized as one company, nor were they under common ownership, but for a certain period the earnings were divided, one pool lasting for five years. These boats were known as the Vicksburg and New Orleans packets and the Greenville and New Orleans packets. They disappeared gradually, the end coming about fifteen years ago, as a result of the sharp railroad competition.

There were a first and a second *Robert E. Lee* on the river, and also a first and second *Natchez.* The first *Lee* was built in 1866 and the first *Natchez* in 1869. It was between these two boats that the famous race from New Orleans to St. Louis took place in 1870. The boats left New Orleans June 30, the

Lee arriving at St. Louis at 11.30 a. m. July 4, the *Natchez* arriving later.

Boats on the Mississippi have not changed in type from those of the early days. The substitution of steel for wooden hulls has been about the only change, and the use of steel hulls is not general. Only one boat now running to Vicksburg is so built. This boat is the *S. S. Brown* of the Arkansas River Packet Company. She is a new boat. Another steel-hull boat, the *Ferd Herold,* now owned by the Lee Line, at Memphis, and operated by it between Memphis and St. Louis, made a few irregular trips to Vicksburg some ten years ago.

The opening in 1883 of the Louisville, New Orleans and Texas Railroad, now known as the Yazoo and Mississippi Valley Railroad, an Illinois Central property, went far toward accomplishing the downfall of steamboat traffic on the lower Mississippi. The railroad paralleled the river from Memphis to New Orleans, reaching all the important towns on the east bank of the river. Prior to the opening of the railroad cotton from this territory had been sent to New Orleans by river at $1 to $1.50 per bale, but on the completion of the railroad the rail rate soon reached a point where it was unprofitable for the boats to handle cotton. From river competitive points such as Vicksburg the rail rate dropped as low as 45 or 50 cents per bale to New Orleans, while from points back from the river such as Rolling Fork, Miss., about 40 miles from Vicksburg and 10 from the river, the railroad recouped itself by charging $1 to $2 per bale.

The matter of insurance also operated against the river route. The railroad rates, as given above, included the common carrier's liability of risk, but on all cotton shipped by boat the shipper was put to an additional expense of from one-half of 1 per cent to 1 per cent of the value of the shipment. The premium on shipments from Vicksburg to New Orleans amounted to 25 cents on a bale of cotton valued at $50.

In the early eighties and before, there were lines of cotton boats running to New Orleans from Memphis, Greenville, and Vicksburg, built especially to carry cotton. One of them, the *Henry Frank,* carried the record cargo of 9,226 bales, of which three-fourths were big or uncompressed bales. This cargo was carried to New Orleans in 1881.

With the spread of cotton compresses throughout the South the conditions under which cotton is transported altogether changed. Formerly the only compresses were located at important centers, such as Memphis, Vicksburg, and New Orleans. Nowadays any town of comparatively slight importance has its own compress. Practically all these compresses have excellent facilities for receiving and shipping the bales by rail. The railroad track is at the door of the compress, and on cotton that has been brought to the compresses by the railroad a "refund" is allowed if the cotton is sent from the compress by rail. This has overturned the old system of handling cotton by river. The planter still sends his cotton to the commission merchant or factor to sell and the latter sells it to the cotton buyer who has the cotton compress. The buyer now ships the cotton directly from the compress on a through bill of lading to the New England mills, to Liverpool, Havre, or elsewhere. Export cotton is genally routed via New Orleans, and that for New England may go by one of several routes, a good part of the latter being handled by the Illinois Central via Louisville or Cincinnati. Much of this formerly went by river to Cairo or to Cincinnati, whence it was forwarded by rail to New England.

68. Traffic on the Great Lakes

The development of ships and shipping on the Great Lakes during the past 60 years has followed a trend toward standardization and economy in handling bulk commodities, which now constitute about 98 per cent of lake commerce. The slow moving sailing vessel has been supplanted by the modern bulk freight steamer especially adapted to modern demands.

The present day fleet, together with facilities ashore, make the Great Lakes preeminent among the waterways of the world in the transportation of commodities in bulk.

The American lake fleet now aggregates 2,791,204 gross tons compared to 695,604 gross tons in 1868. During this period, however, the number of vessels of all classes composing the fleet decreased from 5,365 to 2,693. The average steam vessel grew from about 230 gross tons to over 2,000 gross tons and the average sailing vessel from 150 gross tons to 1,600 gross tons.

The first American ship on the lakes was built at Erie, Pa.,

(68) *Transportation on the Great Lakes.* Washington, 1926. pp. 28–29.

in 1797. Shipbuilding prospered on Lakes Erie and Ontario during the following years and for some time shipping activities on these lakes exceeded that of the other lakes combined.

The first steam-powered vessel was built on Lake Ontario, at Oswego, N. Y., in 1816 and up to 1820 only three more were added as against 71 on western rivers and 52 on the Atlantic coast. In the next decade eight steamers were built on the lakes and one of these made the first trip from Lake Erie to Chicago in 1832.

Previous to 1841, when the *Vandalia* was launched, all of the lake steamers were of the side-wheel type. In 1843 seven more propellers were constructed and by 1850 there had been a total of 50 propellers built, aggregating 13,247 tons. The total tonnage of the lake fleet in 1851 was 215,000 tons, two-thirds of which were in sailing vessels averaging about 200 tons each.

When the State of Michigan completed a 10-foot canal around the rapids at Sault Ste. Marie in 1855, Lake Superior was open to the small vessels then in use. Up to this time Lake Superior had not been included in the main traffic lines established.

For a period of about 25 years following, lake traffic increased steadily with a corresponding increase in the number of vessels. In 1875 the total tonnage on the lakes was nearly 600,000 tons, the steam tonnage being about three-fifths of the sailing tonnage.

The encroachment of railroad competition about this time greatly reduced lake commerce and impeded the growth of the fleet. New construction of vessels reached 73,000 tons in 1874, but had fallen off to 7,000 tons in 1877, and had averaged only 13,000 tons a year for the five years ending in 1880. In 1880 the lake fleet aggregated only 560,000 tons, or 35,000 less than in 1875.

A revival in lake commerce and shipping occurred during the 10-year period, 1880 to 1890, when the navigation improvements undertaken by the National Government were becoming available. The most important project brought to completion about this time was the ship canal at Sault Ste. Marie. This waterway provided a draft of 18 feet and supplanted the 10 foot canal and locks built and maintained by the State of Michigan. Other Government projects, the ultimate aim of which was to provide 20 feet in all main channels and important harbors, were well advanced. . . .

Shipping engaged in the lake commerce increased to 1,000,000 tons in 1890, and to nearly 1,500,000 tons in 1898. The size of vessels which averaged about 700 tons in 1890 increased to an average of 1,200 tons in 1898. The maximum size of steamers reached as high as 7,000 tons compared to the original propeller's tonnage of about 140 tons in 1841, 57 years previous.

At the beginning of the twentieth century the supremacy of the steamship was well established and sailing vessels declined in number and tonnage until at present there are but 75, aggregating 120,000 tons. Of these, a number are in use as barges, being classified as sail ships merely because of their rig.

Chapter XXVI

THE UNITED STATES A WORLD POWER

69. Weaknesses of the Banking System

The principal defects in our banking system we believe may be summarized as follows:

1. We have no provision for the concentration of the cash reserves of the banks and for their mobilization and use wherever needed in times of trouble. Experience has shown that the scattered cash reserves of our banks are inadequate for purposes of assistance or defense at such times.

2. Antiquated Federal and State laws restrict the use of bank reserves and prohibit the lending power of banks at times when, in the presence of unusual demands, reserves should be freely used and credit liberally extended to all deserving customers.

3. Our banks also lack adequate means available for use at any time to replenish their reserves or increase their loaning powers when necessary to meet normal or unusual demands.

4. Of our various forms of currency the bank-note issue is the only one which we might expect to respond to the changing needs of business by automatic expansion and contraction, but this issue is deprived of all such qualities by the fact that its volume is largely dependent upon the amount and price of United States bonds.

5. We lack means to insure such effective cooperation on the part of banks as is necessary to protect their own and the public interests in times of stress or crisis. There is no cooperation of any kind among banks outside the clearing-house cities. While clearing-house organizations of banks have been able to render valuable services within a limited sphere for local communities, the lack of means to secure their cooperation or affiliation in broader fields makes it impossible to use these or similar local agencies to prevent panics or avert calamitous disturbances affecting the country at large. These organizations have, in fact,

(69) *Senate Document No. 243. 62d Congress. 2d Session.* Washington, 1912. pp. 6–9.

never been able to prevent the suspension of cash payments by financial institutions in their own localities in cases of emergency.

6. We have no effective agency covering the entire country which affords necessary facilities for making domestic exchanges between different localities and sections, or which can prevent disastrous disruption of all such exchanges in times of serious trouble.

7. We have no instrumentality that can deal effectively with the broad questions which, from an international standpoint, affect the credit and status of the United States as one of the great financial powers of the world. In times of threatened trouble or of actual panic these questions, which involve the course of foreign exchange and the international movements of gold, are even more important to us from a national than from an international standpoint.

8. The lack of commercial paper of an established standard, issued for agricultural, industrial, and commercial purposes, available for investments by banks, leads to an unhealthy congestion of loanable funds in great centers and hinders the development of the productive forces of the country.

9. The narrow character of our discount market, with its limited range of safe and profitable investments for banks, results in sending the surplus money of all sections, in excess of reserves and local demands, to New York, where it is usually loaned out on call on Stock Exchange securities, tending to promote dangerous speculation and inevitably leading to injurious disturbances in reserves. This concentration of surplus money and available funds in New York imposes upon the managers of the banks of that city the vast responsibilities which are inherent in the control of a large proportion of the banking resources of the country.

10. The absence of a broad discount market in our system, taken together with the restrictive treatment of reserves, creates at times when serious financial disturbances are anticipated a condition of dependence on the part of individual banks throughout the country, and at the same time places the farmers and others engaged in productive industries at a great disadvantage in securing the credit they require for the growth, retention, and distribution of their products.

11. There is a marked lack of equality in credit facilities between different sections of the country, reflected in less favored communities, in retarded development, and great disparity in rates of discount.

12. Our system lacks an agency whose influence can be made effective in securing greater uniformity, steadiness, and reasonableness of rates of discount in all parts of the country.

13. We have no effective agency that can surely provide adequate banking facilities for different regions promptly and on reasonable terms to meet the ordinary or unusual demands for credit or currency necessary for moving crops or for other legitimate purposes.

14. We have no power to enforce the adoption of uniform standards with regard to capital, reserves, examinations, and the character and publicity of reports of all banks in the different sections of the country.

15. We have no American banking institutions in foreign countries. The organization of such banks is necessary for the development of our foreign trade.

16. The provision that national banks shall not make loans upon real estate restricts their power to serve farmers and other borrowers in rural communities.

17. The provision of law under which the Government acts as custodian of its own funds results in irregular withdrawals of money from circulation and bank reserves in periods of excessive Government revenues, and in the return of these funds into circulation only in periods of deficient revenues. Recent efforts to modify the Independent Treasury system by a partial distribution of the public moneys among national banks have resulted, it is charged, in discrimination and favoritism in the treatment of different banks. . . .

70. The Panic of 1907

Certainly since as long ago as the date of the San Francisco catastrophe there has been no lack of warning indications of financial troubles and possible business disaster. For at least ten or twelve years there has been an era of advancing prices and great industrial, commercial, and speculative activity in all the countries of the world. Credits have increased and multiplied

(70) *Annual Report of the Comptroller of the Currency.* 1907. pp. 69–71.

until the limit has been reached in the amount of reserve money on which they must be based.

For at least two or three years, however, it has been becoming more and more evident that there must soon be a slackening of pace if we were to avoid a general and universal crisis in financial and commercial affairs. These conditions have been world-wide and not by any means confined to the United States. Crises of more or less severity have arisen in several important countries. As is always the case when there is a demand for liquidation, it first manifested itself in the stock market. For months there has been a more or less steady decline in stock-market quotations. Not only stocks, but the very best bonds, have dropped lower and lower in price. The difficulty in selling bonds has become so great that for several years many of the railways have had to raise money for their necessary expenditures and improvements with so-called short time notes, instead of regular bond issues, the rates of interest on such issues rising higher and higher and each issue being harder to place. Merchants and manufacturers of the highest standing and credit have found it more and more difficult to secure or renew loans and the rates have risen steadily for months past.

With such conditions existing we approached the autumn crop-moving period, when there is always more or less disturbance of credits on account of currency shipments and withdrawals of balances from the reserve cities. For a time it seemed as if there were good reason to hope that there might be no more than a gradual liquidation which might be conducted in detail, one interest or line at a time, beginning with the stock market, and that while there might be a general decline in the volume of trade and the gradual liquidation of credits, it would not develop into a bank or commercial crisis. But during the month of October the collapse of a highly speculative corner in stocks, dealt in on the "curb" in New York—not even listed on any regular exchange—brought suspicion upon an old, well-established national bank in the city of New York. Although examinations by the national-bank examiners and the New York clearing house committee showed this bank to be entirely solvent, with its large capital and a considerable surplus still beyond question intact, public interest had been aroused to such an extent that runs developed in New York City on a number of other

banks and trust companies and some national banks between which and the bank first under attack there was known to be community of ownership and management. The national banks of New York City were all found to be solvent by the clearing house committee, and being supported by the clearing house banks none failed.

But, unfortunately, a few other banks and trust companies were not in such good condition, and many of them, not being members of the clearing house or any similar association, they were not so well prepared for cooperation and support of each other. The Knickerbocker Trust Company, with $1,200,000 of capital and $48,387,000 of deposits, closed its doors on October 22, and this was followed by a large number of failures among smaller banks and trust companies. During the months of October and November ten State banks and trust companies, two of which have since resumed, closed their doors in New York City and vicinity. There were long and serious runs on two large trust companies, which were only kept from failure by the support of the other trust companies and the clearing-house banks. One national bank, the First National Bank of Brooklyn, which was clearing-house agent for two large trust companies in Brooklyn which had failed, was compelled to close its doors on October 25 in order to avoid the responsibility for the clearings of these trust companies, and is now in the hands of a receiver.

On October 26 the New York clearing-house banks decided to issue clearing-house certificates for use in the payment of balances, and to limit, if not suspend, the shipment of currency to out-of-town banks. In this the New York banks were followed by those of the other central reserve and most of the reserve cities. The result was to at once precipitate a most serious bank crisis and a famine of currency for pay rolls and other necessary cash transactions. All domestic exchanges were at once thrown into disorder and the means of remittance and collection were almost entirely suspended. Money has been withdrawn and hoarded by individuals, corporations, and even more, perhaps, by the banks themselves, all of whom at once drew and held all the money of any kind they could obtain, often really in larger sums than needed.

It has been one of the peculiar features of the situation that

there has actually been more of a panic among the banks themselves than there has been among the people. The banks have been fearful as to what might develop, and finding their usual reserve deposits only partially available, if available at all, they have been compelled in self-protection to gather from every source all the money they could possibly reach and to hold on to it by refusing payment wherever it is possible and satisfying their customers with the smallest possible amount of cash. It has been remarkable how patiently and with what forbearance the people in the business community generally have borne with the situation and helped the banks to deal with the emergency. With the exception of the first excitement in New York and some smaller runs in other places, there has really been surprisingly little excitement or uneasiness among the people.

The greatest hardship to business generally has been the derangement of the machinery for making collections and remittances. As can readily be seen, this has interfered with every kind and class of business and led to great curtailment of business operations of every kind. Factories have suspended, workmen have been thrown out of employment, orders have been canceled, the moving of crops has been greatly retarded and interfered with and exports have fallen off at a time of the year when they should be at their highest. Another result has been a reduction of the volume of the foreign credits available just at the time they are most needed to offset the large imports of gold which have been made.

The conditions which led to the panic of October and November, 1907, were not due to the failure of a few individual banks. They were not due to the lack of confidence of the people in the banks, but more to a lack of confidence of the banks in themselves and their reserves. Banks have been fearful that the reserve system would break down, and in consequence it has broken down, and the reserve deposits have been only partially available. They were also fearful that not sufficient currency could be supplied to meet the demand, and as they all made the demand at once, there has not been sufficient currency. The result has been a currency famine.

