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THE INDUSTRIAL HISTORY

OF THE

UNITED STATES



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PHYSIOGRAPHIC MAP OF THE UNITED STATES

Frontispiece

The Industrial History

OF THE

United States

NEW AND REVISED EDITION

BY

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PREFACE

THE history of the United States, more than that of any Old World country, is the record of physical achievement. The exploitation of virgin territory by a race of extraordinary intelligence, resource, and energy is the essential theme of our national history. Political events and social changes are conditioned on industrial evolution, and the story of America can be comprehended only in the light of her material aspirations and attainments. The advance of agriculture from the pioneer farm to the bonanza ranch, the expansion of manufactures consequent on the substitution of machinery and factory organization for the domestic handicrafts, the service rendered to commerce by steam, the telegraph, electricity, — these are the really potent factors in the history of the United States. The transformation of industrial organization from indentured service to the trade union, from the self-employed artisan to the trust, from wild-cat banking to the national bank system, has more significance than the ups and downs of parties or the result of a presidential election.

Political revolutions and military undertakings cannot be ignored by the student of economic history. War must be treated not as picturesque by-play merely, but as a disastrous interruption of industrial progress. The financing of a war often introduces a disturbing factor into the currency system, emergency taxes retard or promote business interests and furnish opportunity for special legislation, the enlistment and disbanding of an army involve sudden alterations in the labor supply, while army life has a demoralizing influence on business habits. Social institutions and their slow transformations offer a most

interesting accompaniment to the study of economic evolution, but they may fairly be considered as effect rather than cause of economic tendencies.

The record of industrial progress may be rendered no less intelligible and interesting to the average student than the development of political forms. Business methods are more familiar than military tactics, and a mechanical invention is more readily comprehended than a constitutional revision. Elaborate treatises have been written on various phases of our economic history. It is the aim of this book to bring the essential elements of that history within the grasp of the average reader. The complicated story has been told in the briefest possible fashion, but marginal references will enable the student to go into detail as fully as may be desired. Contemporary problems are treated in mere outline. The data essential to the study of each have been set forth with no expression of opinion, the best authorities, pro and con, being noted in the margin. A final chapter on the conservation of our national resources has been added to this edition in the hope of making evident the transcendent importance of the interests involved. Here, again, so brief a treatment can do hardly more than suggest salient facts, leaving the student to follow the line of his special concern. For the assistance of teachers, suggestions for supplementary reading and for class discussion are given in an appendix.

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THE INDUSTRIAL HISTORY

OF THE

UNITED STATES

INDUSTRIAL HISTORY OF THE UNITED STATES

CHAPTER I

THE LAND AND THE PEOPLE

The Discovery of the New World

THE explorers of the sixteenth century opened a new world to the industrial enterprise of Europe. Ancient civilization had centered in the Orient. Political power and commercial influence had rested in turn with Egypt, China, India, Persia, Greece, and Rome. The trade of mediæval Europe had been with the Levant. Even the Venetian fleet, though it sailed once a year to London and the Baltic ports, never ventured out into the Atlantic. The westernmost capes were called Finisterre, Land's End, Ultima Thule, while the great ocean beyond was known as the Sea of Darkness. Nameless terrors haunted its stormy waters, and merchantmen hardly ventured out of sight of the familiar headlands. After the adoption of the mariner's compass the Western Islands had been rediscovered, and Genoese pilots in the employ of Portugal had braved the thousand miles of stormy sea that lay between Lisbon and the Azores, but no man dared go farther west or south. Only when the Turkish conquest of Constantinople and the eastern Mediterranean gave the customary trade routes into the keeping of a hostile power, did men seek to traverse the Atlantic. Monarchs, such as John II of Portugal, Isabella of Castile, Henry VII of England, sought not a new continent, but a new trade route to the Orient — to India, China, and the Spice Islands.

Cheyney, European Background of American History, Ch. II.

Bourne, Essays in Hist. Criticism, 173–189.

Fiske, Discovery of America, I, Ch. IV.

Yeats, The Growth and Vicissitudes of Commerce, Pt. II, Ch. IV.

The Eastward Route. — Prince Henry of Portugal, the Navigator, first undertook to find an "outside" route to India, and many expeditions were sent from Lisbon under the auspices of the astronomer prince. They sailed to southward and came upon Porto Santo and Madeira, the Canaries and Cape Verde Islands. Creeping along the coast, the timorous navigators rounded Cape Verde and crossed the dreaded Equator. Finally, in 1487, Bartholomew Diaz circumnavigated Africa as far as the Great Fish River. A mutiny among his sailors forced Diaz to return without traversing the eastern ocean; but ten years later Vasco da Gama sailed on to India. The conquest of the important trading ports followed, and a Portuguese empire was established in the coveted Spice Islands. Bartholomew Columbus, a younger brother of Christopher, accompanied Diaz, and it is thought that he suggested to the discoverer of America the possibility that a shorter route to the Orient might be found by sailing directly west. Certain it is that Bartholomew submitted this plan to Henry VII in the year succeeding his momentous voyage.

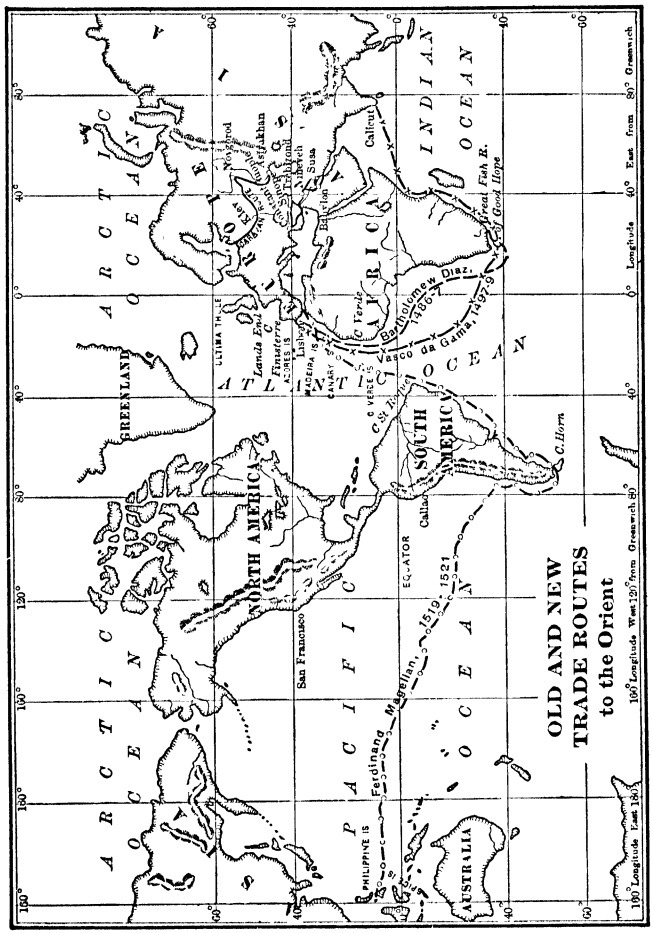
Fiske, Discovery of America, I, Ch. V, VI; II, Ch. VII.

Yeats, Pt. II, Ch. V.

The Westward Route. — When Christopher Columbus hit upon the islands of the Caribbean Sea, he thought that they must be on the east coast of Asia. In 1503, Americus Vespucius sailed from the Spanish Main to the thirty-fifth parallel, south latitude. Finding no passage to the westward, he became convinced that this was not Asia nor the Spice Islands, but a new world.

Bourne, Essays in Hist. Criticism, 193–217.

Before this discovery, Pope Alexander VI had declared a division of the newly discovered lands between the exploring monarchs of Spain and Portugal. All the islands lying west of a meridian drawn three hundred and seventy leagues west of the Azores were assigned to Spain; realms discovered to the eastward were to belong to her zealous rival. Ferdinand Magellan, a Portuguese navigator sailing under the auspices of Charles V, set forth to circumnavigate South America and penetrate the unknown sea beyond, hoping to open a route to the Indies in the region that belonged to his master. With heroic fortitude he and his


OLD AND NEW
TRADE ROUTES
to the Orient
ARCTIC OCEAN
ATLANTIC OCEAN
PACIFIC OCEAN
INDIAN OCEAN
NORTH AMERICA
SOUTH AMERICA
EUROPE
ASIA
AUSTRALIA
GREENLAND
EQUATOR
San Francisco
Ferdinand Magellan, 1519-1521
Bartholomew Diaz, 1486
Vasco da Gama, 1497-9
Cape of Good Hope
Great Fish R.
Calicut
C. Horn
Canary Is.
Azores Is.
Cape Verde Is.
St. Helena
Philippine Is.
Ultima Thule
Lands End
Finisterre
Lisbon
Gibraltar
Algiers
Tripoli
Tunis
Suez
Mecca
Aden
Bagdad
Persian Gulf
Bombay
Madras
Ceylon
Calcutta
Singapore
Java
Borneo
Sumatra
Hong Kong
Yokohama
Nagasaki
Shanghai
Vladivostok
Port Arthur
Peking
Tientsin
Mukden
Harbin
Irkutsk
Moscow
St. Petersburg
Archangel
Christiania
Stockholm
Copenhagen
Berlin
Vienna
Trieste
Venice
Marseilles
Genoa
Naples
Constantinople
Odessa
Black Sea
Caspian Sea
Aral Sea
Lake Baikal
Behring Sea
Behring Strait
Kamchatka
Alaska
Yukon R.
Klondike
Nome
Dawson
Seattle
Portland
Vancouver
Victoria
Winnipeg
Hudson Bay
Labrador
Newfoundland
Quebec
Montreal
Boston
New York
Philadelphia
Baltimore
Washington
Chicago
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Pittsburg
Cincinnati
St. Louis
Kansas City
Omaha
Denver
Salt Lake City
Los Angeles
San Diego
Panama Canal
Panama
Havana
Key West
New Orleans
Galveston
Mexico City
Vera Cruz
Yucatan
Jamaica
Cuba
Haiti
Porto Rico
Trinidad
Barbados
Bermuda
Rio de Janeiro
Buenos Aires
Montevideo
Valparaiso
Lima
Callao
Guayaquil
Bogota
Caracas
Para
Manaos
Amazon R.
Orinoco R.
Magdalena R.
Rio Grande
Rio Negro
Rio Colorado
Rio Parana
Rio Uruguay
Rio Madeira
Rio Tapajos
Rio Xingu
Rio Tocantins
Rio Sao Francisco
Rio Doce
Rio Paraguay
Rio Pilcomayo
Rio Bermejo
Rio Salado
Rio Negro
Rio Colorado
Rio Parana
Rio Uruguay
Rio Madeira
Rio Tapajos
Rio Xingu
Rio Tocantins
Rio Sao Francisco
Rio Doce
Rio Paraguay
Rio Pilcomayo
Rio Bermejo
Rio Salado
180° Longitude East 180°
160°
140°
120°
100°
80°
60°
40°
20°
0°
20°
40°
60°
80°
100° Longitude West 120° from Greenwich 80°
0° Longitude 40° East from 80° Greenwich

devoted crew braved the terrors of an Antarctic winter, threaded the windings of the tortuous strait since called by his name, crossed the ten thousand miles of pathless Pacific, and finally reached the Ladrones and the Philippines. Magellan came to terms with the king of Cebu, who accepted Christianity and guaranteed to Spain the exclusive privilege of trading with the islands, and thus was founded a Spanish empire in the Orient. This southern route to the Spice Islands was, however, too long and difficult to serve the needs of trade. The search for a more direct passage to the South Sea was then undertaken, and continued for three centuries. Not until the Northwest Passage was finally proved impracticable did explorers abandon the search. The westward route to the Indies was never found, but the explorers revealed to the astonished gaze of Europe a new world — a virgin continent to conquer, to colonize, to exploit. The imaginations of men were fired by the undreamed-of opportunity, and adventurous spirits gave themselves, body, soul, and fortune, to the prosecution of great enterprises. The people of Europe finally abandoned the Oriental quest and turned to face the Occident. Thereafter riches, honor, power, were sought in the Americas, and the Atlantic became the highway of trade. Modern commerce centers in western Europe, and the balance of power rests with the nations that possess ports on the Atlantic.

Semple, American History and its Geographic Conditions, Ch. I.

Industrial Resources of America. — Only now, after four hundred years of exploration, are the resources of the New World fully known. Its colossal proportions have been gradually revealed, and a second vast sea, twice the width of the Atlantic, has been explored to its farthest reach. Balboa did, indeed, sight the Pacific; but he surmounted the land barrier at just that point where the eastern and western shores converge to an isthmus but thirty miles across. To north and south of this connecting strip of land stretch great continents. Of the two Americas, the northern has proved to be the richer in natural resources and the more available for colonization. It has the advan-

tage of belonging to the land hemisphere of the globe. North America is one of a ring of continents gathered about the North Pole. Its Arctic coast line stretches over a span of one hundred and twenty degrees, and only a narrow strait divides Alaska from Siberia, while Labrador lies but two thousand miles west of Ireland. Should a New York steamer take the northernmost route, rounding Nova Scotia, passing through the Gulf of St. Lawrence and the Straits of Belle Isle, touching at Greenland, Iceland, and the Shetland Islands, she need never be more than twelve hours out of sight of land. This is the shortest course from America to Europe, but it is not used by trading vessels because icebergs and head winds render it unsafe, and because these subarctic lands offer little traffic. It is, however, the path followed by the first discoverers of America. Vikings from Norway established a colony in Iceland in the ninth century and in Greenland in the tenth. Leif Erickson made his way down the bleak coasts of Labrador to Nova Scotia, possibly to New England, in the year 1000 A.D. So inhospitable were these countries that the Norse adventurers abandoned their westward quest and bent their long keels to the south, to the booty-stocked cities of Normandy, France, and the Mediterranean.

Along the fortieth parallel the Atlantic measures three thousand miles from shore to shore; but, in spite of its greater length, this has become the highway of commerce. Here, in a latitude where ice offers no obstacle to navigation, lie the best harbors of the American coast, those of Portland, Boston, and New York. Here, too, great estuaries, Long Island Sound, Delaware Bay, and the Chesapeake, enable the largest vessels to sail far inland; and here deep rivers, the Hudson and the Delaware, supplement ocean traffic. This, moreover, is just the most productive portion of America. In the huge bend of the coast between Cape Cod and Cape Hatteras, soil and climate and mineral resources combine to create the richest *hinterland* of the New World. More important even than this physical endowment is the trade wafted to these

shores. North America stands over against the commercial nations of Europe and thus has direct entry to the best markets of the Old World.

The southern continent juts out into the Atlantic farther than the northern. Cape St. Roque is but one thousand miles west of Cape Verde. Her rivers and harbors are no less serviceable, but South America has the misfortune to face the Dark Continent — the uncivilized African coast. Both North and South America are walled off from the Pacific. A lofty mountain range runs the length of the western coast from Alaska to the Straits of Magellan, unbroken save at the Isthmus of Panama. Even in Pacific trade the northern continent has the advantage, since it extends forty-five degrees farther west in the fortieth latitude, the latitude of commerce. From San Francisco to Yokohama is but forty-six hundred miles, while from Callao to the Oriental ports is a voyage of eleven thousand miles. North America fronts the commercial opportunities of Asia, while South America stands *vis-à-vis* to a submerged continent.