The remedy for this state of affairs is to improve the reserve system so that the reserve deposits of the banks can be kept in a bank where they are surely and certainly available. We must

impart to our currency system some element of elasticity, so that when there comes a sudden demand for currency it can be supplied in bank notes, without depleting the supply of reserve money. . . .

Chapter XXVII

MEETING WAR CONDITIONS

71. The Effect of Conservation in Manufacturing

The conservation schedules for makers of men's and youth's clothing limited the length of sack coats and the length and sweep of overcoats, reduced the size of samples, and restricted each manufacturer to not more than 10 models of suits per season, resulting in a saving of 12 to 15 per cent in yardage. The number of trunks carried by traveling salesmen of dry goods houses underwent an average reduction of 44 per cent. The schedule for the women's garment industry was calculated as capable of saving 20 to 25 per cent in yardage.

The standardization of colors together with certain restrictions in styles of sweaters and analogous knitted articles released 33 per cent of the wool ordinarily used in that industry. A schedule providing that hosiery, underwear, and other knit goods, with certain small exceptions, should be packed for shipment in paper covered bales instead of pasteboard boxes resulted in a large saving in shipping space, while at the same time it released pasteboard to be used as a substitute for tin plate in the manufacture of containers for articles for which tin plate had been forbidden. It was estimated that this schedule would have effected an annual saving of 17,312 carloads of freight space, 141,000,000 cartons, and nearly a half million wooden packing cases.

On the face of it, spools for thread would seem to be an industry not worth the time spent in restricting it. Yet investigation showed that thread manufacturers had reduced the yardage on spools from 200 yards to 150 yards and were considering a further reduction to 100 yards in order to avoid disturbing the unit retail selling price. The quantity was fixed by the division at 200 yards per spool, bringing about an economy of 25 per cent in lumber, labor, shipping space, wooden cases, cardboard boxes,

(71) Bernard Baruch, *American Industry in the War.* Washington, 1921. pp. 65–67.

and other shipping supplies, releasing, it was estimated, 600 freight cars per year.

These conservation schedules were issued to the several trades, their separate features to become effective at future dates fixed by agreement between the Board and the respective trades. In some industries, where the period of production is an extended one, the date for becoming effective had to be placed some months in the future.

This was true of the shoe manufacturing industry. A very exhaustive investigation was made here, far-reaching plans inaugurated, and schedules issued. But only a few features of the schedule had actually become effective by the time the armistice was signed. The schedule provided that shoe manufacturers should be restricted to three colors in leather—black, white, and one shade of tan. New lasts were forbidden; heights of shoes were limited; and certain other features requiring an unnecessary amount of leather were eliminated. Activity in this direction was first stimulated by the fact that in the midst of the war there developed a fashion requiring that women have shoes colored to match each gown, very high shoes for women being also a vogue; and this in face of the fact that there was a peculiarly difficult shortage in glazed kid leather of which the majority of women's shoes are manufactured. This schedule would have effected savings in leather not only in stock carried by retail stores but in shoes standing in the homes. It would have saved capital, packing boxes, labor, and transportation in amounts very large. The savings back through the processes of manufacture, preparation, and tanning of hides, dyeing of leathers, etc., would also have been large. One tanner reduced his line from 81 colors to 3 colors. Most manufacturers reduced their styles by about two-thirds, and retail stores by greater amounts.

The manufacturers of automobile tires agreed to a reduction from 287 styles and sizes of tires to 32, with a further reduction to 9 within two years. This had a tendency to release a large amount of rubber and capital tied up in stocks everywhere. A schedule was issued also to the rubber clothing and the rubber footwear industries, the former eliminating 272 styles and types and agreeing to bale their product instead of shipping it in cartons. Even bathing caps were restricted to one style and one color for each manufacturer.

Savings in the agricultural implement industry are among the most important effected. Implement manufacturers were able to simplify manufacturing operations and reduce their stocks of raw materials; manufacturers, dealers, and jobbers found it possible to do business with smaller stocks of finished products; the steel mills saved, because every variation in size or shape had required a different set of rolls, and so on. Schedules were issued to manufacturers of portable grain elevators, plows and tillage implements, grain drills and seeders, harvesters, mowers, hay rakes, ensilage machinery, spring-tooth harrows, farm wagons and trucks, land rollers and pulverizers, and cream separators. The number of sizes and types of steel plows was reduced from 312 to 76; planters and drills from 784 to 29; disk harrows from 589 to 38; buggy wheels from 232 to 4; spring-wagon wheels from 32 to 4; buggy axles from over 100 to 1; buggy springs from over 120 to 1; spring wagons from over 25 to 2; buggy shafts from 36 to 1; buggy bodies from over 20 to 1 style, two widths; spring-wagon bodies from 6 to 2.

By making his line of farm wagons conform to this schedule, one manufacturer reduced his variety of front and rear gears from 1,736 to 16. Yet the farmers were as well taken care of in the growing, harvesting, and marketing of their crops with this smaller variety of agricultural implements to draw upon as they had been with the wide variety previously manufactured. The habits and prejudices of localities and individual farmers had made it necessary for manufacturers to make many more sizes and types of equipment than were essential, for all of which parts had to be carried, and the number of finished implements in the hands of manufacturers, jobbers, and retailers were unnecessarily large because of this multiplicity. . . .

72. Federal Operation of the Railroads

On December 26, 1917, the President of the United States issued a proclamation taking possession of the railroads of the country, under the powers granted by the Army Appropriation Act of August 29, 1916. As a preliminary to this profoundly significant step, there were many months of strenuous railroad

(72) F. H. Dixon, "Federal Operation of the Railroads During the War," *Quarterly Journal of Economics*, Vol. XXXIII (1919), pp. 577, 587–599. By permission of the President and Fellows of Harvard College.

history. In April the Railroads' War Board had assumed direction of the railroads, under a resolution signed by nearly seven hundred executives, in which the signatories pledged themselves during the war to coordinate their operations in a continental railway system, "merging during such period all their merely individual and competitive activities in the effort to produce a maximum of national transportation efficiency." . . .

This meant first, that the transportation system of the country must be operated as a unit and made to serve our war needs, with only secondary regard to other considerations, and second, that in the accomplishment of this task, there should be no waste transportation if it could possibly be avoided. We were seriously short of facilities, and the task could be accomplished only if every mile of track and every unit of equipment were used to their utmost capacity and in the most efficient manner. Yet as we shall see later, the demand for speed and efficiency was not always consistent with the requirements of economical railroading.

Of the many methods inaugurated for securing economies in service, those which brought the largest returns in money, if we may rely upon the estimates of the Administration, have been the elimination of passenger service, the unification of terminals, and the reduction in size and expense of the organizations of the individual railroads.

That there was ample justification for elimination of passenger service as a war measure needs little demonstration. Even before the war, there was much comment concerning duplicate passenger service out of the large cities, particularly those of the Middle West, like Chicago, St. Louis, and St. Paul, and now when every available locomotive and car was needed either for the handling of food or munitions, or in transporting troops to the camps and the embarkation points, and when track room at the inadequate terminals was at a premium, the Administration was well within its rights in introducing somewhat ruthlessly a severe cut in service. The saving appears to have been the largest in the west and northwest, where passenger accommodations had been the most liberal, and in the Eastern Region where the traffic was heaviest. . . .

This reduction in scheduled train service made possible a notable achievement of the Administration in its troop move-

ment, in which from January 1, 1918, to the signing of the armistice, there were transported 6,496,150 men. From 4500 different points, 1,785,342 drafted men were moved to training camps and fed in transit. Of the total movement, 4,038,918 men in 9109 special trains traveled an average distance of 855 miles, the largest long distance troop movement in history. Into the crowded embarkation ports were brought 1,904,014 men without interference with other traffic. During one period of 30 days, more than 20 troops trains daily entered the port of New York.

That the policy of reduction of passenger service has resulted in very appreciable inconvenience and discomfort to the traveling public, every one can testify, but it was borne with cheerfulness as a war necessity, and for that reason only. That the Administration fully appreciates this fact is evident in the generous restoration of pre-war service that has already taken place. To what extent the roads can or will eliminate the waste of passenger transportation when they are again in possession of their properties remains to be seen. . . .

In the unification of terminal facilities, the opportunities for radical economies are not so abundant as in the reduction of passenger service. While many of the competitive practices have been done away with, the physical barriers to a thoro unification cannot be removed. The growth in population and the increase in land values has intensified a situation which was essentially uneconomic and unscientific from the beginning, and which is due to the competitive and individualistic character of our railroad development. . . .

By the reduction of the operating organizations, and the elimination of two or three hundred officers at salaries of $5000 or over, Director General McAdoo estimated that he had accomplished an annual saving of about $4,600,000. But this "saving," widely heralded in the newspapers because it meant the elimination of the exorbitant salaries paid to railroad executives, was largely a matter of bookkeeping. The greater part of the officers released by the Administration continued as officers of the railroad corporations, and the sum total of administrative expense remained as before. . . .

The three "economies" in which the largest estimated saving was shown have now been discussed. Other administration poli-

cies may be summarized briefly. Rerouting of traffic to avoid unnecessary mileage was attempted in all sections, and it was assisted materially by shippers themselves who, after the disappearance of the traffic forces and the ending of solicitation, naturally sought the shortest routes for their goods. But direct routes, especially in the east, became so congested that roundabout hauls were required, and the saving was thereby largely nullified. No satisfactory estimate of savings can be made, but it is doubtful whether any large economies resulted under the emergency conditions of the war period. . . .

Solid trains were routed direct from origin to destination, expediting traffic and saving yard expense. The service was applied most extensively to traffic in flour and grain, lumber, fruit, packing-house products, live-stock, cotton, and oil. However, the statistics of loading, particularly for the Eastern Region, are materially affected by the extent of empty car mileage westbound, which the war exigencies forced upon the management. So far as was possible, the "permit system" was used as a weapon to enforce full return loads. The coal-zoning plan, introduced primarily to meet the fuel shortage, was effective in eliminating a large waste in transportation, altho it necessitated a serious readjustment in markets that were accustomed to certain grades of coal, and were by this plan now obliged to resort to substitutes. An increase in demurrage rates almost to a prohibitive point, was put into force to speed up the unloading of cars. Through interline way billing was extended and reconsignment privileges to a considerable degree eliminated. A system of store door delivery of package freight was introduced in New York and Philadelphia to relieve the terminal situation. The Car Service Section undertook with some success the campaign for advance movement of important raw materials during the summer months, to avoid a possible congestion in the fall. Finally, there may be mentioned the devising of methods for the consolidation and simplification of tariffs and the completion of a uniform freight classification, in preparation long before the war, which has been submitted to the Interstate Commerce Commission, but not yet approved.

In the passenger field, the project which is looked upon with the greatest satisfaction by the Administration is that of the consolidated ticket office. The number of these was 101 at the

beginning of the year, replacing 564 offices previously in existence. It is insisted that the convenience to travellers in the combination of Pullman and ticket offices, and in the opportunity to decide between alternative routes with a minimum of inconvenience, provides a service that the public will demand as a permanent feature. . . .

In the field of maintenance, many practices have been standardized, and the principles of unification introduced. Locomotive repair shops have been pooled regardless of ownership, thus reducing distance to which locomotives are sent for repairs and the time they are out of service; standard practice has been introduced in many phases of maintenance and inspection, and the policy of inspection has been extended to take the place of commercial insurance, now abolished. Joint purchase of supplies has been undertaken wherever possible. The most sweeping innovation and the one which has met with the strongest opposition, is the introduction of standardization into the manufacture of locomotives and cars. The Director General, in his seven months' report of September, 1918, stated that there were said to be prior to the war 2023 different styles of freight cars, and almost as many of locomotives. At the time of his report, twelve standard types of freight cars had been decided upon, and six types of locomotives in two weights. With interchangeable parts, it was expected that these relatively few types could be more rapidly repaired, particularly when off their own lines, and that the stock of repair parts could be reduced. Moreover, it had already been demonstrated that the speed in production of new equipment was materially increased. Aside from the natural opposition of the locomotive and car builders to this policy, there are many expert railroad maintenance engineers who feel that the policy of standardization has been carried too far, and that many roads are consequently unable to secure the equipment adapted to their peculiar needs. Efficiency in operation has been sacrificed to efficiency in production. . . .

Chapter XXVIII

POPULATION AND WEALTH

73. National Wealth in 1922

The total amount . . . is about $353,000,000,000 for 1922, which involves an increase over the census estimate of about $32,000,000,000. This difference implies no adverse criticism of the census figures, but depends in part on the addition of values for roads and streets and in part on a modification of the principle of valuing railroads and other public utilities by applying the same principle as that used for real estate. This resulted in increasing such railroad and other public-utility values by about $10,000,000,000. The whole estimate, like that of the census, is practically limited to tangible forms of wealth and takes no account of intangible property of various kinds which depends for its value on tangible wealth.

A more important contribution made by the commission is in the analysis of the total estimate into its chief elements. Thus the total of $353,000,000,000 is found to consist of about $230,000,000,000 for real estate and about $123,000,000,000 for tangible personalty or movables. The figure for real estate includes untaxed as well as taxed realty, and also that belonging to railroads and public utilities. The real estate values, therefore, are found to be about 65 per cent of the total wealth of the country. Of this amount about $42,000,000,000 is for tax-exempt real estate owned almost entirely by the Government (Federal, State, and local). The amount for real estate is analyzed further into its chief components, which are found to be about $122,000,000,000 for land value and about $108,000,000,000 for real estate improvements. Thus land, exclusive of improvements, is estimated at 53 per cent of the total real estate and at 35 per cent of the total national wealth.

The report also makes an approximate division of the total wealth among various uses. Thus it is estimated that about

(73) *National Wealth and Income. A Report by the Federal Trade Commission.* Washington, 1926. p. 2.

18 per cent of the total consists of agricultural wealth, about 14 per cent is used in manufacturing and mining, about 13 per cent is held by railroads and other public utilities, and about 12 per cent is held by Federal, State, and local governments. A very large but unascertained portion is employed in wholesale and retail trade, and quite small shares in other lines of business not mentioned above. Probably the largest single share, however, is that composed of town and city dwellings, furniture, and personal effects—wealth possessed and used for personal necessities and enjoyment—which probably is not less than one-fourth of the grand total.

A comparison of the census estimates of wealth for 1912 and 1922 indicates an increase measured in dollars of about 72 per cent. If allowance is made for changes in the purchasing power of the dollar, as indicated by the change in the level of wholesale prices, the increase was only 13 per cent, or a rate only slightly lower than the rate of increase in population. Such price indexes are not especially adapted, however, for use in this manner, and probably tend to exaggerate the changes in the dollar. Such data as are available regarding changes in the quantities of the concrete forms of wealth (as distinguished from the amount in dollars) suggest the probability that 13 per cent is an understatement of the real increase. . . .

74. National Income

Personal Income—Tax Data

During the seven-year period 1917–1923 the total income of individuals who received and enjoyed the income reported in the Federal personal income returns ranged from a little over $12,000,000,000 in 1917 to a maximum of over $31,000,000,000 in 1923. The total income for 1920 was nearly 27 billions, the second highest for the period. The commission estimates that during this seven-year period the aggregate population receiving and enjoying the total income reported in Federal income-tax returns ranged from a little over seven million individuals in 1917 to a maximum of over eighteen and one-half millions in 1923, or from 6.8 to 16.7 per cent of the total population of the

(74) *National Wealth and Income. A Report by the Federal Trade Commission.* Washington, 1926. pp. 9–13.

country. During this same seven-year period the average per capita income of the estimated population receiving or enjoying the income covered by Federal income-tax returns averaged $1,634, and ranged from a minimum of $1,556 in 1920 to a maximum of $1,755 in 1919.

The commission's analysis shows that in 1923 three-fourths of the total income of over 31 billion dollars for that year was received by individuals reporting net incomes of under $10,000, and 3.7 per cent was received by individuals reporting net incomes of $100,000 or over. According to the commission's estimate, the average per capita total income for the aggregate population receiving or enjoying the income in 1923 ranged from $863 for the group reporting a "net income" (income less interest paid and less certain taxes) of less than $1,000 to $1,529,526 for the group reporting a net income of $1,000,000 or over. . . .

Wages and Salaries

During the six-year period 1918–1923 wages and salaries constituted a larger proportion of the total personal income reported to the Federal Government than did any other source in each year.

In general, wages and salaries constitute the bulk of incomes up to $10,000, and a decreasing proportion of incomes in the higher income groups, becoming a small part of the incomes of $1,000,000 and over. Business profits, except for the group with incomes of less than $1,000, constituted the next most important source in groups up to $10,000 and were about equal to wages and salaries in the $30,000 to $100,000 group. Investment income, or income from property owned, represented by rents, royalties, interest, and dividends, in general represented an increasing percentage of the total for the various income groups, becoming more important than either wages and salaries or business profits for all groups reporting incomes over $10,000 each.

In general the data reflect high wages, salaries, and profits during the war and postwar period, followed by depressed business profits and other profits, slightly decreased wages, and less full-time employment during the business slump of 1920 and

1921, followed by a sharp recovery in business profits and more nearly full-time employment at higher wage levels during the last two years of the six years covered. . . .

Estimates of the Total National Income

The total income of the people of the United States in 1918 is estimated, in round numbers, at $60,000,000,000. This was a war year. During the two years of rapidly rising prices and wage rates that immediately followed the close of the war the total money income of the people rose rapidly. It is estimated at more than $67,000,000,000 in 1919 and nearly $75,000,000,000 in 1920. When depression paralyzed a large portion of industry and prices and wage rates fell the total money income declined also. According to the commission's estimates, it was less than $53,000,000,000 in 1921, but increased rapidly as business recovered. It is estimated at nearly $62,000,000,000 in 1922 and nearly $70,000,000,000 in 1923.

Thus the estimated income of the people increased nearly $10,000,000,000, or one-sixth, in five years. These estimates do not furnish an accurate measure of the degree to which needs of the people were provided as between the several years. The population increased about 6 per cent during that time. Furthermore, a considerable part of the differences were merely nominal, e.g., a larger flow of money spent for commodities and services at higher prices in 1920, as compared with 1919, and not a corresponding increase in the production of those commodities and services. . . .

The Chief Sources of National Income

Of the total estimated income in 1923, amounting to nearly $70,000,000,000, manufacturing industries contributed 24.1 billions, or 34 per cent. Agriculture came second in 1923 with 9.4 billions, which was 13.5 per cent of the total. Mercantile business made the third contribution in size, which was 8.6 billions, or about one-eighth of the total. Fourth came the personal-service businesses—hotels, barber shops, shoe-repair shops, and a host of others—which furnished 6.3 billions, or 9 per cent of the total income. The professions—law, medicine, engineering, etc.—made the fifth contribution in size, which was 5.2 billions

of dollars, or 7.5 per cent of the total. The share that was sixth in magnitude was that of the steam railroads, namely, 4.6 billions of dollars, or 6.7 per cent of the total income in 1923. Mining and quarrying contributed 3.4 billions, or 4.9 per cent of the total in 1923, and ranked seventh. The construction industry's share, 1¾ billions in 1923, ranked eighth and constituted 2.5 per cent of the total income. Commercial banking, so long associated with mercantile trade that the Census of Occupations treats the former as a part of the latter, contributed 1.4 billions of dollars, or 2 per cent of the total income in 1923.

The foregoing are the only groups of industries that contributed a billion dollars or more each to the total national income at any time during this five-year period. There were considerable variations in the proportions of the total, from year to year, for some of the smaller groups.

Division between Labor and Capital

The proportion in which the total product of the joint efforts of human labor and brains employed at wages or salary, on the one side, and capital and business enterprise on the other, is a matter of great economic interest. In the following statements it should be remembered that the shares are the amounts before deduction of any taxes paid by the recipients of the incomes or by business organizations.

Of the total estimated product of industry, amounting practically to $70,000,000,000 in 1923, the employed personnel of the industries and occupations received 38.2 billions, or 55 per cent, in salaries, wages, or other remuneration for their work; capital and enterprise received the other 45 per cent in profits, rent, and interest. These proportions were about the same as for the entire six years, 1918–1923, combined. The proportions varied, however, from year to year with the changes in general business prosperity. In 1921, a year of very severe industrial depression, labor's share, namely, 31.3 billions of dollars, while lower in total amount than in 1922 and 11½ billions lower than in 1920, was the greatest in proportion, amounting to 60 per cent of the total. In the war year, 1918, labor's share of the total net product of industry was 28.2 billions of dollars, or only 47 per cent of the total; while the share of capital and enterprise was

32.0 billions, or 53 per cent of the total. With the culmination of the industrial boom in 1920 labor's share increased in aggregate amount to 42.9 billions and in proportion to 58 per cent; while the share of capital and enterprise declined in the aggregate to 31.4 billions and in proportion to 42 per cent.

Chapter XXIX

TRENDS IN AGRICULTURE

75. Shifts in Agricultural Production

The decade since the World War has been in many ways the most extraordinary period in American agriculture. For the first time in the Nation's history, the census of 1925 showed a decrease (since 1920) in crop acreage, in farm animals, in number of farms, and in farm population. Nevertheless, agricultural production increased more rapidly from 1922 to 1926, inclusive, than in any period since 1900, and probably since 1890, when the agricultural occupation of the prairies approached completion.

Four factors, some new, and some of greatly increased importance, help to account for this anomalous situation:

(1) Use of the automobile and tractor, which has caused a decline since the World War of over 7,000,000 in number of horses and mules, with resultant release of 20,000,000 to 25,000,000 acres of crops to feed other farm animals, an increase of probably 12 per cent or more.

(2) Increasing production of animal products per unit of feed consumed, notably of milk and pork. With reference to economy in crop and pasture land this factor appears to be of a similar magnitude to the use of the tractor and automobile.

(3) Shifts from the less productive toward the more productive crops per acre within several regions, notably from corn toward cotton in the South and from wheat toward corn in the western Corn Belt and northwestward.

(4) Shifts from the less productive toward the more productive animals per unit of feed consumed, principally from beef cattle toward dairy cattle and swine.

These factors have promoted extraordinary shifts in areas of crops and livestock production. The tractor and automobile have been important influences in extending grain production in

(75) *United States Department of Agriculture. Miscellaneous Publication Number 105.* Washington, 1931. pp. 1–2.

the Great Plains area, with a notable decline in parts of the East, principally of wheat; while the large quantities of cheap feed released for meat and milk animals by the decline in horses in the North and West has made competition in the South more difficult, especially in meat production. In the States south of the Potomac and Ohio Rivers there are only a little over half as many hogs as 10 years ago, and only three-fourths as many cattle. On the other hand, in Iowa, Kansas, and the States to the north and west, excluding the Pacific Coast States, the number of hogs has increased from 20 to 100 per cent. The geographic shifts in corn production have corresponded with the shifts in hog production.

Such rapid and profound shifts in agricultural production during years of peace are unprecedented in our national history, but changes in land values and farm population have been scarcely less striking. In most of the dominantly agricultural States, notably in the eastern Cotton Belt, the Corn Belt, and the spring-wheat region, the decline in farm real-estate values between 1920 and 1925 exceeded 25 per cent, and in many counties was more than 50 per cent; while in the industrial areas of southern New England, New Jersey, eastern New York and Pennsylvania, of western North Carolina, and of the Pacific coast, increases occurred in the value of farms, in some counties exceeding 50 per cent. The use of the automobile and the building of good roads has encouraged the development of vegetable, fruit, and poultry farms in these industrial areas, some of which are operated by factory workers and business men in their spare hours. Many such "amphibian" farmers, as they are sometimes called, produce enough products to meet the census definition of a farm, and thereby cause local increases in the figures of farm population. On the other hand, the tractor and associated machinery, together with other advances in agricultural technique, have made many farms on hilly or poor land remote from market as obsolete as the spinning wheel, and have indirectly caused declines in farm population and farm values in many parts of the United States that are serious.

The agricultural conquest of the continent appears to be completed, and urbanization of the population is proceeding at a rapid pace. The consequent decline in the birth rate indicates a stationary population about a third greater than at present

within a few decades. However, it seems probable that the present farm land of the United States will increase very slowly, if at all, for the following reasons:

(1) The decline in number of horses will continue for several years at least, releasing feed for meat and milk animals, since there are less than half enough colts on farms to replace the work stock that die or are disabled annually.

(2) The increasing production of milk per unit of feed consumed, and probably also of meat, will continue, doubtless, for there is still much scrub stock on farms and poor methods of feeding persist.

(3) It will be more profitable to put into crops some of the 15,000,000 or 20,000,000 acres of crop land lying idle and of the 100,000,000 acres of plowable pasture in farms than to clear, irrigate, or drain much new land.

(4) Acre yields of the crops in northwestern Europe, owing mostly to the use of fertilizers, are 50 per cent higher than in those portions of the United States having similar climatic and soil conditions, and a rise in the price of farm products equal to that necessary to justify the clearing or reclamation of a large amount of land would greatly encourage the use of fertilizers in the United States.

76. Farm Tenancy

The people living on farms have declined in numbers, but the family-sized farm has remained characteristic, and farmers who own their farms still greatly outnumber tenant farmers. This is in contrast with urban development with its tendency toward larger units and corporate ownership. It is possible to consider the tenant situation on farms in several ways, each throwing some light on the situation as a whole.

The 2,462,608 farms that were operated in 1925 as tenant farms were 38.6 per cent of all farms. In the several States the number of tenant farms ranged from 3.4 per cent of all farms in Maine to 68.3 per cent in Mississippi. In one county of the latter State 96 per cent of the farms were tenant operated; 70 per cent of the farmers owned neither work animals nor land, depending on their landlords for both; 97 per cent of the

(76) *United States Department of Agriculture. Miscellaneous Publication. Number 105.* Washington, 1931. p. 189.

farms were under 50 acres in size; and 86 per cent of the land in crops harvested was in cotton. . . .

In the North and West tenants who do not own the work animals are so few that it has not been deemed worth while to count them for census purposes, but in the South such tenants, called croppers, constitute 38.9 per cent of all tenants. Croppers harvested an average of but 26 acres of crops in 1924, as compared with 37 acres for other tenants in the South, and 101 acres for tenants in the North and West. The 16 Southern States contained 98 per cent of the colored tenant farmers in 1920; and as they had 61 per cent of all tenant farmers, these States greatly affect the averages for the country as a whole.

The percentage of tenancy among farmers is 51.1 in the South, and 26.6 in the other 32 States taken collectively. Over 245,000 tenants in the Northern and Western States, about 28 per cent, rent from their parents, grandparents, wife's parents, or brothers or sisters. Tenants not so closely related, or not related at all to their landlords, numbered about 616,000 in the 32 States of the North and West, but constituted only 19 per cent of all farmers in those States.

In the Northern and Western States the highest percentage of tenancy among farmers exists in Nebraska, with 46.4 per cent in 1925, followed by Iowa with 44.7 per cent, and Illinois with 42 per cent. But most farms in these States are good enough to encourage a tenant to expect to make a good living. In Iowa, for instance, the land and buildings in tenant farms were worth an average of $24,256 in 1925, and Iowa tenant farms had an average of 113 acres in harvested crops in 1924.

Farm tenants increased in the country as a whole from 38.1 of all farmers in 1920 to 38.6 per cent in 1925. This was about the same rate of increase as from 1910 to 1920. Some of this increase is to be accounted for by the fact that many farm owners who had purchased at high prices just prior to the 1920 census were forced to relinquish ownership and had become tenants in 1925. In most of the area north of the Potomac and east of the Mississippi there was a decrease in the number of tenant farms and an increase in owner-operated farms. Many of these farms in the Northeastern States and near the mill cities of the South were operated by families some member of which was engaged in an urban occupation.

77. Farm Finance

The most noteworthy feature of farm-mortgage finance has been the marked increase from an approximate total of $3,320,000,000 in 1910 to about $9,468,000,000 in 1928. The great rise in prices which culminated in 1920 was an important factor in this increase, but mortgage debt continued to increase until 1928, despite a continuous decline in farm values in nearly all parts of the United States.

The total farm-mortgage debt in 1920 amounted to 136 per cent more than in 1910; the debt in 1925 was 19 per cent above 1920, and the total in 1928 was about 1 per cent over 1925. All States had increases from 1910 to 1920, with largest additions in the western regions. Between 1920 and 1925 three-quarters of the States showed increases and 12 showed declines; in 1928 reductions in debt appeared in 19 States, nearly all in the Rocky Mountain, west North Central, and North Atlantic groups of States. . . . Farms with mortgages equal to or nearly equal to their value show a general conformance to the number of foreclosures and forced sales in the same area.

Distribution of the 1928 debt by census divisions shows 43 per cent in the west North Central States and 21 per cent in the east North Central States. . . .

The value of agricultural land is closely associated with greater borrowing with the land as security. Not only is the total mortgage debt greatest where total farm-land value is greatest, but the average amount of debt per farm and per acre is greatest where these units have higher value.

During the decade following the World War important shifts occurred in the distribution of farm mortgages among holding agencies. Holdings of individuals declined sharply because of the transfer to others or repossession of land sold. Holdings of banks at first increased through refunding of short-term debt but later entered upon the decline which has since continued. Meanwhile mortgages from principal agencies continued steadily upward to 1928, when life-insurance companies held 22.9 per cent of the total; Federal land banks, 12.1; joint-stock land banks, 7; commercial banks, 10.8; mortgage companies, 10.4; retired

(77) *United States Department of Agriculture. Miscellaneous Publication Number 105.* Washington, 1931. p. 175.

farmers, 10.6; active farmers, 3.6; other individuals, 15.4; other agencies, 7.2 per cent.

By 1928 the decline in land values and reduction of security margins of loans had resulted in many foreclosures and led to a decrease in total mortgage holdings of the principal lending agencies during 1928 and an indicated decline in the total volume of farm-mortgage debt of the country.

78. Farm Expenditures

The expenditure of farmers for feed, fertilizer, labor (money wages only), and for lumber totaled over $2,000,000,000 in 1924, and taxes paid probably brought the figure up to nearly $3,000,000,000. In addition there was an expenditure of several hundred million dollars for interest and commissions on mortgage debt. It appears, therefore, that these expenditures amount to fully a third of the farmers' gross income, and when expenditures for machinery and tools, for livestock bought, for seed, spraying materials, and many other items are added, for which no census figures are available, it seems probable that the farmers' cash expenditures totaled about half of the net farm value of his products. . . . The expenditures for feed are heaviest in the Northeastern States, where dairying is the dominant industry and is partly dependent on mill feed, grain, and linseed cake from the West and cottonseed meal from the South. Much western grain is also used to feed poultry and work horses in this region. The heavy expenditure for feed in the California valleys and western Washington is for dairy cows and poultry principally. The expenditure for fertilizer is greatest in the South Atlantic States, extending northward on the coastal plain to New England. The fertilizer is used principally on the cotton and tobacco crops in the South, on tobacco and onions in the Connecticut Valley, and for the vegetable crops on the coastal plain from Norfolk, Virginia, to Boston. Outlying districts are the Aroostook potato district of Maine and the fruit and truck districts of Florida and California. The expenditure for labor is very heavy in these fruit-growing and trucking belts.