Farrand, Basis of American History, Ch. I.

The Territory of the United States occupies precisely the most favored portion of this favored continent. We command the best harbors of the Pacific as well as of the Atlantic coast. On the Gulf of Mexico, navigable rivers and excellent harbors further our commerce with subtropic lands. The Great Lakes we share with Canada, but their terminal harbors, those of Duluth, Chicago, and Buffalo, happen to be within our boundaries. Taken in connection with the St. Lawrence and the Mississippi rivers, this chain of seas makes up a system of inland navigation unrivaled in the world. From the Strait of Belle Isle to the head of Lake Superior stretches a water highway twenty-four hundred miles in length and so direct that the Norsemen found their way to the Dakotas. The headwaters of navigation on the Mississippi may be reached by short portages from the Great Lakes. The father of waters flows through a vast valley, unsurpassed for productive capacity, to a sea circumscribed by tropic islands. A most

promising opening for reciprocal trade is thus afforded. The area of the United States comprises every variety of soil, climate, and humidity known to the temperate zone, while the variations of altitude admit of great diversity of agricultural products. Its mountain ranges contain rich veins of gold, silver, copper, and iron, and its coal deposits are the best in existence and of vast extent. Little of the latent possibilities of this land was revealed to the first explorers. Its industrial resources were dimly guessed by the navigators who skirted its coasts and sent back to their patrons fabulous reports of the spontaneous products there abounding.

The Peopling of North America

Shaler, United States of America, I, 1–34.

Roosevelt, Winning of the West, I, Ch. I.

The character of the men who undertake to develop the economic possibilities of a country is even more important than the nature and extent of its natural resources. Energy, initiative, industry, are the traits that determine the material achievements of a nation. The most propitious physical endowment can avail little if the inhabitants of the land are so ignorant or so sluggish as to leave its resources unexploited.

Fiske, Discovery of America, I, Ch. I.

The Aborigines of North America, so far as history knows them, were lacking in these essential economic traits. Among the Iroquois of the Mohawk Valley, and the Cherokees of the Appalachians, as among the Pueblos of New Mexico and Arizona, a considerable degree of industrial and social advancement had been attained before the coming of the white man. The Zuñis were cultivating the soil for corn and various vegetables and carrying on certain manufactures, such as pottery and cloth, to the point of artistic form and color. A well-organized community life had been evolved by the Pueblo Indians; but not even here was the race endowment sufficient to enable the native peoples to hold their own when brought face to face with Europeans. The most civilized of all, the Aztecs of Old Mexico, had hardly passed beyond the barbarous stage

Farrand, Ch. XIV, XV.

of evolution. The famous empire of Montezuma was probably nothing more than a confederacy of pueblos.

Roosevelt, I, 49, 51, 76.

The industrial inefficiency of the aborigines was evident from the fact that in the rich forest region lying between the Atlantic coast and the Mississippi River less than one hundred and fifty thousand Indians found barely sufficient sustenance. The same area now supports sixty million whites, every one of whom has an ampler and more constant food supply than any Indian brave could count on.

The occupation of this continent by Europeans meant the immediate substitution of civilization for barbarism and the rapid utilization of hitherto unexploited resources. The energy, the initiative, and the industry of civilized races were brought to bear upon a virgin continent. This combination of industrial efficiency with natural resources of extraordinary extent and variety has resulted in economic achievements unparalleled in the world's history.

Spain was the first of the European nations upon the field, and hers was apparently the best chance of success. The Spanish explorers had hit upon the most immediately profitable region of the New World. Columbus, sailing due west from the Canary Islands, came first upon the Bahamas. Later voyages brought him to one and another of the beautiful tropic islands of the Caribbean Sea, and these hospitable and fruitful lands furnished an excellent base from which to explore the coasts of the adjoining continent. In his fourth and last voyage Columbus skirted the Isthmus of Panama and got from the coast Indians reports of a rich and populous country back in the interior where manufactures and commerce were well developed. Twenty years later Cortés set out upon an expedition that resulted in the conquest of Mexico. Guatemala, Honduras, Yucatan, and Nicaragua were soon added to the New World dominions of the king of Spain. After several baffling failures, the Pizarros succeeded in landing at Tumbez and soon an astute combination of diplomacy and force gave the "golden kingdom" into their hands. Columbus had found gold on Hispaniola

Fiske, Discovery of America, II, Ch. VIII, X.

Bourne, Spain in America, Ch. VI, VII.



ROUTES OF THE EXPLORERS

SCALE OF MILES
0 200 400 600 800 1000

Columbus
1st voyage, 1492-'93
2nd voyage, 1493-'96
3rd voyage, 1498-1500
4th voyage, 1502-1504
John and Sebastian Cabot, 1497-'98
Hojeda and Amerigo Vespucci, 1499
Ponce de Leon, 1513
Hernando Cortes, 1519
Alonzo de Pineda, 1519
Giovanni da Verrazano, 1524
Francisco Pizarro, 1526
Panfilo de Narvaez, 1535
Jacques Cartier, 1534-'35
Friay Marcos, 1539
Hernando de Soto, 1539-'42
Francisco de Coronado, 1540-'41
Sir Francis Drake, 1579
Henry Hudson, 1610-'11
Samuel de Champlain, 1615-'16
Jollet and Marquette, 1673
Robert de La Salle, 1681-'82
Varenne La Verendrye, 1731
Capt. Robert Gray, 1792
Lewis and Clark, 1806

PETERS, ENGR'R, BOSTON

Routes indicated by color and hatching.

in quantities that promised a rich return, the followers of Cortés had hit upon apparently inexhaustible veins of silver at Potosi and Zacatecas in Mexico; but all previous finds were outdone by the vandals who looted the treasures of the Incas. The ransom of Atahualpa was a roomful of gold vases whose total value is estimated at $15,000,000. Spanish galleons sailed back across the Atlantic, their holds stuffed with gold and silver, and Spanish sea captains returned home to live in luxury on their ill-won fortunes.

This easily gotten wealth had a demoralizing influence. The energies of Spanish adventurers were absorbed in the quest for gold, and no land seemed to them worthy of attention that did not give promise of limitless treasure. The vast regions to the north of the Gulf of Mexico were explored in vain. Ponce de Leon (1513) sought the fabled fountain of youth, while D'Ayllon (1526) and Gomez (1525) examined the Atlantic coast from Labrador to Florida in quest of a passage to the Indies less circuitous than that traversed by Magellan. Neither gold mines nor a direct route to the Orient rewarded their toils, and the country looked forbidding to eyes wonted to a tropical vegetation. Peter Martyr d'Anghiera, the friend of Columbus, commenting disapprovingly on Gomez' enterprise, wrote: "To the South, to the South for the great and exceeding riches of the Equinoctiall: they that seek riches must not go into the cold and frozen North."

Later expeditions into the interior discovered no El Dorado. Pineda sailed up the Mississippi River (1519) and saw Indians wearing gold ornaments. Narvaez (1525) and De Soto (1539–1542) in turn perished in the pursuit of a kingdom that might be as well worth the plundering as Peru. The survivors of Narvaez' ill-fated expedition forced their way across the plains of Texas, up the Rio Grande, and over the mountains to Culiacan, the northernmost outpost of the Mexican conquest. From Culiacan later adventurers set out to find the seven cities of Cibola and their storied treasures. Fray Marcos (1539) penetrated the interior as far as the Zuñi pueblos of New Mexico.

Coronado's expedition (1540–1542) pushed farther north to a fork of the Platte River, but only squalid Indian villages rewarded his heroic endeavor. For two centuries thereafter all attempt to develop the Spanish dominions north of the thirty-first parallel was abandoned.

Fiske, New France and New England, Ch. I–IV.

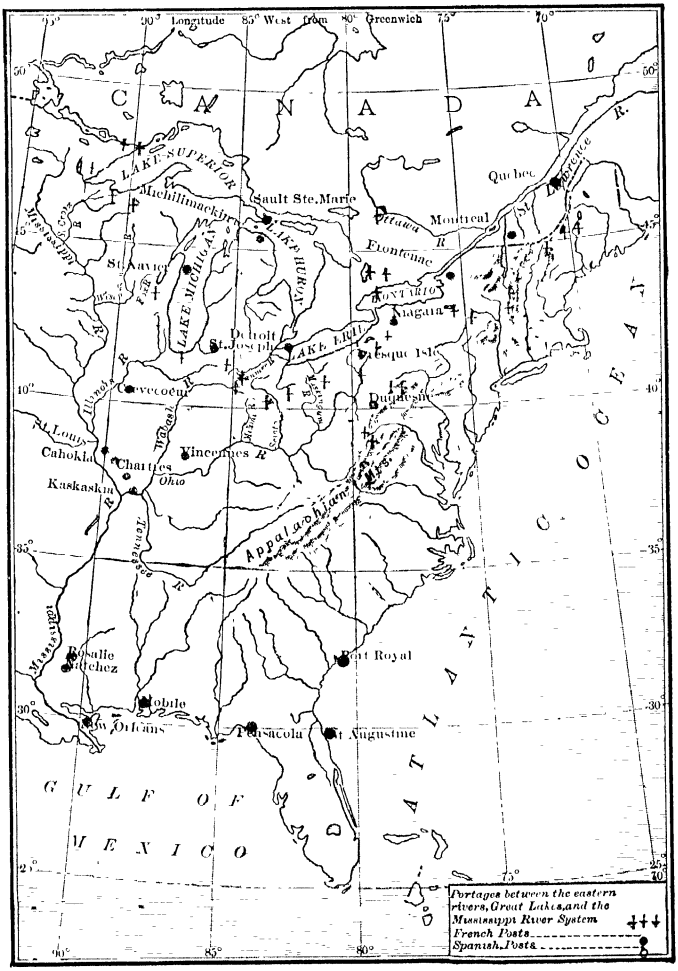
France. — The papal bull that assumed to divide the New World between Spain and Portugal was challenged by Francis I, the dramatic king of France. It is said that he sent a saucy message to Charles V, asking him by what right he and the king of Portugal had undertaken to monopolize the round earth. The authority of the Holy See weighed but lightly upon sixteenth century Frenchmen, and they determined to have their share in the exploitation of America. They sought their treasure in the sea. As early as 1504 fishing smacks from Brittany and Normandy found their way to the shoals off Newfoundland, and by 1578 France had as large a fishing fleet in these waters as Spain and Portugal combined. These sturdy fishermen established France's claim to littoral rights on the adjoining shores — a claim that has vexed the souls of diplomats to this day. In 1524 Verrazano, an Italian adventurer in command of a French corsair, explored the Atlantic coast from Cape Fear north to the Gulf of St. Lawrence. Ten years later Jacques Cartier followed up the great river as far as Montreal and founded the claim of France to that section of the New World. The first attempts at settlement were made farther south and well within Spanish territory, but the unhappy fate of the Huguenot colonies at Port Royal and Fort Caroline determined the limits of French adventure. Thereafter explorers from France were content to follow the lead of the St. Lawrence. They soon came upon that wonderful chain of inland seas, and followed their lead to the heart of the continent. Champlain, who traversed (1615) Lakes Huron and Ontario with an Indian war party, thought he had discovered the Northwest Passage and the long-sought route to the Indies. Later adventurers found a more important trade route, the great river that connects the lake region with the Gulf

Laut, Pathfinders of the West, Pt. I.

Thwaites, France in America, Ch. IV, V.

Dix, Champlain.

of Mexico. Nicollet (1639) reached the Wisconsin River, though he did not follow its current. In 1673 the trader Joliet and Père Marquette paddled up the Fox and down



THE FRENCH SETTLEMENTS.

Thwaites, Father Marquette.

Benton, Wabash Trade Route, Ch. I.

the Wisconsin to the Mississippi, and on to the point where the Arkansas flows in from the west. La Salle finally reached the mouth of the Mississippi (1682) and claimed the vast drainage basin for France. In honor of the Grand Monarque this splendid acquisition was named Louisiana.

Neither gold mines nor the Northwest Passage rewarded the zeal of the French explorers. The Indians told of veins of pure copper cropping to the surface near Lake Superior, but mines could not profitably be worked for lack of labor. The natives were skilled hunters, however, and fortunes might be made in the fur trade, and all the energies of the French government were bent toward the development of this promising traffic. Trading posts were established wherever a river or an Indian trail gave access to the hunting grounds, forts were built at strategic points, missions rose beside them, and the Indian tribes were held in check by a diplomatic alternation of bullets and the gospel. The characteristic types in these forest settlements were the soldier, the fur trader, and the priest. The *bateaux* of the *voyageurs* were ever seeking new channels of trade. Making their way up the rivers that flow into the Mississippi, they succeeded in monopolizing the traffic in peltries over the vast valley lying between the Alleghanies and the Rocky Mountains. It was a French trader, La Verendrye, who crossed the watershed between Lake Superior and the upper Missouri (1738), and his sons caught the first glimpse of the western range, the peaks of the Big Horn Mountains, full seventy-five years before the exploring expedition of Lewis and Clark.

Laut, Pathfinders of the West, Pt. II.

Semple, 25–31.

The French settlements were determined by considerations of water transportation. Quebec and Montreal gave control of the St. Lawrence; Frontenac, Niagara, Detroit, Michilimackinac, and St. Marie guarded the entrances to the Great Lakes; St. Xavier watched beside the first and best trade route to the Mississippi; Fort Duquesne dominated the upper Ohio; Vincennes, the Wabash; Fort Crevecœur, the Illinois. Traffic on the Mississippi was equally well protected by a series of fortified posts. Mobile

(1701) and New Orleans (1721) were founded on the Gulf coast in defiance of Spanish preoccupation.

Thus was outlined a noble empire quite worthy of the ambition of Louis XIV. Infinite courage, devotion, self-sacrifice, went into the effort to establish the claim of France to this portion of the New World, but the enterprise ended in failure and loss. The French domain was forfeited because the French colonies had no lasting industrial basis. French settlements did not strike root because neither soldier, priest, nor *voyageur* had a life interest in the country. When the fur-bearing animals were killed off and the Indian tribes had retreated into the interior, the mission trading post dwindled into insignificance. Only along the St. Lawrence, where agricultural colonies were planted, did the French secure a permanent hold upon the region opened up by their explorers. To Sir John Hawkins, who visited Port Royal in 1565 and found the colonists starving in the midst of plenty, the difficulty was evident. "Notwithstanding the great want that the French had, the ground doth yeeld victuals sufficient, if they would have taken paines to get the same; but they being souldiers, desired to live by the sweat of other men's browes."

Docs. Col. Hist. of New York, III, 396.

Hakluyt's Voyages, X, 56.

Great Britain. — England's right to a share in North America rested upon the exploring expeditions sent out by Henry VII. John and Sebastian Cabot (1497–1498) skirted the coast from Cape Breton to Cape Hatteras and laid claim to the territory in the name of the niggardly monarch who financed the expedition. The opening was little prized at the time and not immediately followed up, for the region seemed unpromising. No gold mines were discovered, and nature was far less kind than in the tropic islands farther south. There was no lack of adventurous mariners in sixteenth century England, but the nation's energies were absorbed in a life and death struggle with Spain. English sea captains found more honor and profit in sacking the rich towns of the Spanish Main and pillaging the treasure ships on their homeward voyages, than in

Fiske, Old Virginia and Her Neighbors, I, Ch. I.

Hakluyt's Voyages, XI, 101–132.

Payne, Voyages of Elizabethan Seamen, First Series, 196–229.

exploration along the bleak Atlantic coast. Yet credit for the first important discoveries in the north Pacific belongs to England. Sir Francis Drake (1577–1585) sailed through the Straits of Magellan and up the west coast of South America, where he plundered the Spanish ports and the galleons on their way home from Peru. Not wishing to risk his booty by returning through Spanish waters, he sailed on up the coast of the northern continent to the forty-third parallel and then across the Pacific and Indian oceans, around the Cape of Good Hope, and so home to Plymouth harbor.

Osgood, American Colonies, I, Pt. I, Ch. I.

Drake was the first navigator to "put a girdle around the earth," but he had no thought of colonies. The first attempt to settle the British possessions in America was made by the brave and knightly Sir Humphrey Gilbert. Obtaining the queen's commission, he sailed directly across the Atlantic and landed somewhere on the coast of Newfoundland in June, 1583. The season was delightful, and raised false hopes of success, but winter brought cold and tempests such as these Englishmen had never experienced, and the enterprise was abandoned. On the homeward voyage Gilbert's ship, the *Squirrel*, went down with all on board. His younger half-brother, Sir Walter Ralegh, succeeded to his commission and his task. Ralegh was the son of an English sea captain. While still a student at Oxford he conned with Hakluyt, compiler of "The Voyages and Discoveries of the English Nation," the perplexing maps of the New World and read all the narratives of the explorers then available. Student though he was and courtier, he was a man of action as well. Consumed by the passionate desire to secure for England her due share in the wealth of the New World, he staked fame and fortune, life itself, on the undertaking. Three separate expeditions this great patriot sent out at his own charge. Forty thousand pounds was spent in the endeavor to plant an English colony at Roanoke Island (1585–1589), but a series of unavoidable misfortunes thwarted the enterprise. On the accession of James I, Ralegh was thrown

Winsor, Narr. and Crit. Hist. America, III, Ch. IV.

Tyler, England in America, Ch. I, II.

Weeks, Lost Colony of Roanoke.

into the Tower, where he was finally beheaded; but his undaunted soul never lost faith in the ultimate realization of his dream. Of Virginia, the land his devoted service had won for England, he said, "I shall yet live to see it an English nation." Though Ralegh's colonies failed, and his hope of discovering an El Dorado on the Orinoco came to naught, the explorations undertaken at his expense reenforced England's claim to the territory south of Cape Hatteras and indicated the most favorable location for future endeavor.

The physical conditions of the Atlantic coast were highly favorable to colonization from England, for the British possessions lay directly across the sea from Plymouth and the Cinque Ports. Throughout the sixteenth century English sea captains had followed the Spanish route and steered south to the Canaries, then due west to the Antilles, and thence north to Cape Fear. Ralegh's costly expeditions made this circuitous voyage. In 1602 Bartholomew Gosnold, one of Ralegh's associates, ventured to sail straight across the Atlantic and came, happily, upon Massachusetts Bay. This adventure proved that England lay one thousand miles nearer to her American provinces than did Spain to hers, and thereafter the direct route was usually followed. The strip of coast open to British enterprise was, moreover, peculiarly accessible from the sea. A fine series of rivers — the Connecticut, the Hudson, the Delaware, the Susquehanna, the Potomac, the James — take their rise in the Appalachian highlands and, being navigable for small boats well-nigh to their sources, proved as serviceable to explorers and pioneers as so many macadamized roads.

Semple, Ch. II.

The first successful English settlement, Jamestown, was made on a tributary of the wonderful bay that Ralegh had divined to be an open highway to the wealth of Virginia. The feasibility of an agricultural settlement once demonstrated, others quickly followed. Plymouth colony was planted in 1620, Salem in 1628, Boston in the year following. From 1630 to 1640 no year passed but saw

Fiske, Old Virginia and Her Neighbors, I, Ch. III.

some shipload of colonists leave Bristol or Plymouth or London bound for America. No harbor or inlet or river in his Majesty's plantations but was explored by these brave home seekers. By 1640 there were twenty-one thousand settlers in New England alone and perhaps half as many more in Virginia. During the next twenty years, the Puritans stayed at home and the Royalists were fain to find a refuge in Virginia, but the restored Stuarts forced the migration of another crop of traitors and malcontents. Oglethorpe's colony in Georgia (1732) attracted poor debtors and other unfortunates from Europe as well as from the British Isles.

Scattered along the coast from Pemaquid to Savannah, rarely venturing inland beyond reach of navigable water, divided from the interior of the continent by a discouraging mountain barrier, settlers in the English provinces were forced to make the most of the land within their reach. Geographic conditions favored the formation of compact communities. The lands available for settlement were in a narrow strip of territory rising from the sea to the foothills of the Appalachian range. The northernmost third, since it is largely mountainous, offered the least attraction to colonists. Southward the lowlands broaden to a tract of three hundred miles width. Geologically this lowland is divided between coastal plain and Piedmont plateau. The coastal plain is the ancient sea beach lifted a few feet above the level of the tide. To the north it is represented by detached areas — Cape Cod, Nantucket, Martha's Vineyard, Long Island, New Jeresy, and Delaware. To the south it becomes the dominant physical feature. Pine barrens cover its undulating levels, but in the river bottoms the original sand and gravel are covered with alluvial deposit. Near the sea the land oozes away into swamp and morass, heavily wooded with cypress and live oak, and along the Jersey and Carolina coasts, bayous and open sounds divide the mainland from a chain of shifting sand dunes that form the outer boundary. The lands of the coastal plain throughout were easily

Semple, Ch. III.

reached and cleared. The Piedmont plateau from Pennsylvania to Georgia is rough hill country, heavily forested before the advent of the white man with pine, hemlock, and hard woods. The " fall line " that divides the coastal plain from the Piedmont indicates the drop from the foot-



hills to sea level and marks the head of navigable water. Settlers did not penetrate this " back country " till the supply of fertile lowlands was exhausted.

Holland. — Of the maritime countries of Europe, the Dutch were by no means the least enterprising, but their energies were largely absorbed in developing their trade

Fiske, The Dutch and Quaker Colonies, I, Ch. III, IV

interests in the Orient. The commercial opportunities of the western continent were brought to the attention of the merchants of Amsterdam by the voyage of Henry Hudson (1609). Commissioned by the Dutch East India Company to seek out the ever desired Northwest Passage, he came upon a wonderful harbor and a river, up which he sailed one hundred and fifty miles before coming upon shoal water. The Indians proving friendly and ready to exchange valuable furs for the merest baubles, the merchants of Amsterdam fitted out a trading ship, and in good time she returned with a profitable cargo. A fortified trading post was built on Castle Island just below Albany, another on Manhattan at the mouth of the river, and a third on the Delaware. In 1621 the West India Company was chartered and given monopoly of commerce with the West Indies, Africa, and the American coast, and full authority to plant colonies in New Netherland. The Company's trading posts gave access to rich hunting grounds, and a brisk commerce in furs developed. Soon an annual harvest of sixty-six thousand skins was sent over to the furriers of fashionable Europe. Other opportunities of wealth were improved by the doughty Dutchmen. The treasure ships of Spain were lawful booty, and slaves bought on the Gold Coast of Africa might be sold in the West Indies for many times their purchase price.

Janvier, Henry Hudson, Ch. IV–VIII.

Mem. Hist. of New York, I, Ch. IV.

The West India Company grew rich apace, but their colonies did not prosper. The inhabitants of New Amsterdam were mere servants of the Company, among whom were few genuine settlers. The agricultural communities along the Hudson, made up of feudal dependents of the "patroons," were discontented and eager to change masters. Holland's New World possessions were far more promising than England's, not for commerce only, but for agriculture and manufactures. The Dutch settlers had a more genial climate and a more fertile soil than their neighbors to the eastward, their forests furnished the best of timber, and their rivers afforded unexcelled water power; but industry languished because the fruits of labor, the surplus

products of field and loom and mill, were claimed by the over-lord to whom the home government had given the land. The fact that the States-General sent them governors and garrisons did not much signify when the opportunity for acquiring land and fortune was withheld, and loyalty waned as men learned how the English villages throve under freer laws. So it came about that when England, jealous of the commercial ascendancy of Holland, sent a fleet to capture her trading posts in America, there was no serious resistance, and the Dutch governor was obliged to surrender New Amsterdam (1664) without firing a gun in its defense. Immediately settlers began to pour in from the English colonies north and south and from over the sea. The population of New Netherland at the time of the conquest was seventy-five hundred. It had doubled by 1696. The Swedish settlements along the Delaware succumbed as readily to English influence. Thus did Great Britain acquire title to the Atlantic coast from the St. Croix to the St. Mary's River.

The Final Victory of the English. — Once rooted in a soil unquestionably their own, the British colonies grew with amazing rapidity. At the close of the seventeenth century there were two hundred and sixty thousand of the king's subjects in America. Fifty years more saw the number rise to one million souls. The first United States census (1790) recorded a population of three million nine hundred and twenty-nine thousand persons of European descent. Fully one fifth of these people spoke some other language than English and probably not more than half were of Anglo-Saxon blood. There were Dutch communities along the Hudson, German in Pennsylvania, Swedish along the Delaware, Italians and Salzburgers and French in Georgia, while Huguenot refugees were numerous in the coast towns, notably Boston, New York, and Charleston; but everywhere the dominant element was of English extraction.

Bancroft, Hist. of United States, IV, 127–130.

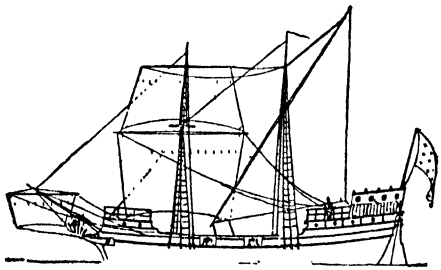
Dexter, Population in the American Colonies.

This extraordinary migration was largely due to social and industrial conditions in the British Isles. The religious and political tyranny of the Commonwealth, no less than

that of the Stuarts, drove thinking men to seek opportunity to work out their own convictions in a land where there was neither priest nor king. The agricultural revolution consequent on the conversion of tilled lands into sheep pasture threw thousands of men out of employment. The peasant farmers lost their holdings, the agricultural laborers were no longer needed, and seventeenth century England was unable to maintain her sons. The surplus population turned to the New World, where land was to be had for the asking. Most of the men who crossed the Atlantic in English vessels were not priests, soldiers, trappers, gold seekers, but men bred to the cultivation of the soil. They brought their wives and children with them and purposed to found homes in America, and they had sober ideas concerning the necessity of earning their bread by hard work. The land open to English settlement contained no hoards of gold and silver, but it proved to have sources of wealth no less remunerative in the long run. Fur-bearing animals were abundant, and forests of pine and oak yielded naval stores that brought a good price in Old World markets. The sea teemed with edible fish, oysters, and lobsters. Captain John Smith, who explored the New England coast in 1614 and wrote a rose-colored account of its possibilities, prophesied, and truly, that the cod fisheries of the north Atlantic would profit this country more than the best mines the king of Spain possessed. Soil and climate were suited to the growing of familiar European cereals, and new products, such as maize, potatoes, and tobacco, were destined to become a prolific source of wealth.

Four European nations laid claim to the territory now included in the United States, and each attempted to secure its title by planting colonies and providing for military defense. We have seen how Holland lost New Netherland through failure to plant free agricultural colonies. France made strenuous effort to hold her New World territory, calling in the Indians to defend her sparsely peopled outposts; but in 1763 she was forced to surrender her claim to the eastern half of the Mississippi Valley, and forty

years later Louisiana Territory passed into the possession of the United States. Spain had even slighter hold on the lands north of the Gulf of Mexico, for no permanent settlements had been made between St. Augustine and Santa Fé. Missions had been built in plenty, and the native races were converted to the Catholic church, but not to European civilization. Here were noble rivers, vast forests, and a soil unsurpassed for fertility, but Spanish adventurers had not patience to undertake the development of a region so barren of immediate gain. Casteñada, the chronicler of Coronado's unlucky expedition, had no hope of success in the Mississippi Valley, "because that part of the country is full of bogs and poisonous fruits, and the very worst country that is warmed by the sun." By a series of treaties the United States has secured Spain's empire in North America — the Floridas in 1819, Texas in 1845, New Mexico, Arizona, and California in 1848. The English race, the last upon the scene, with apparently the most unpromising field for colonial enterprise, was destined to occupy the whole land from the Atlantic to the Pacific, from the Gulf of Mexico to the Great Lakes. Even the islands of the Caribbean Sea, the Isthmus of Panama, and the Spanish Main have finally come under our control. The Oriental empire, discovered by Magellan and maintained by priests and soldiers for near four hundred years, toppled at a blow, and Spain was obliged at last to surrender the Philippines to her vigorous rival.



La Salle's Ship, "The Griffin"

CHAPTER II

THE BUSINESS ASPECTS OF COLONIZATION

Contemporary Estimates of the possibilities of the British possessions in America were colored, naturally enough, by Spanish experience. The first explorers sent home exaggerated reports of what they saw and heard. Verrazano asserted that gold, silver, and copper abounded on the Carolina coast, and Jacques Cartier gave a no less hopeful account of the St. Lawrence country. Jean Ribault, commandant of the Huguenot colony at Port Royal, observed that the natives wore ornaments made of the precious metals and argued that the mines could not be far away. John Sparke, the chronicler of Hawkins's second voyage, shrewdly suspected that the Indians had filched their gold and silver from the wreck of Spanish treasure ships cast upon this stormy coast; nevertheless, he believed that back in the interior " where are high hilles, may be golde and silver as well as in Mexico because it is all one maine."

Hakluyt's Voyages, X, 58.

Payne, First Series, 63.

As the country became better known, soberer opinions prevailed. Men began to realize that the great advantage of the New World possessions lay in the fact that America was a virgin continent where land was to be had in limitless tracts and where there was no immediate fear of a diminishing return from the soil. In " Western Planting," a shrewd estimate of the possibilities of America written by Hakluyt, we find set forth the economic advantage that would accrue to Great Britain from the planting of colonies across the sea. Such enterprises would serve to drain off the surplus population of the mother country. Thousands of able-bodied men, yeomen, and artisans, for whom there

Fiske, Old Virginia and Her Neighbors, I, 43–47.

Hakluyt, A Discourse of Western Planting, Maine Hist. Society Collections, 1877.

was no employment at home, might find in America opportunity to earn an honest living. Such colonies would, also, furnish a new market for English manufactures, which were languishing for lack of purchasers. It was hoped that even the savages would develop a taste for clothes and would thus increase the demand for woolen cloth such as English looms produced in plenty. In exchange for her surplus manufactures, the colonists would send back to England commodities of which the government stood greatly in need for the maintenance of the navy, such as masts and spars, tar and pitch, cordage and iron. Timber and pitch had hitherto been imported from Russia and Poland, the iron had come from Spain, the copper from Sweden. These articles could be had from America at half the price because the supply was limitless, and because in trade with English colonies there could be none of the troublesome exactions suffered in the dominions of the Czar, none of the risks encountered by British traders in hostile Spanish ports. This colonial traffic would give profitable employment to English merchant vessels, forced to lie idle since the Dutch commercial ascendancy, and to English seamen who were hiring themselves to foreigners, since they could not find service under the British flag. Whatever revenue was to be derived from tariffs and tonnage duties would, moreover, accrue to his Majesty's treasury.