Thus it appears that farm expenditures are heaviest in the Northeastern States and California; in fact, many dairy and

(78) *United States Department of Agriculture. Miscellaneous Publication Number 105.* Washington, 1931. p. 133.

poultry farms in these areas approach manufacturing plants in character, transforming purchased feeds into finished products, with heavy expenditure for labor. In the Cotton Belt, on the other hand, the expenditure for labor is greatly reduced in the eastern portion by means of the cropper and tenant systems, and expenditure for fertilizer in the western part is as yet insignificant, nevertheless, the ratio of expenditures to receipts is as high as in any other region, and there are many plantations in which expenditures for feed, fertilizer, labor, and lumber are all large. In the Corn Belt farm expenditures are lighter than in the North Atlantic States or in California but heavier than in the South. The farms, especially in the prairie portion of the Corn Belt, are large, and expenditures for labor, feed, machinery, and lumber are large per farm. There is little expenditure for fertilizer, but as the use of mineral fertilizer is slowly moving westward from the leached lands along the Atlantic coast into the areas of inherently more fertile lands in the Mississippi Valley expenditures for fertilizer in the Corn Belt are likely to increase as the supply of phosphorus, calcium, and other elements of fertility in the soil is depleted.

79. Agricultural Cooperatives

Early in the twentieth century the cooperative method of handling farm business became popular, and the number of functioning associations for buying and selling increased rapidly. From 1900 to 1920 was the heyday period for the local independent association. During these years the technique for the formation and operation of large-scale associations, operating over States or over producing areas, was developed. Two types of large-scale enterprise were evolved—the federation, which was a banding together of local associations with a central office, and the centralized association, composed of thousands of individual farmers who had the same product to market. From 1918 to 1925 many associations of both kinds were formed, but the centralized form of activity acquired a membership more than four times that of the federated organizations.

As a number of the large-scale associations went out of busi-

(79) *United States Department of Agriculture. Miscellaneous Publication Number 105.* Washington, 1931. p. 137.

ness about 1925, there was a decrease in the number of farmers buying or selling through cooperatives.

With the creation of the Federal Farm Board in 1929, and the announcement that it would work through cooperatives, a new impetus was given to the creation of business associations of farmers. The present program includes nation-wide selling agencies for the more important crops, these to serve regional organizations, which in turn are to serve local associations. Already national sales agencies have been formed for grain, cotton, wool, livestock, and beans, and the regional associations for bridging the gap between the national selling agency and the local associations are being rapidly formed.

There is every reason for believing that the present movement will result in a much larger number of farmers becoming members.

Chapter XXX

POST-WAR DEVELOPMENTS IN MANUFACTURES

80. Labor and Machinery in Manufacturing

Manufacturing activity in 1929 reached a new high mark. The value of products manufactured increased 12.3 per cent over the value reported to the census for the previous record year, 1927, while the index of physical volume of output, based on the production of 1899 as 100, rose from 214 in 1919 and 272 in 1927 to 295 in 1929.

The horsepower capacity of prime movers (engines, turbines, and water wheels) in 1929 was only 2.3 per cent more than in 1927, and was practically the same as in 1919, but the horsepower capacity of motors driven by purchased electric energy increased 19 per cent from 1927 to 1929 and 145.3 per cent during the 10-year period.

The electrification of manufacturing industries is accomplished also by the use of motors connected with generators which in turn are driven by prime movers in the same plants. The capacity of such motors increased 77.6 per cent between 1919 and 1929, and in the latter year totaled 12,376,376 horsepower.

The increasing tempo of industrial production culminating in the record activity of 1929 occurred without a corresponding gain in the number of wage earners employed. Mechanization of industry and more efficient utilization of labor led to a drop of 1.8 per cent in factory employment in 1929 as compared with the abnormal postwar year 1919, but the number employed in 1929 showed an increase of 5.9 per cent over 1927. The wage budget of 1929, however, exceeded that of 1919 by 11.1 per cent and that of 1927 by 7.1 per cent.

The increase of 16.1 per cent in the total population of the United States during the past decade (1920–1930) and the decrease of 1.8 per cent in factory wage earners employed in 1929 as compared with 1919 reflect an employment condition which

(80) *Fifteenth Census. Manufactures.* Vol. I, p. 14.

can not be fully accounted for in the statistics of the census of manufactures. While certain expanding industries, notably those referred to in the following paragraph, absorbed wage earners between 1919 and 1929 at a more rapid rate than that by which the population increased, the largest increase in the number of employment opportunities occurred not in the manufactures group taken as a whole, but in the distribution, service, and construction groups of industries, not covered by the census of manufactures.

Among the outstanding wage-earner gains in manufacturing industries between 1919 and 1929 were those which occurred in the following lines of production: Electrical machinery, apparatus, and supplies (including the manufacture of radio equipment), 54.8 per cent; bakery products, 41.8 per cent; furniture, 37.9 per cent; petroleum refining, 36.9 per cent; chemicals (including the manufacture of rayon and allied products), 36.1 per cent; and motor vehicles and parts, 30.4 per cent. . . .

81. The Migration of Industry

At the beginning of the present century industry was quite decidedly concentrated within the manufacturing East, with New England and the Middle Atlantic States in possession of more than half the total, as measured in terms of wage jobs. With the East North Central States added, exactly three-fourths of the nation's manufacturing was localized within the region bounded by the Great Lakes and the St. Lawrence River on the north, the Mississippi River on the west, the Ohio River and Mason and Dixon's line on the south, and the Atlantic Ocean on the east. This region contained, however, slightly less than half the total population (49 per cent).

The following 30 years saw profound changes both in the industry and in the population of the United States. The latter increased 62 per cent and industrial wage jobs almost 88 per cent, resulting in an increase of such jobs from 62 to 72 per 1,000 population. The physical volume of manufactured products nearly trebled (increasing 195 per cent), bringing about a gain of 82 per cent in manufactured goods per capita of the total population.

The geographic redistribution of industry which took place

(81) *Location of Manufactures 1899–1929.* Washington, 1933. pp. 44–48.

during the period, while on a somewhat smaller scale than were the increases in wage jobs and in physical output, was, nevertheless, considerable. The figures disclose a tendency toward decentralization, manifested both in sectional shifts and in dispersion from the larger cities outward. The westward movement of the "center of manufactures" was greater than that of the "center of population" during the 20 years from 1899 to 1919. . . .

The most important changes occurred in the leading 3 industrial divisions—the New England, the Middle Atlantic, and the East North Central. The 2 eastern divisions of the group, with a combined total of 52 per cent of all factory wage jobs in 1899, reported only 41 per cent of the total 30 years later. Six of the other seven divisions—the exception being the West North Central division—increased their proportions of the Nation's industry during the period, but only in the East North Central division, which had about 23 per cent of the factory wage jobs in 1899 and almost 29 per cent of them in 1929, were the gains of sufficient volume to challenge seriously the long supremacy of the manufacturing East. . . .

Changes which occurred in the single decade from 1919 to 1929 throw some light on the volume and character of the geographic distribution of industry. Although factory wage jobs as a whole were almost 2 per cent fewer in 1929 than in 1919, pronounced increases in them took place in some lines of manufacture, notably in 10 industries or industry combinations which are engaged principally in the production of electrical equipment, canned and baked foods, furniture, petroleum products, chemicals, motor vehicles, clothing, and printed matter. While every section of the country increased its number of wage jobs in these industries, there were changes in the proportions credited to 8 of the 9 geographic divisions. . . .

Eight industries or combinations of industries, engaged primarily in the manufacture of meat, lumber products, tobacco, ships, musical instruments, leather, and woolen and worsted goods, and in the construction and repair of steam-railway equipment, radically reduced their wage jobs in all the divisions, from a total of 1,960,601 to 1,300,599. Several of these industries reduced quantity of output in approximately the same proportion; others actually increased their volume, chiefly through increased mechanization of their plants. The manufacturing East

lost some of its former share, as it did in the first group of industries. In this instance, however, New England's percentage increased, the Middle Atlantic States bearing the brunt of the reduction in wage jobs. The drastic decline in the shipbuilding industry—the largest single cause of the geographic reapportionment of these eight industries or combinations—while felt in all sections, was sufficient in the Pacific division to cut down the percentage of that division by one-half. The expansion of logging operations in the Northwest added approximately 25 per cent to the lumber industry in the Pacific and Mountain divisions and lessened the shares of all the others.

However, not all the pronounced instances of sectional redistribution occurred in the two groups of industries considered above. Some took place in a third group composed of 14 industries or combinations of industries having 50,000 wage jobs or more each, in which increases or decreases were under the 20,000 mark set for admission to the first two groups. The principal products of this third group are shoes, paper boxes, clay products, confectionery, cotton goods, engines and tractors, glass, hardware, rolled steel, nonferrous-metal alloys, planing-mill products, silk and rayon manufactures, and structural and ornamental iron and steel products.

The manufacturing East lost heavily in its share of wage jobs in these industries as a group; but every other division except the Mountain increased its portion appreciably during the decade. Shoe manufacturing, 49 per cent of which, as measured by wage jobs, was done in New England in 1919, developed rapidly in the 3 Southern divisions and in the East North Central division, leaving New England with only 39 per cent of the total in 1929. Some migration of cotton-goods manufacture occurred, the New England share falling from 47 to 30 per cent. The only other division having as much as 10 per cent of the industry—the South Atlantic—increased its percentage from 38 to 54 during the period. The hardware industry, formerly concentrated largely in the East (two-thirds of its wage jobs were localized in New England and in the Middle Atlantic division in 1919), advanced rapidly in the East North Central States during the decade, increasing their percentage of the industry total from 30 to 42 and reducing the combined share for New England and the Middle Atlantic States from 67 to 55 per cent.

Fifty-four per cent of the wage jobs in steel works and rolling mills in 1919 were reported in the Middle Atlantic States; only 44 per cent were located there 10 years later, the East North Central division having increased its share of the industry total from 32 to 40 per cent.

A type of industrial redistribution essentially different in character from those sectional shifts described above is seen in the changes in the distribution of wage jobs in urban, suburban, and other areas. In order to observe such movements data are shown for (a) the 93 cities having 100,000 inhabitants or more, (b) the related industrial areas adjoining these cities, and (c) the remainder of the country—referred to in the report as (a) "Areas of primary concentration," (b) "Areas of secondary concentration," and (c) "All other areas," respectively. Movement of an industry from one geographic division to another may, of course, indicate a desire to remove from a crowded urban location to one in a suburban or rural neighborhood, but such a regional move is likely to be made primarily in order to take advantage of more convenient supplies of materials, better coverage of the market, or more satisfactory labor conditions. On the other hand, to leave an area of primary concentration for a site in an adjoining secondary area usually indicates a desire chiefly for more manufacturing space, lower taxes, etc., in the less congested area. While it not infrequently happens that a plant removes from a primary area of one geographic division to a secondary area of another division in order to gain both kinds of advantages, nevertheless, in general, the two types of relocation are quite distinct in motive and effect.

Some dispersion of industry is disclosed in the statistics for the areas of concentration. The primary areas, which as a group had about 45 per cent of the nation's factory wage jobs in 1899, did not quite hold that proportion through the following 30 years of rapid industrial expansion, their share having dropped to 44 per cent in 1929. These large urban areas did more than approximately maintain their 1899 share of the country's population. Their portion of that total increased in 3 decades from 22 to about 30 per cent. In the secondary regions adjoining the large centers industry grew relatively more than it did in the centers themselves, increasing the share of the total wage jobs reported in these outlying areas from 18 to 21 per cent. In all

the more industrialized divisions, except the East South Central —six in all—the secondary areas built up their share of the total industry.

The primary and secondary areas, in which approximately two-thirds of all factory wage jobs are to be found to-day, account for only 3 per cent of the land area of the nation. The remaining 97 per cent is occupied by what are here termed "other areas." Although this vast region suffered a very considerable loss in its share of the total population by reason of the heavy migration to the large cities, it maintained slightly more than one-third of the nation's industry with but a small loss in percentage.

A group of 287 manufacturing plants in the largest 50 industries, those reported as relocated in 1928 or 1929, reflected so strong a tendency toward decentralization as to suggest the possibility that data, if available, might indicate a recently increasing momentum away from the largest urban centers. . . .

The effect of redistributions of industry in the past 30 years—both regionally and in areas of concentration—has been to establish more nearly an equilibrium between population and wage jobs. The extent to which this has taken place is seen in the narrowing of the extremes in wage jobs per 1,000 population—from 34 in the "other areas" and 124 in the primary areas in 1899, to 45 and 106, respectively, in the two types of regions in 1929.

It is of interest to know how location changes have affected the largest 10 cities of the country, as contrasted with the group of 93 urban centers having 100,000 or more inhabitants (areas of primary concentration). One might expect to find marked differences between the growth of the extremely large cities and those in which the population is nearer the lower limit of 100,000. It is, of course, in the largest centers that the most pronounced concentration of both population and industry exists. Data for the most populous 10 cities of the group and for their surrounding industrial areas indicate a fairly definable current of industrial dispersion. Since the rate of growth in wage jobs for these large cities was not quite equal to four-fifths of the rate for the country as a whole from 1899 to 1929, their percentage of the total jobs dropped from 25 to 23. The extremely rapid growth in two of the newer centers—Detroit and Los Angeles—

serves to conceal the relatively small expansion which took place in several of the older cities. Ten smaller municipalities having 100,000 inhabitants or more, and situated in the industrial areas dominated by the 10 chief cities, advanced industrially considerably less than did the latter. Although the remaining sections of these 10 industrial areas, composed of 37 counties and parts of counties (i. e., those portions of the counties which are located outside the limits of cities having 100,000 inhabitants or more), increased their factory wage jobs at a more rapid rate (77 per cent) than did either of the 2 more populous portions of the areas, nevertheless they failed by a wide margin to equal the growth on industry in the country at large.

Despite the tendency toward manufacturing decentralization, generally observable in the statistics presented in this report, industry remains quite highly concentrated in large urban centers. The dispersion which has occurred consists principally of expansion into areas adjoining the dominant population and industry centers, rather than into the thousands of smaller cities and towns throughout the country. The process also has taken the form of a relatively smaller growth of industry in the key cities of the 10 great industrial areas than in those large cities located elsewhere.

It is impossible to say whether these decentralizing tendencies are as strong as they have been generally described. Much recent literature on the subject of industry location refers quite emphatically to a definite reversal of the generally gregarious tendency of industry. Misunderstanding sometimes arises from the fact that reports of industry migrations are likely to be exaggerated. When news that plants or industries are moving from one section of the country to another is investigated, it is often found that the migration, while possibly involving several factories, is relatively unimportant as measured by the resultant geographic redistribution of wage jobs for the entire industry. . . .

Chapter XXXI

LABOR AND THE COST OF LIVING

82. The Arbitration of Labor Disputes

With the general collapse in business in 1921, prices and the cost of living also slumped heavily, and labor disputes assumed an entirely different aspect. Previously, disputes had risen largely on the part of the employees, who desired better wages or decreased hours. Now the demand came from the employers for reduced wages and, to some extent, for increased hours. The employees were, for the most part, on the defensive and the arbitration cases arising at this time were chiefly concerned with the questions of reducing wages and lengthening hours.

Of the 64 arbitration cases of which the bureau has record for 1921, 42 were decided in favor of the employers, and in 1922, 21 out of 41 were in favor of the employers. Thereafter the pendulum swung the other way, and the great majority of the decisions were in favor of the workers.

Outstanding cases of wage decreases following the war were various decisions of the Railroad Labor Board, rendered in 1921 and 1922, which took away a considerable part of the wage increases granted in the general wage decision of 1920.

Street-railway cases have been very frequent in the postwar years, most of the union agreements providing for arbitration as a last resort. Arbitrations have also been very frequent in the printing trades, in the electrical trades, and in the men's garment industry, the unions and employees concerned having adopted the principle of arbitration on a fairly general scale.

The most significant development of the postwar period, in the field of labor arbitration, was probably the passage of the railroad labor act of 1926. This act abolished the old Railroad Labor Board and created a new machinery of mediation and arbitration. Under this act there have been many arbitrations involving wages and hours. In addition, three cases involving

(82) *Bulletin of the United States Bureau of Labor Statistics. Number 541.* Washington, 1931. pp. 28–29.

wages and hours have been referred by the President of the United States to special boards set up by him for the purpose, as provided in the act of 1926. In one of the three cases referred to presidential boards the employees were given a wage increase, while in another a wage increase, higher than that previously offered by the railroad, was denied. The decisions of these presidential boards are theoretically not binding, but the sanction back of them is so great that they are not likely to be disregarded. In addition, as the act of 1926 was agreed upon in advance by all the unions as well as the railroads, a certain moral obligation rests upon all disputants to accept the decisions arrived at through the machinery of the act. . . .