Hakluyt's Voyages, VIII, 111.

The Financing of the Colonies

The Chartered Companies. — So evident were these advantages that Parliament was urged to appropriate money for equipping a colonial venture on the ground that it was more honorable that the state should back such an enterprise than surrender it to private monopoly. No state fund was voted, however, and at the request of "certain firm and hearty lovers of colonization," Hakluyt among the number, the king intrusted the undertaking (1606) to two joint stock companies chartered for that purpose. The London Company was assigned the region

Brown, Genesis of the United States, I, 36–42, 52–63; II, 692–696

Cheyney, Ch.VII,VIII.

lying between the thirty-fourth and the thirty-eighth parallels, and the Plymouth Company that between the forty-first and the forty-fifth. The region intervening was open to colonization on the part of either company or by other "adventurers." Later charters (1609 and 1612) vested in the incorporators the government of such colonies as they should establish and the monopoly of trade between the colonists and the mother country. The money necessary to fit out a colonial expedition — to transport colonists and provide the food and clothing for their maintenance during the initial years — was secured by sale of stock. Each subscriber received a "bill of adventure," which entitled him to a share in the profits of the enterprise. It soon became evident that no dividends were forthcoming, but subscriptions were none the less urged on grounds of public expediency. The planting of colonies in America came to be considered a patriotic obligation. The clergy were enjoined to urge it upon their congregations as a Christian duty, and lotteries were opened in this interest. One hundred members of the House of Commons took stock in the London Company, subscribing from £37 10*s.* to £75 each. The wealthy citizens of Dover and Sandwich contributed liberally to this faraway venture, and, in response to the request of the lord mayor, the trade guilds of London opened their coffers and gave £5000 toward the founding of an English colony over-sea.

Lucas, Charters of the Old English Colonies, 9–28.

Brown, Genesis of the United States, I, 71, 280, 306, 309, 391, 465, 469; II, 555, 558, 581, 685, 688.

The sending of colonists to America was undertaken on a purely business basis. The initial expenses were great, but it was hoped that the ultimate profit to the adventurers in the way of dividends and to the country as a whole by the beneficial effects of colonial trade would bring full compensation. The capital accumulated by the corporation was invested in supplies — agricultural implements, cattle, sheep, and horses, and food to last the colonists until the first harvest. For a term of from five to seven years the supplies were treated as a common store from which the needs of the "planters" — men, women,

and children — were supplied. Each able-bodied man was to work according to his capacity at the task assigned him, whether hunting, fishing, plowing, or at carpentering or smith's work, and the products of their labor were turned into the common stock. The first houses put up were used by all in common, and the first boats built belonged to the community. Each colony was expected to send some marketable product to the representatives of the company in England.

At Jamestown, the first enterprise of the London Company, for example, a magazine, was erected for housing the common stores, and a "cape merchant" was appointed to receive and distribute them. The plan was far from successful, because it did not offer sufficient incentive to labor. Few men will put forth their best endeavors when their needs are met out of a public fund and they realize no advantage from individual effort. The Jamestown colonists shirked their tasks, and, the supplies being soon exhausted, Captain Smith was forced to announce that every man must perform his share of the work or be excluded from the colony. "Every one that gathereth not every day as much as I do, the next day, shall be set beyond the river and forever be banished from the fort, and live there or starve." After this energetic taskmaster returned to England (1609), the fields were neglected, the cattle were killed for eating, and the "starving time" came upon the infant colony. But for the timely arrival of Lord Delaware with fresh supplies and adequate authority, the Jamestown settlement would have met the fate of Roanoke. Sir Thomas Dale, who was sent out by the company in 1611, put matters on a better footing by assigning to each man a piece of garden land for his own use. Thereafter there was no difficulty in inducing the settlers to till the soil on their own account, but the requirement that they should labor one month out of every year for the company was grudgingly obeyed. So eager were the directors for a money return on their venture that they ordered Captain Newport, when he sailed for Virginia

Fiske, Old Virginia and Her Neighbors, I, Ch. IV.

Osgood, I, Pt. I, Ch. III.

Brown, Genesis of the United States, I, 71, 402–13.

Works of Captain John Smith, 89–174, 497–543.

Tyler, Ch. III–VI.

Bassett, Virginia Planter and London Merchant.

in 1608, to bring back a cargo of products worth £2000 (the cost of this second supply) and intimated that, if profits were not soon realized, the colony would be abandoned, since the discouraged stockholders were withdrawing their pledges. Newport carried with him eight skilled artisans, and these men got together some tar, pitch, glass, and iron ore. These commodities, together with clapboards cut by the colonists "for their exercise at leisure times," made up the first return cargo from Virginia.

Winsor, Narr. and Crit. Hist. America, III, 175–177. Osgood, I, 34–44.

The colony sent to Sagadahoc on the Kennebec River by the Plymouth Company, in 1606, set out under brilliant auspices. It was planned by Lord John Popham, Chief Justice of England, and officered by his brother, George Popham, and his nephew, Ralegh Gilbert. The rank and file of the settlers, however, were rough, wild fellows picked up in the seaports, who had little ability and less inclination for hard work. The summer season was wasted in exploring expeditions, and the friendship of the Indians was forfeited through wanton cruelty. Winter found the colonists unprepared, and they could get neither corn nor furs from the outraged natives. Popham died, and the colony was so reduced by disease and starvation that, when the supply ship arrived in the spring, the men would hear of nothing but immediate return to England. They carried home an evil report of the land where they had suffered so much hardship, and the Plymouth Company, disheartened by this costly experiment, planted no more colonies at its own expense.

These failures on the part of the chartered companies are not to be regretted. The English settlements might have been mere trading posts dependent on the good will of a merchant company like the Dutch colonies on the Hudson, but for the fortunate circumstance that the first ventures were unsuccessful and returned no profit on the investment. The stockholders became discouraged, the managers got into trouble with the government, and the charters were withdrawn, that of the London Company in 1624, that of the Council for New England eleven years after.

Associations of Adventurers. — Later colonies were financed by private associations, each of which secured a charter giving title to a definite strip of territory and more or less adequate political control of the projected settlements. The first successful settlement within the domain of the Plymouth Company was made by a group of Separatists who, finding the England of James I a difficult place to live in, sought to establish a government more to their liking in the New World. The seventy London merchants who financed this enterprise subscribed £10 each and made careful provision for a money return. In the articles of agreement between the associated adventurers and the planters of Plymouth, it was stipulated that the parties to the contract were to "continue their joynt stock & partnership togeather, y^e^ space of 7 years, . . . during which time, all profits & benifits that are gott by trade . . . or any other means of any person or persons remaine still in the comone stock." The planters were to labor on the common fields for the common good. It was hoped that a considerable revenue would be realized, if not from actual products, then from the profits of trade. For several years, however, the colony was hardly more than self-sustaining. The Pilgrim Fathers relished, no more than the "vagabond gentlemen" of Virginia, toil that did not result in immediate personal gain. In 1624 the scheme was abandoned, and every man was given one acre of land where he might "set corn for his own particular." Thereafter there was plenty of food; but the adventurers wanted marketable goods, and their exactions proved so annoying to the planters that the agreement was dissolved (1627). The colony undertook to buy up the interests of the stockholders for £1800 to be paid in yearly installments of £200 each. Certain leading men, Bradford, Winslow, Standish, Brewster, and others, became responsible for the fulfillment of this pledge.

Osgood, I, Pt. I, Ch. V.

Tyler, Ch. IX, X.

Bradford, History "of Plimoth Plantation," 56–58, 162–166, 176–178.

Brown, Genesis of the United States, I, 33–35.

In the case of the Massachusetts Bay Colony, the adventurers went in person to America, carrying their charter with them, and thus the association became identified with

Osgood, I, 141–152.

Tyler, Ch. XI, XII.
Egleston, Land System of New England Colonies.

the colony. Every stockholder was entitled to a voice in the management of the company's affairs and attended in person the stockholders' meeting, known as the General Court, until the increase in the number of settlements necessitated the election of representatives. The charter secured a grant of land extending from the Merrimac River to the Plymouth line, and from "sea to sea." Within this territory new colonies were planted from time to time on lands granted free of charge by the General Court. Ipswich, Newbury, Charlestown, Dedham, and the Connecticut River towns, Hadley, Hatfield, and Northampton, were offshoots from the parent colony and followed each in turn the same general plan. The settlers joined forces for the prosecution of undertakings that were too great for individual initiative, such as the clearing of the forest, the cultivation of the first crops, the putting up of houses, barns, fences, sawmills, gristmills, etc., and as soon as practicable each of the proprietors in the common lands was assigned his portion and proceeded to cultivate on his own account. This was not communism but coöperation.

Tyler, Ch. XIV, XV.

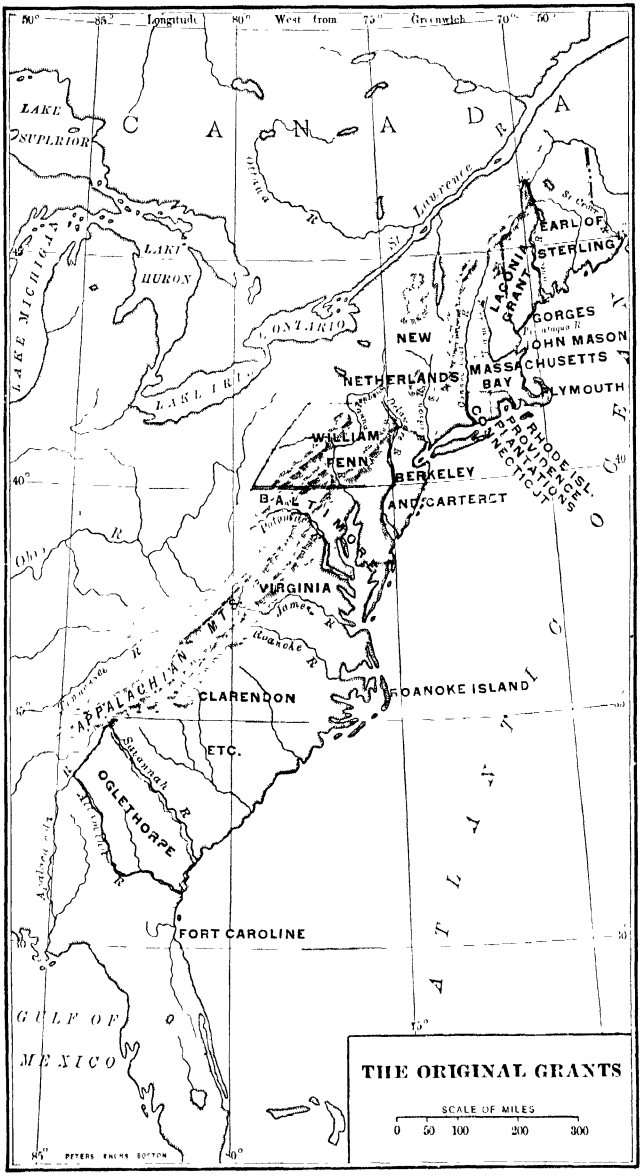
Providence Plantations and the Connecticut towns were also independent ventures financed by the planters themselves. Being under no obligation to pay tribute to a body of adventurers in England, the colonies grew rapidly in population and wealth. By 1700 New England, despite her natural disadvantages, was the most densely settled province in America.

Lucas, 87–123.

Proprietary Grants. — It was not unusual for private persons with sufficient means to secure a grant of land and undertake the planting of a colony as one might set about the cultivation of a distant estate. Such colonial enterprises were feudal in character. The undertaker owned the land and met the expenses of the shiploads of laborers sent out to develop its resources and was, in consequence, entitled to whatever revenues in the way of rents, and receipts from mines or from customs duties might accrue.

Osgood, II, Pt. III, Ch. I.

Sir Fernando Gorges, a friend of Sir Walter Ralegh, despairing of success through company management, se-


Longitude West from Greenwich
LAKE SUPERIOR
CANADA
LAKE MICHIGAN
LAKE HURON
LAKE ONTARIO
LAKE ERIE
St. Lawrence R.
Ottawa R.
NEW NETHERLANDS
EARL OF STERLING
LACONIA PRANT
GORGES
JOHN MASON
MASSACHUSETTS BAY
PLYMOUTH
PROVIDENCE PLANTATIONS
RHODE ISL.
CONNECTICUT
WILLIAM PENN
BERKELEY AND CARTERET
BALTIMORE
VIRGINIA
James R.
Roanoke R.
APPALACHIAN MTS.
CLARENDON
ROANOKE ISLAND
ETC.
OGLETHORPE
Savannah R.
Altamaha R.
FORT CAROLINE
GULF OF MEXICO
ATLANTIC OCEAN
THE ORIGINAL GRANTS
SCALE OF MILES
0 50 100 200 300
PETERS ENGR BOSTON

cured, together with John Mason, another member of the Council, the Laconia grant (1623). The Council bestowed upon these gentlemen the exclusive right to plant settlements along the coast between the Kennebec and Merrimac rivers and the monopoly of fisheries and trade. A fishing station was established at the mouth of the Piscataqua River, and salt works were there set up. Salt, dried fish, furs secured in trade with the Indians, clapboards and pipestaves, made up the returns from this venture; but the cost of maintaining the colony exceeded the income. The workmen sent out were fishmongers from Billingsgate "hired at extreme rates," a thriftless and lawless crew, who lived extravagantly and worked only under compulsion. In 1629 the grant was divided, Gorges acquiring control of the territory between the Piscataqua and the Kennebec under the title of Lord Proprietor of Maine, and the lands south of the Piscataqua being awarded to Mason. Neither proprietor did much toward the actual colonization of his territory.

Winsor, Narr. and Crit. Hist. America, III, 295–310, 326–330, 366, 367.

Osgood, I, Pt. II, Ch. IX.

In 1632 the first Lord Baltimore, who as member of the London Company had made a futile attempt to found a colony in Virginia, obtained from the king a charter making him sole proprietor of the territory lying between the Potomac River and the fortieth parallel. His son Cecil succeeded to the title that same year and became Lord Proprietor of Maryland. Twenty gentlemen and three hundred laboring men, well stocked with provisions, undertook the first settlement in 1633. Lord Baltimore gave careful attention to the welfare of his colony and expended £20,000 out of his own purse in forwarding supplies. The climate was genial and the soil rich. The cultivators were soon able to send corn to New England in exchange for salt fish, and the hogs and cattle procured from Virginia flourished. Religious toleration offset the disadvantages of feudal government in the minds of Roman Catholics, Quakers, and other dissenters, for whom there was no place in Old or New England, and the colony was augmented by self-supporting emigrants.

Winsor, Narr. and Crit. Hist. America, III, 517–525.

Fiske, Old Virginia and Her Neighbors, I, Ch. VIII; II, Ch. XIII.

Tyler, Ch. VII, VIII.

Andrews, Colonial Self-Government, Ch. IX, X.