83. Minimum Wage Legislation

Men.—Minimum wage legislation as such has not been passed by any State for the fixing of the wages of men. Up to the present time minimum wage legislation has been limited to females, sometimes including male minors. However, under this heading should be noted the compulsory arbitration legislation of Kansas and the Adamson Law passed by Congress in 1916.

Women.—The minimum wage legislation of the United States has been generally limited to females, whether adult or minors, and in several instances, to male minors. Massachusetts was the first State (1912) to enact a minimum wage law covering women and children in private employment. . . .

The force of the rates fixed depends upon public opinion in two States, Massachusetts and Nebraska. The legislation of the other 15 States contains provisions for the legal enforcement of the wage rates.

The history of minimum wage legislation in the 17 States where legislation was enacted has been most discouraging to its advocates. The only appropriation ever made in connection with the Nebraska act was an initial one of $500, which later was turned into the sinking fund of the State, no action ever having been taken under the law. . . .

To sum up the present status of minimum wage legislation for women in private industry, three laws have been repealed (Nebraska, Texas, and Utah), three laws have been held unconsti-

(83) *Bulletin of the United States Bureau of Labor Statistics. Number 541.* Washington, 1931. pp. 447–449.

tutional by the United States Supreme Court (Arizona, Arkansas, and District of Columbia), and two laws have been held unconstitutional by local supreme courts following the decision of the United States Supreme Court in the Adkins case (Kansas and Porto Rico). The Minnesota law recognized the effect of the Adkins case but is considered valid for minors. The Colorado law is ineffective because of lack of adequate appropriations. North Dakota has repealed (Acts of 1927, ch. 83) section 17 of the minimum wage act, which provided for regular appropriations, and made it necessary to pass separate appropriation bills biennially. Wisconsin has amended its law for the purpose of continuing the legislation as valid within the decision of the Adkins case. The Massachusetts law, depending upon public opinion to enforce its minimum wage orders, is apparently constitutional. California and Washington, it is understood, and probably North Dakota, Oregon, and South Dakota, are depending upon public opinion with the help of the minimum wage legislation to affect the wage of women in private employment.

Minors.—The States still having minimum wage legislation on their statute books are probably, at least to some extent, influencing wage rates of minors. As the Adkins case, decided by the United States Supreme Court, did not involve a minor, the decision of the case holding invalid a law which provided for the fixing of a minimum wage rate for adult women does not necessarily hold invalid the legislation which provides for the fixing of a minimum wage rate for minors.

84. Women in Industry

The past two years have seen a continuance of the interest in the wages and hours of working women, and in the laws regulating their employment. In addition, the increase of unemployment has given prominence to two closely related problems—the part-time woman worker and the married woman worker. At present the contention is raised in various quarters that the part-time worker is a subsidized competitor, that she is either married or has some other means of support apart from her job, and will therefore take wages on which a woman wholly dependent on herself would starve. If she were not available, it is claimed,

(84) *Bulletin of the United States Bureau of Labor Statistics. Number 541.* Washington, 1931. p. 869.

the employer would have to so plan his work as to give a full-time job at a reasonable wage. The married woman worker is criticized on similar grounds, the claim being made that since she has a husband whose business it is to support his family, she works merely for the sake of obtaining luxuries or raising the standard of living, or otherwise increasing the family welfare, a purpose which, while commendable enough in itself, ought not to be followed at the cost of excluding the single worker who must depend on her own efforts for bare support. . . .

85. Workmen's Compensation Laws

All the States of the Union had workmen's compensation acts at the beginning of the year 1931 except four (Arkansas, Florida, Mississippi, and South Carolina). In addition to these 44 State acts, this article covers the four Territorial acts (those of Alaska, Hawaii, Philippines, and Porto Rico), the act for the District of Columbia, for longshoremen, and for the United States civil employees. . . .

Insurance of the employer's liability to pay compensation is recognized as an essential feature of the system in most of the States. This may be effected through private insurance (stock or mutual companies), self-insurance (proof of solvency, with or without the giving of a bond or other security), or by insurance in State funds, which may be exclusive or competitive. . . .

Of the 50 compensation acts . . . 17 are compulsory and 33 are elective. A State fund insurance system exists in 19 of the States . . . (the Tennessee fund is limited to coal mining only). Of the 19 States having State fund insurance systems, 7 are exclusive, whereas in 12 the State fund competes with private insurance companies. . . .

No law undertakes to cover all employments. Various exemptions are made, the most important numerically being the exclusion of agriculture and domestic service. Interstate commerce is exempt because it is subject to the exclusive action of Congress, though its law creates liability and does not provide compensation. Laws that apply only to "hazardous" or "extra-hazardous" employments exclude other, thereby distinguished as

(85) *Bulletin of the United States Bureau of Labor Statistics. Number 541.* Washington, 1931. pp. 896–906.

"nonhazardous." Casual employments are usually exempted, and those not for gain frequently. . . .

Few laws as originally enacted made specific provision for compensating occupational diseases. The dominant idea of accident has given way by degrees, however, until at the present time compensation, either for occupational diseases generally or for designated diseases of this class, is allowed under 17 of the 51 laws analyzed. . . .

The amounts actually payable under the acts are determined by three factors—the rate (usually a percentage of the wages), term, and (in most States) a fixed maximum weekly or total payment, or both.

Per cent of wages.—In all but two States (Washington and Wyoming) the amount of compensation is based upon wages. . . .

Using as a basis the rates for temporary total disability, it appears that 50 per cent of the employees' wages is allowed in compensation in 13 States . . . 60 per cent in 8 States . . . 65 per cent in 7 States . . . and 66 2/3 per cent in 16 States. . . .

Maximum term and amount.—It is obvious that the reduction of a workman's income by one-half or even by one-third, the most liberal percentage provision, leaves a large proportion of his loss uncompensated. But the burden on the employer is restricted further (and transferred necessarily to the injured employee and his family), since the term of payment is not fixed by the period of disability in most States, but by an arbitrary maximum; death benefits likewise rarely continue for the period of their probable need. . . .

There is quite apparent a tendency to recognize the greater economic loss in case of a permanent total disability than in case of death. Death benefits continue under 11 laws for life or until remarriage, while under 21 acts life benefits are paid for permanent total disability. . . .

Weekly maximum and minimum.—Another leveling feature of most laws is the establishment of a weekly maximum and minimum. The former may prevent the higher paid employee from securing the full proportion of his earnings that the percentage provision would indicate, while the minimum named is often affected by the qualification that if the wages received are less than such minimum the amount of the actual wages shall be paid as a benefit. The result of the various restrictions has

been computed as placing upon the injured worker about 50 per cent of the burden of industrial accidents in the most favorable States and from 65 to 80 per cent in those less favorable.

In most cases the actual maximum and minimum payments are named, but in a few it is the basic wage that is noted, payments being computable therefrom. No maximum or minimum provision is fixed in two States (Alaska and Arizona). Fixed amounts depending on the number of dependents are payable in Washington. Under the provisions for temporary total disability the Philippines have a maximum of $9 a week. Two States have a maximum of $14, twelve of $15, five of $16, one of $16.50, seven of $18, while sixteen permit amounts above $18 per week. Monthly maximums are prescribed in Nevada ($72), Oregon ($97), Wyoming ($90), and by the Federal civil employees' law ($116.66).

Partial disability.—Temporary partial disability is usually compensated for by the payment of a fixed percentage of the wage loss, the term and amount, both weekly and total, being limited. . . .

All compensation States now provide medical benefits. Under 14 laws neither time nor amount is limited. The period is without limit in 8 other States which limit the amount, while the time but not the amount is limited in 12 States. However, time or amount or both may be increased in the discretion of the commission in 21 States, so that there are but 8 States in which both items are absolutely restricted.

The provision is generally without cost to the workman, but in Alaska the employer may deduct $2.50 per month, in Arizona and Nevada one-half the cost, not over $1 per month, and in Washington one-half the cost, from the employee's wages to maintain a medical fund. . . .

86. Benefit Activities of Unions

This . . . revealed that the great majority of labor organizations make provision to assist their members in meeting the calamities of death, illness, or accident. This may be done through the medium of either insurance or what are generally known as trade-union "benefits." The emergencies arising from

(86) *Bulletin of the United States Bureau of Labor Statistics. Number 541.* Washington, 1931. pp. 405–407.

a strike or lockout are usually those first met. After that the union may furnish relief in case of death of the member or his wife or in case he becomes incapacitated for work because of injury or sickness. Of these, death is the emergency most often provided for, though sickness and disability also frequently receive assistance. A few unions have even assumed the responsibility of making some provision for the surviving family after a member's death. Some unions pay cash benefits to members found to be suffering from tuberculosis, or pay for their treatment in a sanatorium; others which do not pay benefits for this disease make regular or occasional contributions to private sanatoriums, with the understanding that their members shall be entitled to treatment if needed. Others pay for certain disablements peculiar or common to the trade. Even those labor organizations which have no regular benefits often have a "benevolent" or "relief" fund from which, in special cases, deserving members may receive assistance in times of financial stress. These benefits paid by the international organization are in a great many cases supplemented by similar benefits paid by the locals.

A few organizations provide annuities for members who, by reason of advancing age, illness, or disability, are unable to continue at the trade, and several of the larger international unions also maintain homes for their aged members, the superannuated unionist being given a choice between the pension and residence at the home. Only well-financed unions can afford to pay such benefits, however, for the constantly mounting costs make the burden of a pension system prohibitive for all but the largest and most prosperous organizations.

Since all of these services cost money and all of the revenues of labor organizations must come from the members, it follows that the number and amount of benefits reflect in great measure the prosperity of the trade and consequently of the organization. Everywhere the tendency is toward the expansion and increase of benefits where the funds of the union will warrant. Unions in declining trades or in those suffering from depression, on the other hand, are generally decreasing benefits or abolishing them altogether.

Few of the trade-union benefit funds are on an actuarial basis. In the majority of cases a certain amount, estimated as sufficient

to cover the expenditure for benefits, is added to the dues; if this proves to be insufficient the assessment is increased. In actual practice some organizations have accumulated in this way funds that will undoubtedly be sufficient to cover any liabilities for benefits. Others have not been so fortunate or have failed to take into account the increasing need for money with the result that they find their funds in a precarious situation as regards future payments. This uncertain stability of benefits funds has led a number of labor organizations either to drastic reorganization of their systems on an actuarial basis or to the substitution of group insurance or other kinds of insurance.

A gradually evolving tendency appears to be the shifting of the responsibility for certain conditions onto the employer. This is especially apparent in connection with the problem of unemployment. Although labor organizations do what they can to prevent loss of employment by their members, exert themselves to find them other positions, and in certain instances either pay cash benefits or excuse payment of dues during the period of enforced idleness, many feel that this is a burden that the industry, not the employees nor their organization, should bear. In some industries the union has been successful in inducing the employers to bear at least part of the burden of unemployment, and has been instrumental in the creation of a system of unemployment insurance for the industry. . . .

Chapter XXXII

ADVANCES IN TRANSPORTATION AND COMMUNICATION

87. Growth of the Transportation System

During this period an enormous amount of capital went into new transportation facilities in the United States. The year 1920 may be taken as a convenient starting point. From that year to 1932 the railroads' investment in new lines, extensions, and additions and betterments, less retirements, amounted to $6,309,117,000. Companies engaged in the transportation of petroleum and its products by pipe line which report to the Interstate Commerce Commission increased their investment by $423,613,000. Capital outlays on State, county, and local highways and city streets totaled $12,500,000,000. Appropriations by the Federal Government for improvements of rivers and harbors aggregated about $604,000,000. On the other hand, electric railways reporting to the Commission had $727,233,000 less investment in 1932 than in 1920, owing in large part to abandonments but also in part to a reduction in the number of companies required to file reports.

The net total of the foregoing is $19,110,000,000, or substantially the amount of the railroads' recorded investment in 1920. In addition, great sums have been expended for motor vehicles, garages, boats and other privately owned water equipment, natural gas and electric transmission lines, petroleum pipe lines on which no report is made to the Commission, and for aircraft, airports, and other air transport facilities. After making due allowance for facilities used in purely local transportation or which are otherwise not competitive with established agencies of transportation, it appears conservative to estimate that the increase in transportation facilities between 1920 and 1932 represented a capital outlay of substantially 25 billions of dollars. . . .

(87) Regulation of Transportation Agencies. *Senate Document Number 152, 73d Congress, 2d Session.* Washington, 1934. pp. 2–3.

In *Coordination of Motor Transportation,* 182 I.C.C. 263, there appears the following estimate of the distribution of domestic freight traffic in 1929, excluding that moving in the coastwise and intercoastal trades. The estimate is in terms of ton-miles.

	Per Cent
Steam railroads	72.9
Great Lakes	15.8
Pipe lines (petroleum)	5.2
Intercity trucks	4.2
Inland waterways	1.4
Electric railways and airplanes	.5
Total	100.0

88. The Water-Transport Industry

After playing a leading part in the settlement and development of the country, transportation by water receded in the latter half of the nineteenth century to a position of relatively minor importance, although bulk transportation on the Great Lakes of grain, coal, and iron ore continually expanded. In the second and third decades of the present century factors came into play which have enabled this form of transportation to regain some of its former importance.

First among these factors was the building of the Panama Canal, which made good water service possible between the densely populated industrial eastern seaboard and a rapidly growing agricultural and commercial area on the west coast. Increased outlays for river and harbor improvements also played an important part. The World War set influences in motion which fortuitously encouraged the development of domestic water transportation, and to an unforeseen extent. The building by the Government of a large fleet for overseas purposes left many vessels available, latterly at a very low price, for use in domestic transportation. More recently ships have been diverted to this trade because of the decrease in foreign commerce. Interest in our merchant marine, previously at a low ebb, was revived during the war. The difficulty which the railroads experienced in handling the large volume of traffic then offering also led the Government to equip certain inland waterways with more modern types of craft, and thus to begin barge

(88) Regulation of Transportation Agencies. *Senate Document Number 152, 73d Congress, 2d Session.* Washington, 1934. pp. 5–6.

operations which it has since continued on the Mississippi and Warrior Rivers and has extended to the Intracoastal Canal and the Illinois River.

Another factor of considerable importance was the strengthening of section 4 of the Interstate Commerce Act in 1910 and 1920, and the progress which the Interstate Commerce Commission made in eliminating the departures from the long-and-short-haul clause which had originated in past water competition. This is the clause of this section which prohibits the charging of more for a shorter than for a longer haul over the same line or route in the same direction. By ruthless resort to this practice the railroads practically destroyed the earlier competition on many of the inland waterways, and also impaired some coastwise competition and such intercoastal competition as existed prior to the construction of the Panama Canal. As the Commission gradually eliminated these low rates under the amended and strengthened fourth section, water carriers were given opportunities which they had not theretofore had.

As a result of these and other factors, the volume of domestic water-borne traffic grew from about 190,000,000 net tons in 1914 and 286,000,000 tons in 1920 to 456,000,000 tons in 1929, although, owing mainly to the depression, it declined thereafter to 272,000,000 tons in 1932, the latest year for which figures are now available. Traffic on our inland waterways, measured in ton-miles, was 22.07 percent as great as all rail traffic in 1925, 23.54 percent in 1929, and 13.87 percent in 1932. The greater part, however, is Great Lakes traffic. Omitting this, these percentages are 2.02, 1.92, and 3.36 percent, respectively. Much of the water-borne traffic is, of course, of only local consequence. Ton-mile statistics of coastwise and intercoastal traffic are not available; for the intercoastal traffic, at least, they would have little significance. . . .

89. The Motor-Transport Industry

Motor transport entered the field as a competitor of rail transport about a decade and a half ago. For convenience, the term "intercity" will be used to identify such motor transport and distinguish it from the kind which substitutes in local service

(89) Regulation of Transportation Agencies. *Senate Document Number 152, 73d Congress, 2d Session.* Washington, 1934. pp. 13–14.

for the old horsedrawn vehicle. During its short life, intercity motor transport has grown with extraordinary rapidity, without any Federal control and until recently with comparatively little effective State control. . . .