A batch of proprietaries dates from the Restoration. Charles II was bent on asserting the royal prerogative not only in England but in America as well. The unclaimed territory afforded opportunity for rewarding his friends and supporters, and he gave out patents with a lavish hand. The coast country south of Virginia to the twenty-ninth parallel was granted to a group of loyal noblemen, the Earl of Clarendon, the Duke of Albemarle, Lord John Berkeley, Sir William Berkeley, Sir John Carteret, and others (1668). These gentlemen, with the assistance of John Locke, the philosopher, proceeded to draw up a feudal form of government for the Carolinas while promising liberal terms in the way of lands, trade privileges, and religious freedom to voluntary immigrants. Some persecuted Quakers did indeed move across the Virginia boundary, and enterprising Yankees from Massachusetts came down to prosecute trade, but the government of the proprietors was so tyrannical and inefficient that there was no security for life or property. The Carolinas did not prosper until a stable crown government was established (1720).

Winsor, Narr. and Crit. Hist. America, V, Ch. V.

Fiske, Old Virginia and Her Neighbors, II, Ch. XV.

Winsor, Narr. and Crit. Hist. America, III, 421–422.

Andrews, Colonial Self-Government, Ch. V, VI.

In 1664 England's shadowy title to the Hudson River territory was vested in the Duke of York by charter from the king. The fleet sent to besiege New Amsterdam had little difficulty in enforcing the claim, and New Netherland became New York. Nicolls, the governor, sent out to represent the royal proprietor, made inquiry into the laws that had been adopted by the New England colonists and modeled his government thereon. The Dutch settlers were glad to remain under the liberal English rule, and Connecticut farmers came in to take up the fruitful lands on Long Island.

Winsor, Narr. and Crit. Hist. America, III, 422–449.

The fertile stretch of territory between the Delware River and the sea, the Duke of York sold (1664) to his friends, Lord Berkeley and the Carterets. In the Jerseys, as in the Carolinas, the proprietors, lacking funds with which to stock a colony, offered liberal terms to settlers who should meet their own expenses. The vacant land

was quickly taken up by English, Dutch, and Swedish farmers.

Andrews, Colonial Self-Government, Ch. VII, VIII

Very different in origin were the last two proprietorships. In 1681 the unoccupied land west of the Delaware River and between the fortieth and forty-second parallels was granted by the spendthrift Charles II, in satisfaction of an old debt, to William Penn, the Quaker philanthropist. In this case the proprietor came in person to America. He refused to establish a trade monopoly, considering the prosperity of the colony more important than money gain. "I am day and night spending my life, my time, my money, and am not a sixpence enriched by this greatness. . . . Had I sought greatness, I had stayed at home." Representative government, liberal laws, and full ownership in the soil proved adequate inducements to immigrants. The City of Brotherly Love sprang up at the junction of the Delaware and Schuylkill, a location selected by the wise proprietor as suitable "for health and navigation."

Fiske, The Dutch and Quaker Colonies, II, Ch. XII, XVI.

Andrews, Colonial Self-Government, Ch. XI, XII.

Buell, William Penn.

Winsor, Narr. and Crit. Hist. America, III, 476–495.

Fifty years later the part of Carolina that lies between the Savannah and Altamaha rivers, having been surrendered to the Crown by the original proprietors, was granted by George I to a group of philanthropists who proposed to give opportunity to prisoners for debt to make a fresh start in life. Oglethorpe and his associates were constituted "trustees for establishing the colony of Georgia" and were made responsible for the conduct of its affairs for a term of twenty-one years. A corporation was organized for the financing of this latest colony, but with no thought of gain. Its stock was subscribed by benevolent individuals, churches, and trade guilds, while Parliament appropriated £10,000 toward the humane enterprise. The colonists were brought over at the expense of the corporation and provided for during the initial years until they had secured a firm footing. In 1751 Georgia became a crown province.

Winsor, Narr. and Crit. Hist. America, V, 361–392

Greene, Provincial America, Ch. XV.

The success of the proprietary colonies varied with the wisdom and zeal of the persons responsible for their man-

agement. These experiments, no less than the chartered companies, proved that no money return could be expected from American investments and that the economic advantages to be derived from colonies were remote and indirect. All the proprietary rights except those of the Penns and the Calverts had lapsed to the Crown before the Revolution, and the several governments were administered by royal appointees and assemblies representing the interests of the colonists.

Land Tenure

The prime concern with the founders of a colony, whether chartered company, proprietor, or association of adventurers, was to induce people to migrate to America; for without laborers nothing of commercial value could be produced. The managers of the several colonial enterprises, however aristocratic their original plans, became convinced by actual experiment that it was good policy to put *bona fide* settlers in immediate possession of the land. Nothing short of actual ownership in the soil sufficed to attract and hold immigrants.

Osgood, I, 73–79.

In Virginia, for example, the purpose of the company to retain possession of the land and get it cultivated by laborers or tenants gave way before the necessity of offering the highest inducement to effective tillage. Sir Thomas Dale assigned a three-acre garden lot to each of the company's servants and offered twelve acres of uncleared land to all newcomers; but the cultivators remained mere tenants at will. The House of Burgesses in its first session (1619) demanded that the colonists be put in full possession of these lands, and that every resident shareholder be allotted one hundred acres in fee simple for each share (£12 10*s*.) he had contributed to the common stock, and this was conceded. Associations of adventurers proposing to go in person to Virginia secured grants of land from the London Company until 1624, and, after that "hot-bed of sedition" forfeited its charter and Virginia became a

Bruce, Economic History of Virginia, I, 227, 502–506.

royal province, from the Crown direct. Since each stockholder was entitled to one hundred acres in the first "division" and one hundred more when the grant had been "seated," these associations came into possession of great tracts of land. John Martin, one of the first councillors, who organized the company that settled Martin's Hundred on the James River, secured for himself and associates eighty thousand acres. Other grants hardly less extensive were assigned to the planters of Smith's Hundred, Southampton Hundred, Bermuda Hundred, etc.

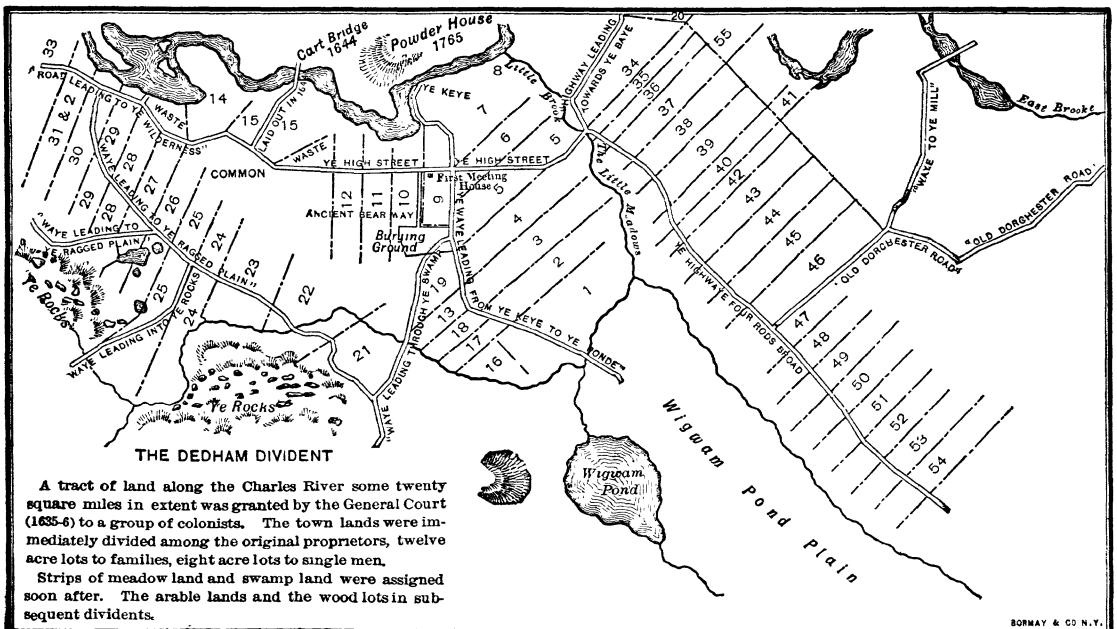
Individual planters might increase their estates by the title known as "head right." Every shareholder who met the cost of importing an able-bodied laborer, man or woman, was entitled to fifty acres in the first division and fifty additional in the second. The right was soon extended to all residents of Virginia and became the usual method of acquiring land. Since the transportation charges amounted to £6, the land came to little more than a shilling an acre. Moreover, the imported laborer was usually under contract to repay the passage money in service. Thus, by a moderate outlay, the planter secured an estate and the hands with which to till it. The custom was admirably suited to a country where land was abundant and labor scarce, but it was susceptible of abuse. Unscrupulous planters obtained grants in consideration of passage money paid for members of their families or for their own journeys to and from England. The land offices grew corrupt, and soon it was not required to bring evidence of passage paid. A small fee handed to the secretary insured the solicited grant with no questions asked. This practice became so general that it was finally (1705) sanctioned by law. Fifty acres might be had for five shillings, on condition that a house be built and three acres planted within three years and a suitable number of cattle maintained. The result was a significant increase in the size of the holdings. In 1625 a shareholder was entitled to one hundred acres and had expectations of a second hundred, while at the close of the century the average size

Bruce, I, 512–518.

Osgood, II, Pt. III, Ch II.

Beverley, History of Virginia, Bk. IV, Ch. XII.

Bruce, I, 519–564.



A tract of land along the Charles River some twenty square miles in extent was granted by the General Court (1635-6) to a group of colonists. The town lands were immediately divided among the original proprietors, twelve acre lots to families, eight acre lots to single men.

Strips of meadow land and swamp land were assigned soon after. The arable lands and the wood lots in subsequent dividents.

of a Virginia estate was seven hundred acres, and many a planter owned thousands. The king was recognized as the ultimate proprietor of all lands in the Virginia colony, and the immediate owners paid a quitrent of a farthing an acre. This was an important source of revenue urgently maintained by the crown officers and as urgently protested by the planters.

Ripley, Financial History of Virginia, Ch. II.

In striking contrast to the land system of Virginia was that of New England colonies. The people who put their lives into the planting of Plymouth colony were credited with a share in the venture. Each colonist, whether man, woman, or child, free citizen or servant, was entitled to a £10 share of stock, and every shareholder received full possession of twenty acres of land when the first division was made. At Salem each of the original settlers was entitled to a house lot in the village, ten acres of arable land, and rights of pasturage and mowing in the meadows in proportion to the number of cattle owned. The projectors of the Massachusetts Bay Colony agreed that every adventurer who went to the settlement or sent others at his own charge, was to have fifty acres for each passage paid. This provision did not lead to the building up of great estates, as in Virginia, because the arable lands were limited in area and there were always newcomers to provide for. Soil and climate, moreover, were not such as to encourage farming on a large scale. The settlers preferred to live near together, and the house lots were usually assigned along a single street with garden ground at the back, while the arable, meadow, and wood land was not divided until the community grew strong enough to build fences and to protect distant fields against Indian raids. In all the settlements made under the auspices of the Massachusetts Bay Company this plan was followed, though the size of the allotments varied with the amount of land at the disposal of the town and the number of proprietors among whom it was to be divided. Settlers in Rhode Island, Connecticut, and New Hampshire adopted the Massachusetts model. The planters of New England

Bradford, 56–58, 163–166.

Works of Captain John Smith, 782–784.

Adams, Village Communities of Cape Ann and Salem.

Osgood, I, Pt. II, Ch. XI.

were everywhere small farmers, dwelling near together in villages or towns, each possessing his land in fee simple and cultivating it with his own hands. Taxes sufficient to meet local expenses were assessed by the town authorities, but nothing in the nature of quitrent was required by the General Court.

In the royal province of New York, the feudal form of land tenure introduced by the Dutch West India Company influenced later developments. Great estates such as Rennslaervyck persisted under the English rule. Some of the royal governors granted tracts of hundreds of thousands of acres to favored individuals, and feudal properties like Livingston Manor were created. The practice was protested, since it seriously retarded the settlement of the province. "The Grantees themselves are not, nor never were in a Capacity to improve such large Tracts, and other People will not become their Vassals or Tenants for one great reason as peoples (the better sort especially) leaving their native Country, was to avoid the dependence on landlords, and to enjoy lands in fee to descend to their posterity that their children may reap the benefit of their labor and Industry." The development of the province was retarded, since immigrants preferred going to New England, where lands might be had in fee simple and without charge. When, by the treaty of Fort Stanwix (1768), the Mohawk Valley was purchased of the Iroquois Confederacy, land offices were opened and farms were made over in fee simple to actual settlers on the easy condition that five acres out of fifty should be cleared within three years.

Doc. Hist. of New York, I 377–389; III, 622–627.

American Husbandry, I, 104, 109, 118–120; 128, 129.

The proprietors held their respective territories as so many feudal estates from which they were at liberty to grant, sell, or lease lands as might best suit their purposes. Even William Penn had in mind an aristocratic form of land tenure. He offered to sell five-thousand-acre tracts for £100, allowing fifty acres free for each servant imported, but reserved a quitrent of one shilling per hundred acres. A tract of five hundred acres was awarded to every man who should transport and "seat" his family at his own

Osgood, II, Pt. III, Ch. II.

charge. Here was abundant opportunity for the acquisition of large estates, but here, as in Massachusetts and New York, physical conditions were not favorable to great plantations, for soil and climate necessitated a varied and intensive agriculture. Large tracts of land were bought by groups of settlers, English, Welsh, or German, and then subdivided among the partners to the purchase. The result was a series of agricultural communities of an especially democratic type.

American Husbandry, I, 192, 196, 198.

With a view to attracting settlers, the proprietors of the Jerseys offered to every man who, already equipped with musket and ammunition and six months' provisions, should meet the governor on his arrival, one hundred and fifty acres of land, and a like amount for each servant or slave imported and similarly provided at his own expense, while the allowance for women was seventy-five acres. This offer drew settlers from the adjacent colony of New York. "What man," wrote the Earl of Bellomont, "will be such a fool as to become a base tenant to . . . Mr. Livingston . . . when for crossing Hudson's River that man can for a song purchase a good freehold in the Jerseys?" The colonial population of New Jersey was almost wholly made up of small farmers and their families.

Docs. Col. Hist. of New York, IV, 791.

South of Mason and Dixon's line, both physical conditions and the terms on which land was granted tended to develop large estates. The soil of the coastal plain lay in broad fertile tracts, and the climate was suited to staple crops, such as corn, tobacco, rice, and cotton. There was considerable economy in cultivation on a large scale, and the small farmer was at a disadvantage. In the Conditions of Plantations (1636) Lord Baltimore offered each adventurer who should transport five settlers a grant of one thousand acres in perpetuity, subject only to a quitrent of 20*s.* per year. Adventurers bringing over a greater number of laborers, especially when the men were "artificers, workmen, and other useful persons," received larger grants, so that some of these estates amounted to ten or fifteen thousand acres. The intention of the proprietor

Wilhelm, Local Institutions of Maryland, 7–38.

was to create manors after the mediæval type. Each adventurer sublet his lands to the men whom he brought over, and these, like feudal dependents, paid rent in money or produce and presented themselves at the call of the lord of the manor fully equipped with muskets, powder, and bullets for service against the Indians. Sixty such manors of three thousand acres each were established by 1676. The proprietor also made provision for peasant farmers in freehold grants. To any man who should meet the cost of transporting his family to Maryland was assigned one hundred acres for himself, for his wife, and for each servant imported, and fifty acres for each child. Such freemen were to pay rent at the rate of ten pounds of wheat for every fifty acres taken up. In the fertile lowlands the great estate proved so profitable that farmers who took up land on these terms were crowded out.