Conditions within the industry.—Intercity trucking is disorganized and much of it is in an economically unsound condition. The reasons are familiar, and a brief summary will suffice.

The small scale of operations, the presence of three more or less distinctive but highly competitive types of operators, and the ease of entering the business are the basic reasons. As yet there are comparatively few well-organized, large-scale operations, and these are small when judged by rail standards. There are thousands of little operators, with a very few trucks or even a single truck. The law makes a distinction between common carriers and contract carriers and attaches greater responsibilities, or gives lesser opportunities, to the former than to the latter. Both, but especially the common carrier, are continually faced with actual or potential competition from private truck operation, whether it be by industries, commercial or shipper organizations, or farmers.

It has been and is easy to enter the business, especially on a contract or private basis, and may require little capital expenditure. The efforts of the States to control entrance, summarized elsewhere, have not been very successful, owing, however, in part to the lack of supporting interstate regulation. A small sum, and often only a down payment on a single truck, is enough in many instances for a start. Use is made of a publicly owned highway, the construction and maintenance of which impose a charge through some form of taxation upon the operator, but no capital expenditure.

This ease of starting small-scale operations has the natural result that many truck operators are poorly trained and inadequately financed, and some are irresponsible. The lack of training means hardships for the individual trucker and difficulties for his competitors, both those of equally low qualifications and those who, with greater experience and larger resources, try to conduct their operations on a businesslike basis. Too often rates have been demoralized by operators with little or no knowledge of costs or by those who have been driven by sheer financial

necessity to quote rates which they know to be unremunerative. The situation is very like, but worse than, that which existed in the early days of railroading. . . .

90. The Air-Transport Industry

Organized air transport in the United States dates from about the year 1926. In 1925 the one extensive service was the Government-operated air-mail route between New York and San Francisco. There was practically no regular passenger service "and an almost complete absence of private capital and public interest."

Growth and present condition of the industry.—Several factors served to stimulate what soon proved to be a very rapid growth. Probably the most important of these was the passage of the Kelly, or Air Mail, Act of 1925, which authorized putting the air-mail business in private hands on a contract basis. The first contract was let in 1926 and liquidation of Government operations was completed in 1927. A second factor of importance was the passage of the Air Commerce Act of 1926 and the creation under its terms of the Aeronautics Branch of the Department of Commerce. This agency immediately began its work in the provision of aids to air transport and in the advancement of safety in operation. Continued improvements in the design and equipment of airplanes also were of major importance.

However, at the end of 1928 the passenger business was still of relatively minor importance in comparison with the air mail. Thereafter it experienced a phenomenal growth. . . . The number of passengers carried increased from 50,000 in 1928 to 470,000 in 1931, and then rose more moderately to 493,000 in 1933. Passenger-miles continued to increase at a high rate in the latter years, indicating a lengthening of the average journey. The express and freight business also has shown a large and sustained growth.

Air transport lines still, however, conduct a very small business in comparison with that of the railroads. Thus in 1932, a low year of travel by rail, the passenger-miles reported by scheduled

(90) Regulation of Transportation Agencies. *Senate Document Number 152, 73d Congress, 2d Session.* Washington, 1934. pp. 49–50.

domestic air lines represented only 1.06 percent of rail passenger-miles, exclusive of commutation service. The mail carried in 1933 would not have filled three average trains and the express and freight carried would have filled a little over one such train. Employees totaled 4,336. . . .

Chapter XXXIII

PUBLIC AND PRIVATE FINANCE

91. Post-War Federal Debt Reduction

The war debt reached its highest point on August 31, 1919. In the full decade thereafter ending on August 31, 1929, the gross debt outstanding had been reduced from $26,594,267,878.45 to $16,805,433,171.38, a decrease of $9,788,834,707.07, which was accomplished (1) through expenditures aggregating $4,451,698,144.15 chargeable to ordinary receipts under the established program for the liquidation of the debt; (2) through the application of $4,367,624,774.93 surplus of ordinary receipts; and (3) through net reduction of $969,511,787.99 in the general fund balance. The annual interest charge on the interest-bearing debt outstanding on August 31, 1919, was $1,105,690,254, and on August 31, 1929, $652,471,596. The gross debt outstanding was reduced 36.8 per cent during this 10-year period, and the interest-bearing debt was reduced 37.3 per cent, the larger per cent reduction in interest-bearing debt being occasioned through slight increases as between the two dates in matured debt on which interest had ceased and in debt bearing no interest. During this 10-year period the annual interest charge was reduced 41 per cent. The effect of the reduction in interest charge is offset in part by the appropriation for the sinking fund each year of the amount of interest which would have been paid during the year on the bonds and notes retired through the sinking fund, as provided by law. . . .

92. The Dawes and Young Plans

Under the terms of the agreement providing for the distribution of the Dawes annuities, signed at Paris on January 14, 1925, the United States is entitled to receive annually from Germany in discharge of her treaty obligations, certain payments on ac-

(91) *Annual Report of the Secretary of the Treasury, 1929,* p. 14.
(92) *Annual Report of the Secretary of the Treasury, 1929,* pp. 52–54.

count of the reimbursement of the costs of the United States army of occupation and the awards of the Mixed Claims Commission established in pursuance of the agreement of August 10, 1922, between the United States and Germany. The United States has received each year out of the Dawes annuities up to August 31, 1929, the amounts stipulated under the Paris agreement of January 14, 1925, for these two accounts.

The Dawes plan under which Germany has made reparation payments since 1924 was the result of recommendations made in 1924 by a committee of experts, headed by General Charles G. Dawes. This committee was invited by the Reparation Commission, in its decision of November 30, 1923, to consider the means of balancing the budget and the measures to be taken to stabilize the currency of Germany as well as determine what reparation payments might be made by Germany in the immediate future. While it was not within the jurisdiction of this committee to consider the definitive fixation of Germany's reparation liabilities, it presented a plan of settlement which was intended to operate for a sufficient time to restore confidence and which would eventually lead to a final and comprehensive agreement. As confidence has now been restored and Germany has been reestablished on a relatively high level of economic activity, the time seems favorable for the definite settlement of the reparation question. Such a settlement is desirable not only for the benefit to Germany but also because of the element of uncertainty existing in the affairs of all other countries concerned in reparations. Decisive steps were taken in the direction of final settlement by representatives of the Governments of Germany, Belgium, France, Great Britain, Italy, and Japan in the agreement reached at Geneva on September 16, 1928, for the appointment of a committee of financial experts to be intrusted with the task of drawing up proposals for a complete and final settlement of the reparation problem. The committee, consisting of representatives from the countries mentioned above and two citizens of the United States, were appointed during January, 1929. The first regular meeting of the committee was held in Paris on February 11, 1929, at which Mr. Owen D. Young, an American citizen, was elected as its chairman. After protracted negotiations the committee finally reached an agreement on June 7, 1929.

The plan, commonly referred to as the Young plan, presented by this committee, provides among other things that Germany shall pay an average annuity, exclusive of the annual sum required to meet the services of the German external loan of 1924, of 1,988,800,000 reichsmarks ($473,732,160) over 37 years, which on a 5½ per cent basis has a present value of about 31,172,000,000 reichsmarks, and varying annuities for 22 additional years. The committee also recommended a division of the annuities among the several creditor governments, in accordance with which the United States will receive on account of its claims for army costs and mixed claims an average annuity of 66,100,000 reichsmarks for 37 years and 40,800,000 reichsmarks for 15 years thereafter.

The committee did not in its report name the sums to be allocated to army costs account and to mixed claims account. The Treasury Department recommends, however, that of the sums to be received 40,800,000 reichsmarks be allocated to the satisfaction of mixed claims, and that the balance be allocated to the satisfaction of the United States Government claims on account of army costs. The reduced amounts to be received under the Young plan as compared with the Dawes plan involve, except in the case of a 10 per cent reduction of army costs claims explained below, a postponement rather than a diminution of the total sums to be paid. The ultimate liquidation of both accounts will necessarily be postponed, but since the claims in the one account are those of individuals to whom the time element is necessarily very important, and in the other the claims of the Government to which the time element is of no great consequence, it is felt that the former should have some preference.

The Young plan is intended to provide a schedule of payments that when made will completely discharge Germany's treaty obligations. In so far as the United States are concerned, the plan involves some modification of treaty obligations. It will be necessary, therefore, for the Congress of the United States to authorize the executive branch of the Government to enter into an agreement with the German Government providing that the payments above described when completed will discharge Germany's obligations to our Government arising on mixed claims and army costs accounts. The Treasury Department recommends that such authority be granted, for no one will question

the desirability of a complete and final settlement of all war obligations still outstanding, and the proposed settlement demands but unimportant concessions on the part of our Government and of those of our citizens who have claims against Germany.

93. The Capital Market, 1928–29

The outstanding financial events of the fiscal year affecting either Federal revenues or expenditures were the continuance of an active and rising stock market, declining bond prices, a change in the character of security flotations, and the emergence of relatively high interest rates.

Stock market activity.—Stock market activity was characterized by rising prices, increased turnover or sales, and increased brokers' loans. The number of shares of stock sold on the New York Stock Exchange alone increased from 720,000,000 during the fiscal year 1928 to 1,042,000,000 in 1929, an increase of 44.6 per cent. The total value of domestic capital stock issues increased from $2,343,000,000 to $5,259,000,000, or 124.5 per cent. The increase in the turnover of all stocks and in the issuance of new domestic capital stock accounts for a large increase in the collections from the stamp tax on capital stock transfers and issues. The gains realized from such turnover also account for a large part of the increased revenue from individual income taxes.

New financing and refunding.—There were significant changes in the character and amount of new securities offered, in the securities issued for refunding purposes, and in the offerings of new foreign securities. Securities offered solely by domestic business corporations amounted to $7,011,600,000, exclusive of refunding issues, an increase of $2,486,200,000, or 54.9 per cent over the preceding year. Of the amount offered $3,224,200,000 was in the form of common stock, an increase of 280 per cent, and $1,418,400,000 in the form of preferred stock, an increase of 46.8 per cent. The balance, representing bonds and notes, decreased 12.6 per cent. Issues of securities by domestic corporations for refunding purposes in the form of bonds, notes, and preferred stock decreased from $2,039,400,000 to $603,500,000, while refunding through the issue of com-

(93) *Annual Report of the Secretary of the Treasury, 1929,* pp. 4–5.

mon stock increased from $154,400,000 to $505,400,000. Foreign securities offered in the United States, exclusive of refunding issues and consisting chiefly of bonds, decreased from $1,505,600,000 to $871,000,000, or over 42 per cent.

Future Federal tax receipts should not be materially affected by the change in corporate financing, from bonds to stock, although the source of some tax receipts is shifted. Losses from taxes formerly collected from individuals upon their receipts of interest from corporations will probably be more than recouped from corporations because an equivalent amount of interest will no longer be deducted by corporations in computing their taxable net income.

Interest rates.—Under the pressure of demand for funds arising out of the extraordinary situation prevailing in the stock market, interest rates rose during the fiscal year and increased the interest cost to the Federal Government.

Interest rates were rising at the beginning of the year, declined somewhat during the fall months, and rose again, beginning in January. The discount rate was increased at seven Federal reserve banks from 4½ to 5 per cent in July, 1928, followed by advances at other banks, the 5 per cent rate prevailing by May 20, 1929. The New York bank raised its rate to 6 per cent on August 9, 1929. Interest rates, measured by the yields of 60 high-grade bonds, rose from 4.50 per cent in June, 1928, to 4.73 per cent in June, 1929, and commercial paper rates during the same period rose from 4¾–5 to 6 per cent.

Federal Government borrowing was effected at much higher costs than during the preceding fiscal year. The Federal Government floated issues of certificates of indebtedness with 3⅞ and 4 per cent coupon rates in June, 1928, but had to offer 4½ per cent in September, 1928, 4¾ per cent in October, 1928, and March, 1929, and 5⅛ per cent in June, 1929, there being but one recession in the advance in rates, that of a 4¼ per cent issue in December, 1928. These rates were distinctly higher than in the preceding fiscal year when the coupon rates varied from 3 to 4 per cent, so that the average rate paid upon the entire Federal interest-bearing debt at the end of the year was 3.95 per cent as compared with 3.88 per cent one year earlier.

94. Banking Concentration and Failures

The experience of the postwar period has been of sufficient duration to permit a comprehensive appraisal of the effect of the new economic and social conditions upon our system of banking. Briefly stated, it may be said that banking is following in the wake of the trend of business in general toward larger operating units with stronger capital funds and more experienced and highly trained management. The natural result has been that the larger cities are being favored with banking organizations of great financial stability with the capacity to render a better and more diversified type of service.

In the principal cities, therefore, in various parts of the country, there have grown up through mergers and through increases in the variety and volume of business banking institutions which for strength of capital and management technique were unknown in the pre-war period. There have been no failures of any of these types of metropolitan banks. They are giving the general public a safer and higher type of banking service than has hitherto been known. Their stability rests upon the great diversity of banking business to which they have access and to the further fact that they are able to secure the most highly trained and experienced talent. These banks comprise both unit and branch banking institutions.

The aggregate of all the banking resources in the United States is about $72,000,000,000, held by a little more than 25,000 banks (as of June 29, 1929), but 250 banks hold resources to the aggregate amount of approximately $33,400,000,000.

While the largest and strongest banks with the bulk of the banking resources are in the large cities, about three-fourths of all the banks in number are in the smaller towns and cities and may be classed as country banks. It is these banks which serve directly the agricultural communities. They operate with small capital funds and are very much limited in their ability to employ a trained management. The economic developments of the postwar period have had the effect of decreasing the opportunities of these banks to operate with profit and it is this situation to which I should like to direct your most serious consideration.

(94) *Annual Report of the Comptroller of the Currency, 1929,* pp. 1–4.

We are faced with the fact that during the 9-year period from July 1, 1920, to June 30, 1929, inclusive, about 5,000 banks, nearly all in the agricultural communities, closed their doors and tied up deposits of approximately $1,500,000,000. These failures have not been limited to any one section of the country, although they have been most prevalent in the agricultural districts. Up to November 1, 521 banks with deposits of about $200,000,000 had suspended during the year 1929. . . .

As will be observed . . . the failures of State chartered banks greatly outnumber those of the national banks, but small national banks have not been immune to the conditions which are causing the failures of small country banks generally. As an illustration of the wide scope of this economic condition, it may be said that in seven States over 40 per cent of all the banks in existence in 1920 have failed and in six States between 25 and 40 per cent. In 26 States, or more than one-half the total, over 10 per cent of the banks that were in operation in 1920 have since failed. When it is considered that no important failures have occurred among banks in the larger cities, the ratio of failures in the country districts is even higher.

We have here, therefore, a strong contrast between city and country bank operations. Whereas the depositor in a large city bank, whether a wage earner or a business man, has had full protection, the depositor in the small country bank has suffered severely from the inability of so many of these banks to meet their deposit liabilities. The farming communities have not been afforded the protection for their savings which has been available to depositors in the large cities.

It is cause for immediate concern that the operating conditions faced by the country banks show no prospect of improvement under the present system. There are many country banks now operated at a loss and many others operating upon earnings insufficient to justify their capital investment. There is not available to me the earning statements of State banks, but taking the national banks as an illustration and the year 1927 as a typical year (later earning figures not being compiled) 966 national banks operated at a loss and an additional 2,000 earned less than 5 per cent. These constituted about 38 per cent of all national banks in the United States.

Comprehensive study of the banking situation for the past

nine years clearly indicates that the system of banking in the rural communities has broken down through causes beyond the control of the individual banker or the local community. These causes are of a basic nature and have many ramifications throughout the great economic and social changes which have occurred in the United States since 1914. I shall not attempt in this report a detailed analysis of this situation except to say that the economic movement away from a large number of independent local utility and industrial operating units toward a stronger and more centralized form of operation in the large cities has curtailed the opportunities of the country bank for diversity and extension of business while broadening these opportunities for the large city bank.