In the Great Deed of Grant issued by the proprietors of Carolina (1668) every freeman settling in the country was offered one hundred acres for himself, his wife, each child, and for every man-servant imported, and fifty acres for each woman servant, subject to a quitrent charge of half-penny per acre. The philanthropic directors of the Georgia colony assigned to each settler brought over fifty acres of land and tools with which to cultivate it. In both of these colonies the intention of the projectors had been to induce farmers to take up the land in tracts commensurate with their working force. The influence of climate and agricultural conditions proved more potent than their carefully devised plans. The government was obliged to concede the Virginia method of acquiring land, and great estates secured by head right became the rule throughout the Southern colonies.

The Colonists

The subduing of the wilderness was no pastime. Strenuous labor was required to fell the trees, plow lands beset with stumps and stones, protect growing crops against

weeds and cattle, build houses and barns, cut roads through the forests, and defend the little settlements against hostile Indians. Only men of strength, courage, and industry could succeed.

The fifty spendthrift gentlemen who came to Jamestown with Captain Newport knew nothing of agriculture or of any other useful art. They had no inclination to the prosaic task of providing food and shelter, and were infatuated with the hope of finding some easier road to fortune. There was among them, says Captain John Smith, "no talke, no hope, nor worke, but dig gold, wash gold, refine gold, load gold." Even when the shipload of shining earth sent over to England was declared to be worthless, and the "gold-showing mountains" proved to be hills of common red clay, it was not easy to induce the visionary adventurers to undertake useful employments. This futile experiment proved the necessity of sending out men who were able and willing to labor with hand or brain. In 1610 the Council in Virginia reported to the London Company that they must have at least a year's provisions supplied them and laborers adequate to this difficult business. None but "honest, sufficient artificers, as carpenters, smiths, coopers, fishermen, brickmen, and such like," were desired.

Works of Captain John Smith, 104.

Brown, Genesis of the United States, I, 410, 439.

The men who settled Plymouth suffered terribly in their first winter. Half of their number died of cold and scurvy — the major part adult men. When the spring came they set about planting corn, catching fish, and building houses that they might be well provided against the second winter. The Pilgrims were men of the middle and artisan classes, accustomed to work, and, though they knew little of agriculture, they readily adapted themselves to the new conditions. Moreover, they had come to America in no venturesome spirit. Driven from England by religious intolerance, they brought their wives and children and household goods with full determination to build homes in the New World.

Bradford, 111, 121, 137, 151, 152.

In striking contrast to the sober industry of the Pil-

Osgood, I, 114–122.

Bradford, 137–151, 154–161.

grims and their eventual success showed the braggart thriftlessness of three neighboring settlements. Thomas Weston, one of the merchant adventurers of the Council for New England, equipped a colony on his own account, having secured a patent to lands in Massachusetts Bay. A settlement was attempted at Weymouth (1622), but the men sent over were an "unruly company" who "spent excessively" while the ship's stores lasted and then begged and stole from the Indians until the exasperated savages determined to destroy the camp. The settlement was only saved from annihilation by Captain Miles Standish of Plymouth, who marched to Weymouth with his little force, overawed the Indians, and enabled the disheartened rowdies to get away. Weston's colonists had laughed at the straits to which they saw the Pilgrims reduced, handicapped as they were by women and children, and had boasted of their own advantage in being all lusty men. They did not understand how essential to a settlement was the steadying responsibility of the family claim.

Bradford, 178–184.

Bradford, 283–292.

Equally unfortunate was the enterprise of Robert Gorges, who came to Weymouth in the following year. Sir Fernando sent his younger son clothed with great authority. He had received an extensive grant of land and the commission of governor-general for all New England, but a year's experience of the hardships of pioneer life discouraged this luxurious gentleman. "Not finding the state of things hear to answer his quallitie & condition," says Bradford, he returned to England in disgust. No less disheartening was the attempt of another representative of Sir Fernando, Thomas Morton "of Clifford's Inn, Gent." to found a colony at Mount Wollaston. His people were runaway servants and other ne'er-do-weels, who spent their time in drinking and riot to the great annoyance of the men of Plymouth. The merrymakers at Merrymount may not have been so disreputable as the Pilgrims believed, but their practice of selling rum and firearms to the Indians menaced the safety of all the neighboring settlements. Plymouth was constrained to

send her little army and "prevent the growth of this mischief," so that Morton was arrested and sent back to England and his dissolute company dispersed. John White, the Dorchester clergyman who was laying wise plans for the Massachusetts Bay Colony, pointed out that such "rude and ungovernable persons, the very scum of the land, were unfit instruments for the planting of a commonwealth."

White, The Planter's Plea.

Lord Bacon, who was deeply interested in the London Company's experiment, echoed this protest in his Essay on Plantations (1625). "It is a shameful and unblessed thing to take the scum of people, and wicked and condemned men, to be the people with whom you plant; and not only so but it spoileth the plantation; for they will ever live like rogues, and not fall to work, but be lazy, and do mischief, and spend victuals, and be quickly weary, and then certify over to their country to the discredit of the plantation. The people wherewith you plant ought to be gardeners, plowmen, laborers, smiths, carpenters, joiners, fishermen, fowlers, with some few apothecaries, surgeons, cooks, and bakers."

Bacon's Works, VI, 457.

The Labor Supply

The most serious problem encountered by landowners was the difficulty of securing a sufficient force of laborers. Able-bodied men who would work for hire were scarce in the colonies, and wages were consequently high. The attempt to regulate wages, in accordance with English precedent, failed utterly. The statute passed by the General Court of Massachusetts in 1630, for example, prescribing 2*s.* a day for skilled artisans, was frequently revised and finally repealed. The natives were lazy, at least in the estimation of the whites, and showed no aptitude for field work. The attempts made to force this non-industrial people to manual labor were unsuccessful, for the captives sickened and died. In England, on the other hand, artisans and field laborers were falling into poverty

Weeden, Econ. Soc. History of New England, I, 98–99.

Brown, Genesis of the United States, I, 252, 352, 506; II, 688.

and crime for lack of means to earn an honest living, and the parish officers were eager to rid themselves of the paupers and dissolute persons with whom their jails and workhouses were filled. It was thought a thrifty and benevolent scheme to send this surplus population to America. The London Company undertook to meet half the cost of transportation and maintenance for all children sent them by the parish authorities, on the understanding that they were bound to service from the day of their arrival in Virginia until they came of age. The Company undertook to provide these little servants with food and clothing during their term of bondage, to teach them some trade, and to assign to each boy, when his freedom year arrived, fifty acres of land to cultivate, a cow, seed corn, tools, and firearms. He then became the Company's tenant, paying one half the produce of his farm for seven years, at the end of which term he was insured full possession of twenty-five acres. One hundred pauper children were sent to Virginia from the city of London in 1619 and one hundred more in 1620.

Bruce, I, Ch. IX.

Ballagh, White Servitude in Virginia.

Indentured Servants. — After the collapse of the Company, individual planters began to import servants on similar terms. A written contract or indenture bound master and man to the fulfillment of their mutual obligations. The term varied with the age of the servant; if over twenty-one years of age he was to serve four years, if under twelve, seven. For persons between twelve and twenty the usual term of service was five years. A law enacted in 1666 made the general requirement of five years' service from persons imported at nineteen years or over, while servants under that age were to serve until their twenty-fourth year. Children were preferred to adults because they were usually more teachable, the cost of maintenance was less, and the term of service longer. Hundreds of these unfortunates were indentured by their relatives, or transported by the parish guardians, or kidnapped by the agents of shipmasters and shipped to Virginia to be bound over on their arrival to the planter who

offered most for their services. Fourteen or fifteen hundred such children were sent over in 1627 and the shameful trade thrived thereafter. Restrictive legislation seemed futile. In 1680 the English authorities estimated that some ten thousand persons were each year "spirited away" to America by force or fraud.

McCormac, White Servitude in Maryland.

Of the adults brought over many were criminals whose death sentence had been commuted to a term of service in the plantations. The Council in Virginia early protested against the foisting of felons on that colony, and a law prohibiting the reception of such persons passed the House of Burgesses (1671) and was approved by the governor. Seven years later this law was set aside to give opportunity for the transportation of political offenders. Shiploads of Irish rebels had been sent to America during Cromwell's occupation of Ireland, and Cavaliers were transported from England in like manner for their championship of the Stuarts. After the restoration of Charles II, batches of Roundheads were sent to the colonies to be sold into service. Scotchmen involved in the insurrection of 1678 and the English farmers and laborers who joined in Monmouth's rebellion were also transported to America. They were carried to the Barbadoes or to Jamaica or to any coast port where there was a good chance of finding a purchaser, but the greater number were disposed of in the Southern colonies, where estates were cultivated on a large scale. On the little New England farms indentured servants were not so much in demand.

Bruce, II, Ch. X.

The law did what it could to protect the servant in his rights. If the master failed to provide adequate food and lodging or treated his man with undue harshness, the latter had recourse to the county court, and the commissioners were authorized to annul the contract if the master did not make amends. The law required that in case of sickness a physician should be furnished, and if the servant became permanently incapacitated the master must still provide for him till the end of his term; thereafter the parish was responsible. On the other hand, the county

Phillips, Plantation and Frontier, I, 339–375.

officers were bound to assist in the recapture of runaway servants. Men, boats, and horses were impressed for the search until the fugitive was restored to his master. He was then obliged to serve double the time of his unexpired term and to pay the costs of capture, while if the offense were repeated he might be whipped or branded in the cheek.

Weld, Travels, I, 120–124.

Eddis, Letters from America, 63–89.

Whatever may be thought of the moral right and wrong of this labor system, its economic advantages were many. Laborers were transferred from the place where they were not wanted to a place where they were in demand, and their passage money was paid by an employer who was guaranteed against loss by a claim of from five to ten years of service. When the term expired, master and servant presented themselves at the county court and a certificate of emancipation was made out and duly signed. The servant was then presented with ten bushels of grain, two suits of clothes, firearms, etc., sufficient to secure him against want, and the emancipated man could earn good wages as a free laborer or he might even acquire land. In Pennsylvania and New Jersey redemptioners were granted fifty and seventy-five acres to cultivate in their own right.

Geiser, Redemptioners and Indentured Servants in Pennsylvania.

Bruce, II, Ch. XI.

African Slaves. — Toward the close of the seventeenth century the supply of servants from the British Isles fell short, and laborers were provided from another source. A shipload of negroes, captured on the Gold Coast, had been brought to Jamestown by a Dutch trader in 1619 as a business venture. The Dutch West India Company sent other shiploads from time to time, but they found their best market in the West Indies. There were only three hundred Africans in Virginia in 1650 and but two thousand in 1671, and the number might have remained inconsiderable had not an English commercial corporation — the Royal African Company, chartered in 1662 — been given (1687) exclusive monopoly of trade between the Gold Coast and the British colonies. Under the auspices of the Duke of York, the commerce in slaves was encouraged, and great numbers were sent to the Atlantic coast for sale.

Weeden, II, Ch. XII.

Beverley, Bk. IV, Ch. X.

The Africans were barbarians, but they had practiced agriculture and primitive manufactures, and they were physically better adapted to field labor in a hot climate than the servants imported from the British Isles. It was soon apparent that the slave was a more economical investment than the indentured servant. The initial cost was greater. The passage money paid to secure a servant amounted to from £6 to £10, while the price of a slave varied from £10 to £50; but the servant was bound for a limited term, while the slave was bound for life. His children, moreover, became the property of his master. The slave was fed and clothed more cheaply than the servant, for there was no contract, and the slave had no standing in the courts against his master. The African had less skill and intelligence than the white servant, but high-grade labor was not necessary for extensive agriculture.

Washington, Story of the Negro, I, Ch. II, III, IV.

Slaves were bought and sold all along the Atlantic coast. They were less in demand in the Northern colonies where more intelligent labor was required and where the climate was too severe for men and women fresh from tropic Africa. In 1721, when the slave trade was at its height, there were few blacks in New England; in New York, the number was seven thousand, or one seventh of the total population; in Pennsylvania, the slave population made up one thirteenth of the total; in Maryland it was nearly half, in Virginia more than half, in North Carolina one third, while in South Carolina the blacks outnumbered the whites in the ratio of four to three. The benevolent projectors of the Georgia colony forbade the holding of slaves, but their intentions were overruled by the planters, who asserted that the hot and malarial coast country could not be cultivated by Europeans. George Whitefield, the eminent evangelist, supported their petition on the ground that slavery was the best means to raise the Africans from barbarism to civilization. The blacks did, indeed, learn the English language and adopt the Christian religion, and they were trained to useful labor; but the influence of the system was none the less demoralizing for owner and slave. The

Steiner, History of Slavery in Connecticut, 377–393.

Kalm, Travels into North America, I, 387–397.

Bassett, Slavery in North Carolina Colony.

Winsor, Narr. and Crit. Hist. America, V, 376, 387–388.

Phillips, II, 99–125.

social dangers involved in bringing thousands of untutored savages of a wholly alien race to work in gangs under hired overseers were very grave. A serious slave insurrection broke out in South Carolina (1721), and the Board of Trade urged the governor to devise some law for encouraging the importation of white servants.

Docs. Col. Hist. of New York, V, 610.

The Scarcity of Money

Bullock, Monetary Hist. of U.S., Pt. I, Ch. III.

Once "seated" upon the land it was easy for an industrious community to provide shelter and food and coarse clothing, but all luxuries and many of the necessities, such as iron implements and other manufactures, must be imported from across the water, and to pay for such commodities was difficult. Fortunate was the colony for whose products there was a market in England. Gold and silver coin was always acceptable to foreign creditors, but of this there was little in circulation. The specie brought over by incoming colonists was soon returned in payment of debts, and there was as yet no mining of the precious metals. The main source of supply was the Spanish colonies, notably the West Indies, whence silver might be had in exchange for lumber and salt fish. Several of the colonial governments established mints in the hope of providing a specie currency, and for thirty-six years (1652–1688) Massachusetts coined the "pine-tree" shillings. They contained but 78 per cent of the silver required in an English shilling, but even this depreciated coin was exported.

Sumner, Hist. Am. Currency, 11–14.

Eggleston, Commerce in the Colonies.

For the purpose of local traffic certain staple commodities were used as the medium of exchange, — corn, cattle, and beaver skins in the Northern colonies, tobacco in Virginia and Maryland, rice and hides in the Carolinas and in Georgia, bullets along the frontier. The several colonial governments authorized the practice and undertook to fix the specie value of these commodity moneys. The General Court of Massachusetts (1640) set the value of Indian corn at four shillings a bushel, that of rye at five

Ripley, Financial History of Virginia, 108–153.

shillings, that of wheat at six. According to Mme. Knight, the practice still held at New Haven in 1704. "They give the title of merchant to every trader: who Rate their Goods according to the spetia they pay in: viz. Pay, money, Pay as money, and trusting. Pay is Grain, Pork, Beef, etc. at the prices sett by the General Court that year; mony is pieces of Eight, Ryalls, or Boston or Bay shillings (as they call them,) or Good hard money, as sometimes silver coin is termed by them; Also Wampom, viz. Indian Beads w'*ch* serves for change. *Pay as money* is provisions as afores*d* one Third cheaper then as the Assembly or Gen*l* Court sets it; and Trust as they and the merchant agree for time. Now when the buyer comes to ask for a commodity, some times before the merchant answers that he has it, he sais, is Your pay redy? Perhaps the Chap Reply's Yes; What do you pay in says the merchant. The buyer having answered, then the price is set; as suppose he wants a sixpenny knife, in pay it is 12*d* — in pay as money eightpence, and hard money its own price, viz. 6*d*." In Virginia warehouses were established for the storing of tobacco, and certificates of deposit were issued that served the purposes of local trade, but the value of tobacco fluctuated from year to year. The government attempted to limit production and, failing this, was forced to buy up and burn an extra heavy crop in order that the surplus might not depress prices unduly.

Bradford, 281–283.

Mme. Knight's Journal, 53–54.

Bullock, Pt. I, Ch. II.

The colonists found the natives using a shell money called wampum, and this admirably served the purposes of Indian trade. So long as wampum might be exchanged for beaver skins, it passed as money among the whites, and it was used throughout the seventeenth century all along the Atlantic coast. The disappearance of the Indian tribes destroyed its purchasing power.

Weeden, Indian Money.

CHAPTER III

INDUSTRIAL DEVELOPMENT UNDER BRITISH CONTROL

Agriculture

Dwight, Travels, II, 297–298, 308–309, 464–469.

American Husbandry, I, 122, 190–191.

THE men who came to the English colonies, whether gentlemen or paupers, proprietors or indentured servants, were under the common necessity of providing themselves with food, clothing, and shelter. The first settlers were everywhere farmers, since the necessities of life must be had from the soil. How easily an able-bodied, intelligent man could make a living in America, we are told by a contemporary observer. "It is common to see men demand and have grants of land who have no substance to fix themselves further than cash for the fees of taking up the land; a gun, some powder and shot, a few tools, and a plow; they maintain themselves the first year, like Indians, with their guns, and nets; and afterwards by the same means with the assistance of their lands; the labor of their farms they perform themselves, even to being their own carpenters and smiths; by this means, people who may be said to have no fortunes, are enabled to live, and in a few years to maintain themselves and families comfortably. . . . The progress of their work is this; they fix upon the spot where they intend to build the house, and before they begin it, get ready a field for an orchard, planting it immediately with apples chiefly, and some pears, cherries, and peaches. This they secure by an inclosure, then they plant a piece for a garden; and as soon as these works are done, they begin their house: some are built by the countrymen without any assistance, but these are generally very bad hovels; the common way is to agree

with a carpenter and mason for so many days' work, and the countryman to serve them as a laborer, which, with a few irons and other articles he cannot make, is the whole expense: many a house is built for less than £20. As soon as this work is over, which may be in a month or six weeks, he falls to work on a field of corn, doing all the hand labor of it, and, from not being able to buy horses, pays a neighbor for plowing it; perhaps he may be worth only a calf or two and a couple of young colts, bought for cheapness; and he struggles with difficulties till these are grown; but when he has horses to work, and cows that give milk and calves, he is then made, and in the road to plenty. It is surprising with how small a sum of money they will venture upon this course of settling; and it proves at the first mention how population must increase in a country where there are such means of a poor man's supporting his family: and in which, the larger the family, the easier is his undertaking."

Money profit in such farming there was none unless the land was situated on a river by means of which the surplus products might be shipped to market, but a farmer usually produced everything needed for the comfort of his family. Grain grown on the cleared land was ground at a grist-mill built of the felled trees and run by water power or wind. Cattle and hogs ranged the woodland and furnished meat, to be eaten fresh or salted down in pickle. Hides were tanned and made up into shoes on the place, and the women of the house spun and wove into warm, durable cloth the wool cut from the sheep that grazed the hill pastures. Flax was grown in sufficient quantity to provide the lighter clothing. Nothing need be purchased but salt and sugar, tea and coffee, millstones, and implements of iron. Under such conditions every enterprising man might acquire property, even though he came into the country as an indentured servant. His term of service at an end, the bondman became a free laborer, and, since wages were high, he quickly accumulated enough money to secure title to a tract of land.

Greene, Ch. XIV.

The mother country offered no such opportunity to her sons. There wages were low and rents high, and the cost of living great. Not the utmost diligence and thrift could put a poor man in possession of an acre of ground. Small wonder then that the unemployed laborers and disinherited yeomen crowded the ships bound for America and besieged the land offices for title to a share in the wilderness.

American Husbandry, I, Ch. VIII.

American Husbandry, I, 45–93.

The New England Colonies. — We have seen with what difficulty Englishmen adapted themselves to the severe climate of New England. The winters were bitter beyond anything they had known, and the sudden changes of temperature proved trying to constitutions accustomed to equable island weather. Granite rock and glacial drift made an unpromising combination to farmers accustomed to the fertile fields of Old England. The soil was sterile except in the valleys, and the summers too short for ripening English grains. Nevertheless, the colonists who secured grants in this inhospitable region managed to support their families and eventually to accumulate wealth. The friendly Squanto taught the men of Plymouth how to plant the Indian grain and how to fertilize the soil with fish, one in each hill. Maize was successfully grown in the coast districts and soon became the staple breadstuff. Within a few years the Pilgrims were selling corn and salt pork to the fishing stations up and down the coast. Vegetables, too, flourished in the brief, hot summers. Apples and cherries and the hardier fruits did well. The cattle brought over from England at great cost found pasture on the cleared land, but it was necessary to house and feed them through the three or four months when the ground was covered with snow. The forests afforded excellent timber, — oaks for the hulls of ships, spruce unexcelled for masts, pine, maple, and chestnut for the building of houses and barns and mills. There was plenty of game, and fish were abundant. Where everything was to be had for the asking, men grew improvident of nature's gifts. The woods were cleared with a wasteful zeal that

Callender, Selections from Econ. Hist. of U.S., 6–15.

Bradford, 121.

Dwight, II, 515.

Dwight, I, Letter VIII.

took no thought of the future, the soil planted continuously to corn was soon drained of its fertility, the fur-bearing animals disappeared with the forests. The products of field and woodland would have supported only a sparse population; but New England had other sources of wealth.

At the headwaters of the Connecticut and the Merrimac, the Kennebec and the Penobscot, the beavers built their dams. Their pelts brought from twenty to twenty-five shillings a pound, and trapping was a lucrative occupation. Plymouth colony sent to London in the five years from 1631 to 1636 £10,000 of beaver, and the furs of the otter and the black fox were hardly less valuable. Every year Boston sent a vessel to Sable Island which came back loaded with the much prized skins of the black fox, together with seal oil and sea lion's teeth. The Indians were the most successful trappers, and the bulk of the furs was secured from them in exchange for food, blankets, and ammunition. New England's share in this profitable trade was forfeited with King Philip's war (1685).

Weeden, I, 90, 129–132, 135–140.

Bradford, 412–413.

The men of the coast towns found a mine of surpassing richness in the sea, and fishing was a profitable industry from the start. Cod of exceptional size and flavor were caught in Massachusetts Bay, and the fishermen of Marblehead and Salem sent shiploads of dried fish to the West Indies and to the Catholic countries of Europe. In 1641 three hundred thousand cod were sent to foreign markets. When the near-shore fishing grounds were exhausted, the enterprising Yankees ventured out to sea and were rewarded by larger catches. The codbanks off Newfoundland afforded a more lasting supply.

Weeden, I, 132–135.

Pitkin, Statistical View of U.S., 37–43.

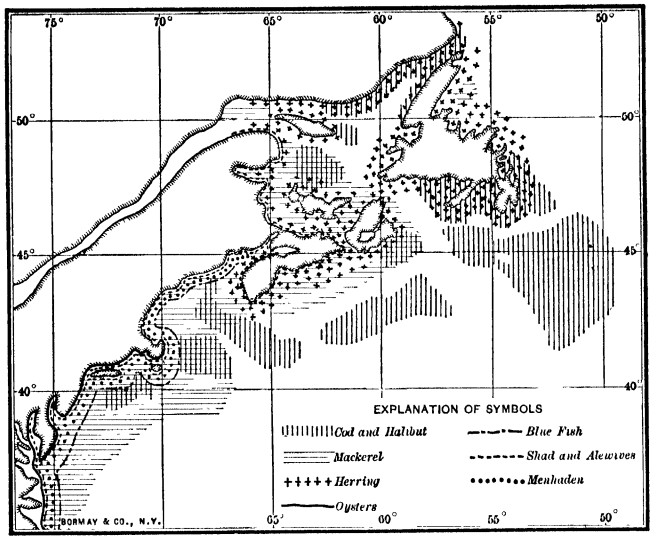
The fisheries created a demand for salt which was readily supplied by evaporating sea water. Salt works were set up at Piscataqua in 1623 and at Beverley in 1638. Along the shores of Cape Cod as well, salt vats were a considerable source of revenue.

Bishop, Hist. of Am. Manufactures, I, Ch. XIII.

Dwight, III, 79–81.

The right or fin whale was abundant off the New England coast throughout the first hundred years of colonial history, and furnished products of great importance in the

Weeden, I, Ch. XI.



FISHING BANKS FROM THE GULF OF ST. LAWRENCE TO THE CHESAPEAKE

markets of the time, — whale bones and whale oil. The carcass of one of these huge creatures was valued at £16. At first men were content to save the blubber from the bodies that drifted ashore. Soon, however, they began to put out to sea in boats and harpoon the animal when he came up to breathe. Toward the close of the seventeenth century the fishermen of Nantucket took up this hazardous industry and developed a high degree of skill. A tradition of 1690 has it that a prophetic Islander, as he watched the whales spouting in the Sound, exclaimed, "There is a green pasture where our children's children will go for bread." The season's profits were shared by masters and men, so that every man aboard, from the captain to the cabin boy, was directly interested in the success of the voyage.

Marvin, Am. Merchant Marine, Ch. VIII.

Abbot, Am. Ships and Sailors, Ch. IV.

Pitkin, Statistical View of U.S., 43–47.

As the whales were driven offshore, these hardy sailors followed them out into the deep sea. Ambergris was worth

its weight in silver, while sperm oil, ivory, and spermaceti were in great demand. Pursuit of their mighty prey led the whalers to Arctic latitudes — Davis Strait, Behring Strait, and the Antarctic Sea. Whaling vessels were built to be stanch rather than swift or beautiful, and could live in the roughest weather. They were manned by sailors famed the world over for skill and daring. New Bedford, Marblehead, and Provincetown vied with Nantucket in prowess and profits, but Boston was the center for the export trade.

New York. — The climate of this region is similar to that of New England except in the lake district, where the temperature is milder and more equable. West of the Hudson the granite ranges of New England are superseded by limestone hills. The soil of the greater part of New York is, in consequence, far more fertile, and the colonists secured abundant crops without the aid of fish or clam shells. Wheat as well as corn could be grown in the valleys, and in the neighborhood of the lakes grapevines and peach trees flourished. Noble forests repaid in timber more than the cost of clearing the land. Sawmills were set up on every stream, and logs could be floated down the Mohawk to Albany and thence down the Hudson to the sea. Wages were high, even for field labor, and a man might readily save money enough to secure a farm. Once in possession of land, he was able to feed his family, and yet sell something in the neighboring town. Every farmer lived in comfort and careless plenty. The surplus products sent to market in exchange for the necessities not produced at home were wheat and wheat flour, corn, potatoes, and barley. From this last the brewers of New York made an excellent beer.

Kalm, I, 234–272; II, 223–260.

American Husbandry, I, 94–125.

American Husbandry, I, 115–123.

The Champlain country was a famous trapping ground for beaver and other fur-bearing animals, while the St. Lawrence and the Great Lakes gave access to remote and unexplored tracts of forest country and to Indian tribes eager to exchange peltries for trinkets, rum, and firearms. When this traffic was at its height, forty thousand skins

Docs. Col. Hist. of New York, V, 726–733.

were annually exported to England, but the trade declined toward the end of the seventeenth century. The export of 1699 amounted to only fifteen thousand skins.

American Husbandry, I, 132–215. Kalm, I, 27–145, 184–194, 220–233, 340–359; II, 109–114, 188–195. Bolles, Pennsylvania, II, Ch. XIII.

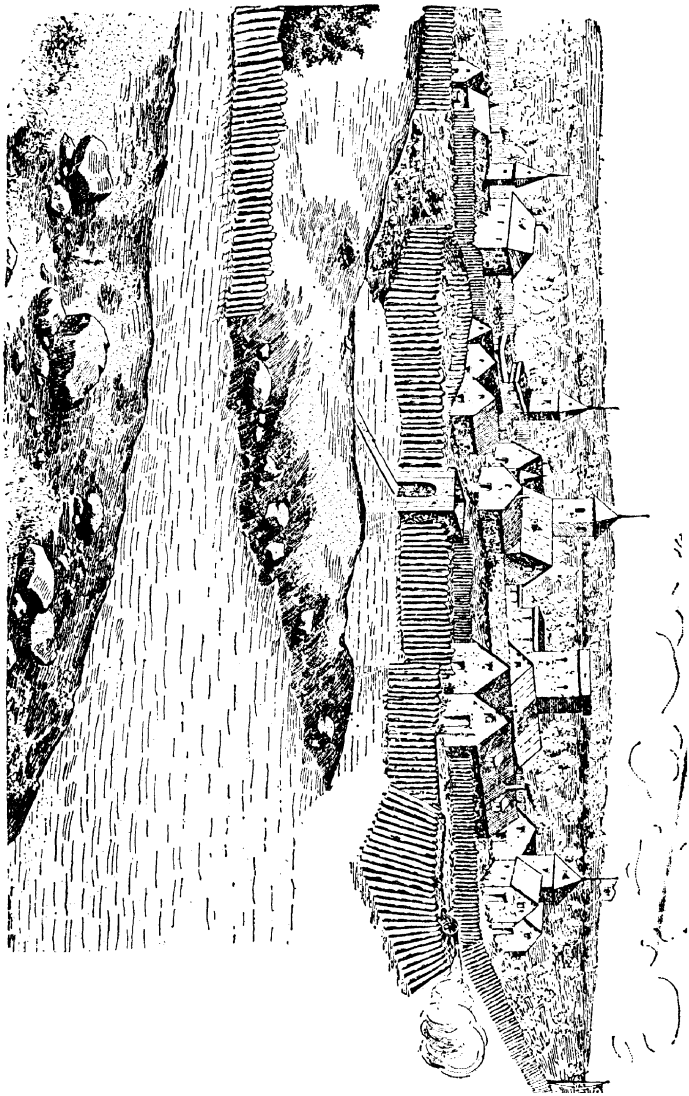
The Middle Colonies. — The territory most congenial to Englishmen by reason of physical endowment lay between the forty-second and the thirty-ninth parallels. Southern New York, Pennsylvania, New Jersey, and Delaware, although ten degrees south of Great Britain, have a climate quite similar. The virgin soil, even under superficial tillage, yielded crops of wheat and barley, oats and rye, greater than the English farmer could produce with scientific fertilization and rotation of crops. Peach trees, a hothouse plant in England, bore so heavily on the sandy plains of New Jersey and Delaware that the fruit lay wasting on the ground or was fed to hogs. Cattle and sheep throve on the rich native grasses without need for housing or feeding through the winter. Timber in great variety was to be had on the slopes of the Alleghanies, and the Highlands of East Jersey contained rich mineral deposits.