Any attempt to maintain the present country bank system by force of legislation in the nature of guaranty of deposits or the like, would be economically unsound and would not accomplish the purpose intended. In the free course of business the country bank can not successfully operate as an independent banking corporation, affording ample protection to its depositors and its stockholders, the obligation and responsibility is upon the Government of the United States, at least so far as the national banks are concerned, to set up a system of national banking which will insure the rural communities against the continuing disastrous effects of local bank failures.

There have been no general financial panics in this country since the war—thanks to the Federal reserve system. Any bank can have access, directly or indirectly, to the benefits of the Federal reserve system to the extent of its sound commercial and business loans and the decline of the country banks has taken place notwithstanding the valuable assistance rendered by the Federal reserve system. A Federal reserve bank is not charged with the responsibility of preventing bank failures. It is beyond the power of the Federal reserve system, as it is beyond the power of any governmental agency, to stand between these banks and insolvency.

In the absence of legislation to remedy the conditions above described, private enterprise has within recent months undertaken to meet the economic situation presented by the growing isolation of the country banks. Local holding companies have been formed in many sections of the country for the purpose of

bringing together a number of banks into a single operating group. The usual procedure is for the holding company, a State corporation, to purchase a majority of the stock of several banks, one of which would be a large city bank which in effect becomes the parent bank of the group. The management personnel of the central bank becomes in practice the responsible management for the entire group. . . .

Chapter XXXIV

FOREIGN AND DOMESTIC COMMERCE

95. The Movement of Goods into Wholesale Channels, 1929

Movement of manufactured products.— . . . Of the $63,409,200,000 selling value (f.o.b. factory) of goods produced by the manufacturing plants in the United States for distribution, 29.6 per cent went directly from the plants to wholesalers, 16.1 per cent went to manufacturers' own wholesale branches, 18.6 per cent was sold to outside retailers (including sales to chain stores), while 1.9 per cent was disposed of through retail stores maintained by the manufacturers, 31.3 per cent was sold direct to industrial consumers, and 2.5 per cent followed the most direct channel from producer to home consumer. Of the amount sold direct to home consumers, $382,894,000 represented sales of manufactured gas. Approximately 9 per cent of the total volume of manufactured goods entering trade was made through agents, such as manufacturers' agents, selling agents, brokers, and commission houses. . . . The ultimate destination of manufactured goods consists of two distinct markets —the industrial consumer market and the home consumer market. The industrial consumer market absorbed approximately 44.8 per cent of the $63,409,200,000 of goods produced by manufacturers for sale. They reached the market in the following manner:

Manufacturers→industrial consumers	$19,849,875,000
Manufacturers→manufacturers' sale branches→industrial consumers	3,582,976,950
Manufacturers→wholesalers→industrial consumers. Manufacturers' sales branches	4,941,499,002
Total	$28,374,350,952

Since the industrial market constituted 44.8 per cent of the total, it naturally follows that the home or ultimate consumer

(95) *Fifteenth Census, 1930. Distribution,* Vol. II, pp. 5–10.

market absorbed 55.2 per cent. It is important to bear in mind that these calculations are based merely on the value of goods, at f.o.b. factory prices, produced by *manufacturers* for distribution. Raw materials from whatever source, as well as imported semimanufactured and finished products, are not included. It is further important that the 55.2 per cent of the $63,409,200,000 be not regarded as goods passing through retail stores. Many kinds of commodities included in this figure, as illustrated by manufactured gas and by motion picture films, while intended for the home consumer market, are not sold through retail stores.

Variations in channels of distribution.—Not all manufactured products are distributed in like manner. Some goods are sold direct to home consumers, others require the use of a single middleman—the retailer—while still others are sold by manufacturers to wholesalers and sometimes through their own wholesale branches. The way in which a given product is distributed depends upon a number of factors, among which may be listed the nature of the commodity, its unit value, the size of the producing plant, the financial strength of the producer, the completeness of the line manufactured in a given plant, the nature of the market—whether the product is intended for the home consumer or the industrial consumer, and the existing marketing machinery which has developed for the distribution of a given product.

Even when the same channels are used in the distribution of a certain commodity or group of commodities, the percentage distribution of the goods which go through a certain channel may differ considerably. To illustrate: . . . approximately 9 per cent of all manufactured goods reported by channels were sold through agents and brokers. In the food and grocery industries, however, agents and brokers were used for as high as 15.3 per cent of their total volume. Sales to wholesalers were also more prominent in the food and grocery industries, amounting to 41.5 per cent as against 29.6 per cent for all industries. This is probably due to the fact that many manufacturers of food and grocery products specialize in the production of a limited number of items which need wide distribution and the products are of a low unit value so that direct contact with retailers other than chains, ordinary and voluntary, is practically out of the question. Sales through wholesale branches maintained by the manufac-

turers themselves in the food and grocery industries amounted to 16 per cent as against 16.1 per cent for all industries. Sales direct to retailers consisted of 24.6 per cent for the food and grocery industries as against 18.6 per cent for all industries. This large volume of sales direct to retailers by the food and grocery industries, despite what has just been said above, is due no doubt to the fact that the greatest development of chains has occurred in the grocery field. These large-scale retail institutions usually obtain their merchandise direct from the manufacturers, performing the wholesale function for themselves, either through the maintenance of chainstore warehouses or otherwise. All such latter sales by manufacturers have been treated as sales to retailers. Sales to industrial consumers, on the other hand, were but 8.2 per cent for the food and grocery industries as against 31.3 per cent for all industries. Sales to household consumers were as high as 5.6 per cent for the food and grocery industries as against 2.5 per cent for all industries.

The variation in percentages of distribution through different types of wholesale and retail organizations are even greater for some industries than indicated for the food and grocery industries, depending largely upon the factors outlined in a preceding paragraph. The channels through which manufactured goods move are also affected by the location of the manufacturing plants in relation to the market for which the goods are intended. The more distant the manufacturer's producing plant is from its market the larger the variety of channels, other things being equal, and vice versa. The conditions underlying consumption constitute another factor in the determination of channels of distribution. Direct contact is usually necessitated when the goods require installation services and technical adaptation to the requirements of the customer. To approach the problem of selecting channels of distribution in a scientific way, it is essential that knowledge be obtained concerning how the various goods of the different industries are being distributed and what factors seem to have governed the percentage distribution of those goods by the various channels reported.

Flow of products of extractive industries.—Of the $15,025,757,000 of goods produced for distribution during the year 1929 by domestic industries other than manufacturers, . . . approxi-

mately 69.9 per cent ($10,510,456,000) was handled by wholesale establishments. . . .

Changing character of wholesaling.—A brief survey of the history of development in the wholesale field inevitably leads to the conclusion that wholesaling is in a state of flux. Many types of wholesale organizations are now in existence which were unknown two decades ago. Cash-and-carry wholesalers and wagon distributors are of recent origin. Even the old conventional type wholesaler has modified his methods of operation to a considerable degree. It is likely that these changes will continue, depending largely upon changes in retailing. As retail institutions modify their methods of operation wholesale organizations serving them must do likewise. The development of the chain store, for example, necessitated a new form of wholesaling to enable independent stores to compete effectively with their chain rivals. This accounts largely for the existence of cooperative wholesalers and wholesale cash-and-carry establishments.

The growth of the department store with its large buying power was responsible to no small degree for the disintegration of some of the large national and sectional dry goods wholesalers handling a general line of dry goods, and the growth of specialty dry goods houses in various parts of the United States. It is probable that the tendency at the present time on the part of retailers to take on wider lines of merchandise will lend impetus to the growth of general line wholesalers so that the pendulum may swing back from specialty wholesaling to general line or general merchandise wholesaling.

The future structure of the wholesale field is also affected by policies and methods adopted by producers on the one hand and retailers or industrial consumers on the other. Hand-to-mouth buying, for example, on the part of either retailers or industrial consumers tends to strengthen the position of the wholesaler who is forced thereby to maintain more adequate stocks and to provide immediate delivery since many of the orders received by him are for rush shipment. The extent to which channels of distribution are selected by producers on the basis of facts and figures, rather than bias and preconceived notions, is another important factor. Above all, however, the future of wholesale organizations will depend largely on the extent to which the

wholesale functions can be performed more economically by either retailers, industrial consumers, or selling producers which, in turn, is contingent to no small degree upon the alertness and efficiency on the part of existing wholesale establishments. . . .

Chapter XXXV

EARLY YEARS OF THE RECESSION

96. The Stock Market Crash and the Collapse of Credit

By the middle of October the situation had undergone a marked change from that prevailing in midsummer. Industrial production, which in June had reached the highest level on record, had shown some recession. Security prices were showing some decline from the record levels reached early in September. Bank credit was showing seasonal growth, while brokers' loans were increasing with unusual rapidity, the funds being supplied almost entirely by nonbanking lenders. These loans for nonbanking lenders had remained at a fairly constant level in April, May, and June, but increased by about $1,000,000,000 in the following four months. It would appear that a large part of this increase was supplied by investment trusts and trading companies, which were being organized extensively at that time. The issues of investment securities by investment trusts and similar organizations were, in fact, the principal factor in the growth of security issues in the autumn of 1929 and were an important source of brokers' loans for account of nonbanking lenders. These companies, having obtained funds from the public through the sale of their own securities, used portions of these funds in the call-loan market. The continued growth of brokers' loans up to the beginning of October, when security prices were tending downward, reflected also the effect of sales by outright owners or holders on relatively large equities to purchasers on credit whose equities were considerably smaller.

In September and October, therefore, recession in industry, reports of smaller corporate earnings, continued growth of brokers' loans, indicating a movement of securities from stronger to weaker hands, and many other factors were weakening the position of the security market. There was an important failure of a finance company in England, which resulted in a loss of

(96) *Sixteenth Annual Report of the Federal Reserve Board.* Washington, 1930. pp. 8–12.

confidence by British investors and some withdrawals of foreign funds from the New York market. On September 26 the Bank of England, which for several months had been losing reserves, raised its discount rate from 5½ to 6½ per cent. This series of events culminated in the last week in October in a break of unprecedented severity in stock prices, which by the middle of November were, on the average, 40 per cent below their maximum. Notwithstanding some recovery in the latter part of the year, the average of 404 common stocks stood at the end of December 35 per cent below the level of the middle of September.

Changes in the banking situation in the last two months of the year were largely in the nature of readjustments accompanying and following the drop in security prices. At first the changes were reflected primarily in the position of member banks in New York City. The growth of speculative activity had given the large banks in New York City a good deal of concern for several years. They had liquidated a part of their investments and had avoided a growth in their own loans to brokers, the volume of such loans in the middle of October being at about the same level as the average for the preceding four years. When the abrupt liquidation began these banks were therefore in a position to take care of the situation. During the week ending October 30 they increased their own loans and investments by $1,400,000,000, largely because they took over loans of outside lenders, both out-of-town banks and others, who withdrew a large part of their loans from the market, leaving the New York banks under the necessity of taking over, at least temporarily, a large volume of these loans. This resulted in the most rapid growth of bank credit on record in this country and in a proportionate increase in member bank reserve requirements. The reserve funds necessary to meet these increased requirements were supplied by the New York reserve bank, which loaned freely to member banks and also purchasd $150,000,000 of United States securities in the open market. As the liquidation of brokers' loans continued in November, it was reflected in a reduction of loans of this character by the New York banks for their own account. During the following eight weeks brokers' loans of New York banks declined by $1,200,000,000 and, just prior to the temporary end-of-year advance, these loans were at a level about $200,000,-

000 below that on October 23, the last report date before the stock-market break.

Outside New York City the first few weeks after the break were also characterized by an increase in demand for bank credit, but later the outside banks also felt the relaxation of the credit demand from the security market. At the end of December loans and investments of all member banks showed an increase of $250,000,000, or seven-tenths of 1 per cent for the entire year 1929, compared with a rate of growth of 4 per cent in 1928, 8 per cent in 1927, and 6½ per cent on the average for the years 1922 to 1927.

During the last three months of the year the net liquidation of loans on securities, by banks and by other lenders, may be estimated in the aggregate at $3,900,000,000. Loans directly to brokers in New York declined by $4,500,000,000, but this amount was offset in part by an increase of $600,000,000 in security loans by banks to borrowers other than New York brokers. Even after allowance is made, therefore, for the fact that about one-eighth of the liquidation of brokers' loans rêpresented a shift to other borrowers, the net decline in security loans for the period indicates liquidation on an unprecedented scale.

This liquidation was accompanied by a reversal of the credit policy of the Federal reserve system. Over a period of about two years increase in the volume of credit utilized in the security market had been the principal consideration determining the firm money policy of the system; and the diminution in the demand for such credit was followed by a reversal of the system's policy. During the first week of liquidation, when the member banks were taking over in large volume loans previously carried by non-banking lenders, the reserve banks bought $150,000,000 of United States Government securities, thereby reducing for member banks the necessity of borrowing at the reserve banks. The reserve banks continued this policy of open-market purchases throughout November and the larger part of December, with the consequence that member banks were able to meet seasonal demand for currency, as well as considerable withdrawals of gold for export, and at the same time to decrease their indebtedness to the reserve banks. During the last week of the year the average volume of reserve-bank credit outstanding was about $150,-

000,000 less than at the end of 1928, the decrease corresponding to the net increase for the year in the country's stock of monetary gold. Decrease in the total volume of reserve-bank credit was accompanied by material changes of composition. Holdings of Government securities had increased by $250,000,000 over the year, acceptances had decreased by $125,000,000, and discounts by $300,000,000. This decrease in discounts for member banks, which on the last day of December were at $630,000,000, the lowest level since early in 1928, indicates the extent to which the general credit situation had been eased during the year. The discount rate at the New York bank was reduced from 6 to 5 per cent on November 1 and to 4½ per cent on November 15. Reductions to 4½ per cent followed in the rates at Boston, Chicago, San Francisco, Atlanta, Kansas City, and (in January, 1930) Philadelphia. Buying rates on bills also were correspondingly reduced. Reserve system policy, therefore, during the last two months of the year, in contrast to the two preceding years, was exerted in the direction of easier money conditions.

This reversal of policy, made possible by diminution in the demand for credit in the security markets, appeared desirable also in view of the sharp reduction in business activity. Industry, which had been operating in record volume up to June, and notwithstanding some recession had remained at an exceptionally high level in the following four months, declined abruptly in November and still further in December. At the end of the year the volume of industrial production and of factory employment and pay rolls had been reduced to the lowest levels since November, 1927, when the recession of that year was at the lowest point. This change in the business situation was in part a reaction from the exceptionally large output in certain industries early in the year; it was also in part a consequence of the rapid rise and subsequent drop of security prices. The rapid rise in stock prices had in various ways stimulated business activity. Industrial enterprises had been encouraged by favorable conditions in the market to finance programs of expansion through the issue of common stocks; and financial houses, assured of a market for new issues, had been encouraged to launch new enterprises, as well as combinations and mergers of existing undertakings. A large amount of time and savings deposits was drawn out by the depositors and used for the purchase of securities, and

funds that ordinarily would have been added to savings deposits were used for the same purpose, with the consequence that in 1929, in contrast with previous years, there was a decrease in the total volume of savings accounts. The large volume of security issues had given rise to increased building operations for plant expansion and enlargement of existing facilities. During the period of rising stock prices, profits taken out of the market by successful traders in stocks had been an important factor in consumers' demand for many services and industrial products, particularly of the luxury type. To a certain extent these purchases of luxury goods were financed through the use of funds withdrawn from savings accounts by purchasers of securities. With the drop in stock prices, these influences were reversed. Investment houses found themselves with large blocks of unmarketed securities, and the public no longer offered a broad market for common stocks, with the consequence that the volume of new security issues diminished rapidly and was confined largely to high-grade bonds. Losses incurred in the break in stock prices reduced the demand of consumers for commodities, and especially for luxury goods, and this had an effect on industry, and especially on those lines of activity that had developed most rapidly in the spring and summer, such as the automobile and the iron and steel industries.

Chapter XXXVI

GOVERNMENT CONTROL OF ECONOMIC DEVELOPMENT

97. An Estimate of the Effects of the NRA

In the opinion of the Committee it is not possible to answer statistically the question whether NRA did or did not contribute to the industrial recovery, which did make evident progress during the NRA period. This is a particular instance of the general fact stated above that the attempt to isolate statistically the effects of NRA from those of other economic factors faces insuperable difficulties.

It is clear, however, that NRA made a definite contribution toward changing the prevailing mood of the country from apprehension to hopeful effort, and this was vastly important in itself. Business gained confidence, which was no less real because it may have been partly based on exaggerated expectations of what the codes would do. This led, quite definitely in some cases, to forward buying and more liberal production policies, without that urge to dump the product on the market and so to wreck prices, which would have followed the same accumulation of inventory prior to NRA. There was, of course, reaction—prompt in respect to the anticipatory boom of 1933, and slower in other instances. But some cumulative effects had been set in motion, and when disillusionment arrived as to the expected effects of particular code provisions, there was a more solid basis of demand to fall back on.

Some of the trade practice provisions intended to raise prices, to stabilize prior price increases or to reduce accumulation of inventory, failed to accomplish their intended effect; but some of these "failures" may really have been moderate successes from the standpoint of general national recovery. This is a commentary on the inadequacy of our knowledge of how to treat the disease of industrial depressions.

(97) *The National Recovery Administration. House Document Number 158, 75th Congress, 1st Session.* Washington, 1937. pp. 181–183.

Insofar as the anticipatory rise in prices in the early summer of 1933 was maintained, there was probably an incidental contributory recovery factor in inventory profits on goods made under precode conditions.

The general or aggregate effect of code trade practice provisions on prices is impossible to isolate, by means of the available statistics, from the effects of other conditions prevailing at the same time. Mention has already been made of the importance of the general change in the mood of business and of the boom of May-July 1933, which largely expressed a general expectation of what the codes would do, rather than the effects of actual code provisions, which came later. In a limited number of cases, specific effects can be traced. In these cases in general the effect in either raising or sustaining prices seems unmistakable but was stronger in the early stages of the experiment and later weakened, or in some cases disappeared entirely, as a result either of lack of compliance or of the stimulus afforded to increased production or of other difficulties. In a few cases prices were actually lowered, as where price filing in some instances led to a more actively competitive market, or where a relatively low minimum price tended to become the general standard.

Various trade practice measures taken under NRA accomplished certain useful specific things, usually of limited scope. A few individual price wars were stopped. There was some reduction of style piracy, and some desirable standardization of products. The practice of "loss leaders" was in some degree controlled. The new NRA machinery was able to bring about some improvement in the way of more effective dealing with those admittedly unethical forms of competition which were already outlawed as unfair.

Under NRA businessmen came to think more in terms of the common interests of their industry, as expressed, for example, in the idea that only as the industry succeeds, can individual enterprises within that industry gain sound success. This awareness of common interests represents a step in advance, even though it needs to be broadened to include the idea that only as it contributes to a successful national economy can an industry as a whole permanently succeed.

NRA gave both to rivals in the same industry and to members of different industrial groups an experience of working together,

of trying to adjust differences, and to formulate a common policy for the general good. The effort itself had value, and because it was made, subsequent efforts may be one step nearer success, if only by avoiding previous mistakes. It is, however, clear that no real commonly agreed-on policy emerged; that the experiment yielded relatively small results in this direction, compared to the total effort.

If industry should again be confronted with a similar program, it would not attempt to get quite so much in the way of protection against competition, if only because some industries learned on their own account that some of these things did not work. And we think the same may be said as to some of the auxiliary labor provisions of the codes.

It is possible for critical historians to appraise NRA as an attempt to cure depression by attacking symptoms rather than underlying causes; and to deal with conflicting interests and promote all-around prosperity by way of the general principles of giving everyone a chance to take something from someone else without making much progress toward finding standards of general good by which to determine a just division or one tending to increase the total national dividend. These criticisms might contain a measure of truth worth serious consideration, but as appraisals they would be utterly onesided. They would fail to recognize the following facts: (1) In this case symptoms became causes of further disturbance; (2) the more fundamental causes of depression were largely beyond the reach of a rescue policy started after these causes had had their effect; (3) relief of symptoms was in itself legitimate and useful, so long as it did not actually hamper cure of the disease; (4) knowledge of causes was imperfect and to wait for deliberate assessment of them so far as known would have prevented prompt action; (5) the same is true of standards for resolving conflicts of interest between groups; (6) NRA was in considerable part an experiment to see how far industry proposals would uncover policies usefully related to causes of depression and would develop means of resolving conflicts of group interests. So regarded, the experiment yielded some results, though not final solutions of the problems raised.

A permanent policy for the future cannot be absolved on these same grounds from the duty of considering causes and standards.

Such a policy should meet more exacting criteria than those proper for judging NRA.

98. Agriculture under the AAA

Benefit Payments 7.3 Percent of Farm Cash Income

Benefit payments derived from the proceeds of processing taxes and made to producers in consideration of the adjustment of their production of certain basic commodities have constituted during the 3-year adjustment period approximately 18.2 percent of the farm income from the commodities for which such programs were in effect, and approximately 7.3 percent of the United States cash income from all farm production. These payments were made with respect to production of wheat, cotton, corn and hogs, tobacco, peanuts, sugar and rice.

Rental and benefit payments contributed about 25 percent of the amount by which the average farm cash income in 1933–35 exceeded the cash income of 1932. Such payments averaged about $451,000,000 during the 3 years. . . .

Farm Prices Advanced 66 Percent

The yearly average price of all groups of farm products increased 66 percent during the 3-year period, 1932–35, moving from 65 to 108 percent of the pre-war level. The low point occurred in March 1933 when farm prices were only 55 percent of the pre-war level, while in December 1935 they averaged 110 percent of the pre-war level. These figures do not include rental and benefit payments.

The gain in exchange value of farm products per unit was somewhat less than the gain in farm prices, since prices farmers pay for commodities used in living and production also advanced about 17 percent from 1932 to 1935. The exchange value per unit of farm products increased from 61 percent of the pre-war level in 1932 to 86 percent in 1935, a gain of about 41 percent.

The above figures on the exchange value of farm products give the relation between the prices of farm products and the prices the farmer pays for commodities and services used in farm production and family living, not including interest and taxes however. For a comparison of the general level of agricultural

(98) *United States Department of Agriculture. Agricultural Adjustment 1933 to 1935.* Washington, 1936. pp. 6–109.

prices on the one hand and nonagricultural prices on the other, it is necessary to turn to a larger group of industrial goods. In 1935 farm prices averaged 74 percent of their 1929 level. For the same year, wholesale prices of nonagricultural products, according to the Bureau of Labor Statistics index, averaged 86 percent of their 1929 level. Thus while the exchange value of farm products increased notably between 1932 and 1935, the farm price level in 1935 was still considerably below the nonagricultural price level, taking 1929 as a base.

While the farmer has made a gain in his share of the consumers' expenditures for food, his share remains smaller than it was in 1929. In 1935, of the consumers' expenditures for 10 foods (beef, pork, poultry, eggs, milk, butter, cheese, potatoes, flour, and bread), about 51.8 percent was absorbed by transportation, processing, marketing and distribution costs. This did not include processing taxes. Including processing taxes with the farmer's price, the farmer received about 48 percent of retail expenditures for these foods. This compares with 35 percent in 1932, and 50 percent in 1929. . . .

It is difficult to measure the effect of the adjustment programs on farm-price increases which occurred between 1932 and 1935. Reduced supplies of farm products, dollar devaluation, and improved business activity all had an important bearing on the farm-price advance. In the case of cotton and tobacco, the reduction of supplies can be traced more directly to the adjustment programs than is the case with some other commodities. Drought was an especially important factor in the rapid reduction of supplies of grains and meat animals.

Factors in the Restriction of Agricultural Production

The two main factors that tended to reduce agricultural production in the period 1932–35 were drought and the agricultural adjustment programs. The record-breaking drought of 1934 seriously affected 1,187 counties of the States in the center of the country and did lesser but still considerable damage in 270 other counties. The reduction planned in the adjustment programs was calculated to allow for loss of export outlets and was applied to products of which there were surpluses. Drought was the dominant factor in the reduction of feed supplies and the heavy liquidation of livestock due to feed shortage. The adjust-

ment programs were dominant factors in the reduced cotton and tobacco production, surpluses of which existed during the entire period.

Some indication of the influence of drought which reduced crops in 1933 and caused heavy losses in 1934, and that of the adjustment programs, is given by comparing the harvested acreages during that period with the acreage "rented" under the program and taken out of the production of adjusted crops. . . .

Because of the changes in the supply situation resulting from the drought and from adjustment programs, the problems of agricultural adjustment at the opening of 1935 differed materially from what they had been at the beginning of 1934 and in 1933. In the case of two of the basic commodities, cotton and tobacco, the continued existence of surpluses made the problem of 1935 similar to that of the preceding years, and the program demanded by farmers to meet the situation was again a program of restriction. On the other hand, available supplies of feedstuffs had been brought below normal by the drought; previous programs or restrictions were consequently revised with a view to expanding the available feed supply per animal unit, conserving meat supplies, and increasing seed stocks. . . .

In 1934, . . . 35,767,899 acres were shifted from the production of cotton, corn, wheat, and tobacco. . . .

In 1935 over 30 million acres of contracted or retired acres were shifted from corn, cotton, wheat, and tobacco. . . .

From May 12, 1933, when the Agricultural Adjustment Act went into effect, through December 31, 1935, expenditures by the Administration totaled $1,529,114,039.97. The amount made available to the Administration during the period was $1,938,705,970.63, including advances from the Treasury which were to be replaced by processing and other tax collections. Of the total funds made available, $409,591,930.66 remained unexpended on January 1, 1936.

Chapter XXXVII

FACTORS IN THE RECOVERY PROGRAM

99. The Cost of and Need for Social Security

For the first time in the history of the United States the Federal Government has utilized its taxing and appropriating powers for a Nation-wide, permanent attack against destitution and its causes. The Social Security Act has launched a program for the general welfare whereby the Federal Government will share with the States the financial responsibility for certain public-welfare services. . . .

Until a few years ago, public expenditures for ordinary welfare activities in the United States were very small. . . .

It is particularly significant that the ratio of the expenditures for ordinary welfare purposes to the national income remained fairly constant during the first quarter of the century, amounting to approximately one-half of 1 percent. In comparison with the total cost of government, however, welfare expenditures showed a considerable decline, dropping from slightly under 7 percent in 1903 to about 4 percent in 1928.

Since 1928 there has been a very great increase in public expenditures for welfare work. Most of this increase has come since the depression and in large measure is a result of the depression. As would be expected, such statistics as are available for recent years show an extraordinary increase. . . .

The largest present expenditure by far for public charity comes under the classification of unemployment relief, financed partly by the Federal Government and partly by the State and local governments. The total expenditures in 1933 for this purpose, including local, State, and Federal Governments and including the expenditures for unemployment relief and civil-works administration, amounted to $967,000,000, while the total for 1934 was approximately $1,887,000,000. These figures, of course, are much larger than the total expenditures for ordinary

(99) *Social Security in America.* Washington, 1937. pp. 345–348, 378.

welfare purposes and have caused considerable apprehension. Those who fear the consequences of such large expenditures have raised the question, "Where is the money coming from?"

However, even including emergency relief, expenditures for welfare purposes in the United States are not large when compared with those of Great Britain. Great Britain, with a population of only about one-third of ours, spent for public charity and social insurance, including old-age pensions, unemployment insurance, and health insurance, a total of $1,369,000,000 in 1932. If health insurance is omitted, the expenditure was approximately $1,200,000,000. A similar expenditure in the United States in proportion to population would run about $4,000,000,000 annually. In 1933, while $25,000,000 was spent in the United States for old-age assistance, Great Britain spent nearly $400,000,000 for the aged through noncontributory and contributory pensions. In order to provide as adequately as Great Britain for the aged, we would need to spend annually about $1,200,000,000 for this purpose.

It is inevitable that future public-welfare expenditures in the United States will be considerably larger than they have been in the past. For a quarter of a century prior to the depression the public expenditures for social work amounted to only about one-half of 1 percent of our national income, but in the future we will undoubtedly have to contribute a much larger share of our national income for this purpose. Even assuming the return of a high degree of prosperity, a large number of our population may nevertheless be unemployed and destitute. The financing of public assistance in the future constitutes our largest problem of public finance. Only one aspect of this problem is discussed here, namely, the need for Federal aid.

It is often stated that the care of the poor is a function of the local community, and that accordingly the Federal and State governments should provide financial support only when it becomes imperative. This theory of exclusive local responsibility for public-welfare activities does not fit into the economic and social structure of society today. The local community is no longer a self-contained unit. Our economic life overflows our political boundaries of townships, municipalities, counties, and States. Destitution today arises from causes with which the local community is powerless to deal, and creates financial obli-

gations beyond the capacity of the local resources. The whole problem of financing public-welfare activities needs to be considered in the light of present conditions.

100. A Public Works Policy

The special problems involved in deficit financing and in the development of a revenue program to defray the costs of a public works program will not be directly considered in this report. It is assumed that any deficits incurred to maintain public services during a depression or to finance a public works program commenced at such a time can be covered by loans without resort to inflation and without endangering the stability of national finances. Indeed, it is the obligation of the United States Government so to maintain its credit that this can be as easily accomplished in the future as during the late depression. It is assumed, moreover, that the national revenue system shall not only be fiscally adequate to meet the demands made upon it during depressions but that it shall be able promptly to retire the public debt—or to prevent it from accumulating permanently—during prosperous periods. Nor is it sufficient that ample funds are provided; the taxation methods employed should be sanctioned by economic criteria so as not to retard the stabilization sought through public works and kindred measures. . . .

Before any discussion of division of costs of public works can profitably be undertaken, some decision must be made as to the type of policy to be pursued and for which the costs are to be divided. Are public works to be undertaken as an economic stabilization device, or merely as simple construction projects designed to increase the sum total of useful public improvements? Are public works to be a temporary, spasmodic, or a continuing activity of government? Are public works to be carried out as fast as plans are developed and congressional approval secured or is construction to be reserved, as far as possible, for depression emergencies? Is the public works program to be an adjunct of unemployment relief plans, or is the public works program to be the major stabilization device to be supplemented by other relief aids when necessary? Decision

(100) *Public Works Planning. House Document No. 140, 75th Congress, 1st Session.* Washington, 1937. pp. 142–143.

as to these questions must be made before a program of the division of costs can be developed.

In order to have a framework within which the division of costs can be discussed it is assumed that the National Government has decided to employ public works as one phase or instrument in its stabilization policy. To maximize this aspect of public works, it is essential that planning should be carried on continuously. The plans developed should cover not only new improvements but the replacement of old facilities, many of which may be obsolete or inadequate. In planning public works a series of zones or priorities will have to be set up within which projects can be cataloged, depending upon the urgency of construction. Some projects it is, of course, impossible to postpone. Others may be held in reserve for a few years and still others can wait even longer. If sufficient attention is devoted to replacement of existing capital and the renewal of equipment the flexibility of the public works program can be increased. Many assets, such as schools, public buildings, water works, etc., continue to render public service long after the time their replacement appears to be desirable from the standpoint of reducing maintenance costs. The postponement of these replacements for limited periods may not therefore interfere with the performance of public service. If the rates of obsolescence are carefully studied the timing of renewals can be made a part of the public works program. The potential volume of such improvements may be substantial. An inquiry into this would be appropriate.

Three types of plans seem to be needed: (1) Projects for normal year-to-year construction; (2) projects reserved for minor depressions; (3) projects reserved for major depressions. The allocation of projects to these separate zones requires continuous planning and the revision of the program to keep pace with technological advances, population shifts, changes in demand, construction costs, and similar factors. The postponement of construction allows engineers and others to take account of these changes and thus improve the details applicable to different projects. Postponement of construction may thus lead to improved plans. This is one of the real economies of advance but continuous planning.

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