American Husbandry, I, 152–153, 169–170, 185–192, 207–209, 213–215, 426–431; II, 17, 19.

Great estates were rare. The fertile area was parceled out in small farms, and the settlers, whether Dutch, Swedish, or English, lived in plain but ample comfort. Indentured servants were far more frequent than in the colonies to north or south. It was quite usual for a man of no substance to mortgage his labor for the cost of transportation, and foreigners, notably Germans, preferred this means of getting to America, since it insured them employment for a term of years and opportunity to learn the language. Slaves, too, were not uncommon. The country was better suited to the African physique than the more Northern colonies.

American Husbandry, I, 216–248, 256–277, 330–390, 414–435.

Virginia. — South of Delaware Bay climate, soil, and products were new to men born in the British Isles. The summer season was longer and far hotter, and the lowlands were malarial. The settlers at Jamestown attempted to grow wheat, but soon discovered that though the plant shot up to an amazing height in the deep, black soil, the



JAMESTOWN IN 1622
From a contemporary Dutch Print

kernels did not harden into grain. Maize planted under the direction of the Indians brought in a heavy harvest, and seven summers after the landing there were five hundred acres in corn.

Bruce, I, Ch. IV, V.

In 1612, John Rolfe, the husband of Pocahontas, raised a crop of tobacco. It soon proved to be the most marketable article to export, and the settlers began to cultivate the nicotine plant to the detriment of food products, until Governor Dale was forced to decree that no man should plant tobacco until he had at least two acres in grain. The Company urged the cultivation of flax, cotton, indigo, grapes, mulberry trees, and silkworms, commodities that they thought more advantageous to the mother country; but their arguments were ridiculed by the planters, who persisted in growing the more profitable crop. Flax and raw silk require continuous care and highly intelligent labor, to be had only for high wages. There was no foreign market for maize, and wheat brought — but 2*s.* 6*d.* per bushel in England, while tobacco sold for 3*s.* a pound. The freight rate to London (£3 per ton) was prohibitory in the case of the less valuable crop. In 1619 twenty thousand pounds of tobacco were exported from Virginia, in 1620 forty thousand, and in 1622 sixty thousand pounds. So given over to the cultivation of tobacco were the planters that they traded their firearms to the Indians in exchange for food. The Indian massacre of 1623 was the result of this foolhardy policy. In the year following, the colony being threatened by a bread famine, the government required that a public granary be established in every parish, where each adult male must deposit a bushel of grain after the harvest. Legislation availed very little, however, for every planter followed the course that meant immediate money advantage. Only when the price of tobacco declined, or his land, drained of fertility by this most exhausting of crops, would no longer bring in a profitable return, did he undertake the growing of corn and wheat.

Callender, 20–25.

James I had opposed the cultivation of tobacco on moral grounds, declaring that it tended to "a general and new



TOBACCO CULTURE

corruption both of men's bodies and manners." He forbade it to be grown in England, and restricted the importation to fifty-five thousand pounds a year, but neither this nor later restrictive decrees were of any avail. In the first decade of the eighteenth century the colonies exported twenty-one million pounds a year, that figure was doubled by 1750, and a clear hundred-million mark was reached before the close of the eighteenth century. Half the tobacco exported from the colonies was grown in tidewater Virginia.

Bruce, I, Ch. VII.

The cultivation of tobacco has profoundly influenced the economic organization of Virginia. The characteristic agricultural unit was the plantation of from one to fifty thousand acres. For the better part of the seventeenth century, the land was tilled by indentured servants, but as the money advantage of slave labor came to be realized, the tobacco fields were cultivated by imported Africans. It was a tillage that did not require a high degree of intelligence. Ignorant slaves under the supervision of overseers plowed and planted and hoed the wide levels of rich loam and, when the plant had come to maturity, cut and carried the leaves to the dry house. Great estates that originally cost nothing but the land office fees brought their owners from £20,000 to £80,000 a year, while the ordinary planter could count on an income of from £3000 to £6000. Estates of less than one thousand acres could not be worked to advantage by slave labor. It was estimated that one slave could till fifty acres and that one overseer could manage twenty slaves, and variations from this economic ratio involved loss. It was usual to reckon the value of a plantation in hands rather than in acres. Each slave was expected to produce £16 worth of tobacco and £4 worth of lumber, corn, and other provisions, in the course of a year. By so doing he paid for his maintenance (£3) and the interest on his purchase price (£50 at five per cent, £2 10*s*.) and brought in a handsome margin of profit to his master. When to this product revenue are added the profits on the natural

Fiske, Old Virginia and Her Neighbors, I, 223–231; II, 184–220.

Ballagh, Land System in the South, 117–119.

Weld, I, 133, 151–155, 147–150.

American Husbandry, I, 228–230, 234, 246, 247

increase of marketable slaves, it will be seen how great were the immediate advantages of slavery.

Phillips, II, 29–39.

The economic disadvantages were less evident two hundred years ago than they are to-day. The once productive tobacco fields are now "dead lands," or are made to yield a meager return by the application of expensive fertilizers. Rotation of crops, subsoil plowing, the utilization of animal manures, were alike impossible with laborers fresh from barbarism, and the planters were forced to extensive cultivation. When one tract of land was exhausted, overseer and slaves were moved on to new soil. Extravagance and waste characterized the management of the whole plantation. Houses were slightly built, orchards were no longer planted, vegetables, grains, and other possible crops were neglected, the fields were not inclosed, cattle, left to range over the waste lands unhoused and unfed, dwindled in size. The demoralizing effect of extensive agriculture was never more apparent.

The wholesale production of such a staple meant a brisk export trade. The tidal rivers and fiord-like inlets, some of which were navigable eighty miles from the sea, admirably served this purpose. The banks of the James, the York, and the Rappahannock showed a series of great plantations, each with its own wharf, to which every autumn sea-going vessels came direct from England to take aboard the hogsheads of tobacco, and to put ashore the commodities sent over in exchange. This was a highly profitable trade, even more so to the mother country than to Virginia. English manufacturers found among the luxury-loving planters a ready market for their fine cloths, rich carpets, and mahogany furniture. Tobacco was expected to pay for everything, if not this year's crop then that of next. Every planter kept a running account with his factor in London, and many of them were hopelessly in debt to their English creditors. The practice of mortgaging land and crops against the merchant's advances has characterized the Southern agriculturist to the present day.

Phillips, I, 282–283.

The Piedmont section of Virginia and the Great Valley

between the Blue Ridge and the Alleghanies were not settled till all of the coastal plain had been appropriated, and thus the development of the hill country was postponed until the eighteenth century. In 1716 Alexander Spotswood, the wisest and ablest of colonial governors, traversed the fifty miles of forest that divided tidewater Virginia from the Blue Ridge, crossed that mountain barrier at Swift Run Gap, and discovered the Shenandoah Valley, "God's own country," as he devoutly called it. The fifty gentlemen of the governor's retinue, the "Knights of the Golden Horseshoe," who drank the king's health on the summit of Mount George, formed a significant contrast to the actual settlers who swarmed into the country during the next hundred years. The Scotch-Irish of Ulster were driven to America in the eighteenth century by no less urgent a motive than had impelled the Puritans and Cavaliers in the seventeenth. Their woolen and linen industries had been ruined (1681), their religious and civil liberty curtailed (1704) by act of Parliament, and they sought freedom from English tyranny beyond the sea. It was a veritable race migration. Several hundred thousand came into the colonies between 1730 and 1770, the major part to Philadelphia and Charleston. In 1770 one third of the population of Pennsylvania was of this sturdy stock. Finding no desirable land open for settlement in the coast country, they pushed south along the valleys of the Appalachian Range and peopled the Great Valley of Virginia, destined to become the "cradle of America." In 1769 the southernmost settlement, Watauga, was planted in the shadow of the Great Smoky Mountains, on the elevated plateau formed by the streams that flow westward into the Tennessee.

Fiske, Old Virginia and Her Neighbors, II, Ch. XVII.

Letters of Gov. Spotswood, I, 40; II, 295–297.

Hanna, The Scotch-Irish, I, Ch. XXXIX.

Bolles, Pennsylvania, II, Ch. XII.

McCrady, History of South Carolina, II, Ch. XVI, XVII.

The men who took up farms in the mountain valleys could raise wheat and barley, meat and wool, fruit and vegetables, sufficient for family use. For commodities that would bring a price in distant markets high enough to pay the cost of transportation, they were forced to depend on a variety of articles to be produced only by in-

Phillips, I, 254–255.

Weld, I, 214–216, 230–234, 246.

telligent labor. From these uplands came the deerskins and tanned leather, the timber and turpentine, the hemp and flax, that figure in the export tables. Such farms were profitable only under intensive agriculture, and there was little temptation to acquire great estates or to import slaves. The people of the "back country" were thrifty pioneers who tilled their fields with their own hands and manufactured clothing, furniture, and wagons at need, as did the small farmers of New England and Pennsylvania. The contrast in the physical features of the plain and the foothills was reflected in the character of the respective populations.

Callender, 25–28.

McCrady, II, 40, 61, 109, 126, 143, 262–266, 386–391, 396–397.

The physical characteristics of the **Carolinas** and of **Georgia** were quite similar to those of Virginia, except that the climate of the coastal plain was warmer and more malarial. Here in the sea marshes were the great rice plantations. Rice must be flooded in the growing season, and it requires a rich vegetable mold such as belongs to the swamp belt. Once cleared of trees and thoroughly drained, the "dismals" were readily converted into productive rice plantations. The work was such as no white man could endure, for the laborer must stand knee-deep in mud and water, stooping under a broiling sun, while pestilent exhalations filled his lungs. Even the blacks sickened and died.

Ramsay, History of South Carolina, II, Ch. V.

American Husbandry, I, 345, 346, 391–396, 407, 408, 414–429.

There was not so much profit in this crop as in tobacco. Each slave was expected to produce £10 worth of rice in a season. When to the cost of maintenance and supervision (£3), and the interest on the purchase price (£2 10*s*.) was added the risk of sickness and loss, the rate of profit dwindled considerably. Nevertheless the planters lived in state and luxury, drawing freely upon the rice merchants for advances in money and goods. Slaves and overseers meant great estates here as in tidewater Virginia. There was no chance for the working farmer in a region where the climate made field labor impossible for a white man.

Fiske, Old Virginia and Her Neighbors, II, 326–330.

Rice was introduced into South Carolina in the last







RICE CULTURE IN SOUTH CAROLINA

quarter of the seventeenth century. Before the close of the eighteenth this crop made up one half the exports from this colony, a circumstance that gave serious concern to the home government. There was no great demand for rice in the British Isles, and so far as this export found its way into European markets, *e.g.* Spain and Portugal, it came into competition with English wheat. No arguments, however, could induce the planters to cultivate the silkworm, so greatly desired by the Spitalfield weavers. The seed of the Oriental indigo was planted on the Ashley River by Eliza Lucas, a botanical lady of Charleston, in 1741, and after a series of vexatious experiments she succeeded in extracting a dye not inferior to the French product. For fifty years thereafter the Sea Island planters devoted their richest soils to the cultivation of indigo, until, in the last decade before the Revolution, South Carolina exported five hundred thousand pounds a year. Indigo, at from two to five shillings a pound, brought in a handsome revenue. One slave could care for two acres producing each eight pounds of dye, besides putting in the winter months on other crops.

Phillips, I, 251, 259–265.

McCrady, I, 350.

In the "back country" the hills were clothed with noble forests, and the soil, of the valleys at least, was amazingly fertile. Here wheat could be grown, and fruits and vegetables; while in the Northern counties tobacco was cultivated to advantage. Though there was more profit in tobacco than in rice and though the air of the hills was more wholesome, the original settlers of the Carolinas clung to the sea level, and population moved westward but slowly. Not till the second half of the eighteenth century were immigrants driven to these new lands. The pioneers paid their way by the products of the forests, lumber and pitch and tar and the skins of wild animals; but as the trees were cleared away, cattle were brought in. The hill pastures were excellent grazing ground, and since only the cultivated fields were fenced, the cattle roamed at will irrespective of ownership, and a herd of a thousand head was not uncommon. This was

American Husbandry, II, 15.

the paradise of the "squatter." A fertile tract of land having been chosen, the farmer had but to live on it for a term of ten, fifteen, or twenty years to secure fee simple title. The forests teemed with game, the rivers with fish, the fertile soil yielded food in plenty with the rudest tillage, and an industrious man might readily acquire a snug little property. Few slaves were imported into the hills, for their labor was not so profitable as in the lowlands and their requirements in the way of food and clothing were greater. Here, as throughout the Piedmont district, north and south, physical conditions favored the small estate and the self-employed farmer.

Michaux, Travels, 290–306.

Beer, Commercial Policy of England, 398–420.

Fostering Legislation. — Certain agricultural interests were furthered by the desire of English statesmen to render Great Britain independent of European imports. The hemp, lumber, pitch, and tar used in British shipyards had been imported from countries with which England might at any time be involved in war. To secure these supplies from a reliable source, the government determined to repeal the import duties, so far as the colonies were concerned, and to offer bounties on such goods as should be shipped to the British Isles. The bounty on hemp was made £6 per ton (1702). In response to this premium Virginia and Maryland exported one thousand tons a year; but New England, whence great returns were expected, never produced enough for her own shipyards. Deep, rich loam and plenty of moisture were essential to success, and these conditions were rare in the Northern colonies. The same act of Parliament offered a bounty of £1 per ton on masts sent to England. So solicitous was the government that the timber of the colonies should not be wasted, that a penalty was imposed for felling a young pine. The surveyor-general was authorized to mark with a broad arrow trees reserved for the use of the royal navy, and the penalty for felling was £100. The British import duties on lumber were removed. Notwithstanding these inducements the colonists continued to ship the major part of their lumber to the West Indies, Spain, and Portugal, in

exchange for goods imported thence. An order from the Privy Council prohibiting this trade was of no effect. "Nothing," said one of the king's representatives, "but an act of Parliament can prevent them."

The Act of 1702 proposed bounties on other naval stores, £4 per ton on tar and pitch, £3 per ton on rosin and turpentine. This last bid was unexpectedly successful. The Carolinas availed themselves of the premium offered and were soon sending sixty thousand barrels a year to England. Prices dropped to one third of the former rate and imports from the Baltic ceased. English merchants soon had more of these commodities than could be disposed of at home and began exporting to the Continent. For the purpose of encouraging the production of indigo, the duty on colonial imports was removed (1748) and a bounty offered of sixpence a pound. This and the removal of duties on raw silk affected the Carolinas favorably, but availed nothing toward increasing the exports from the Northern colonies.

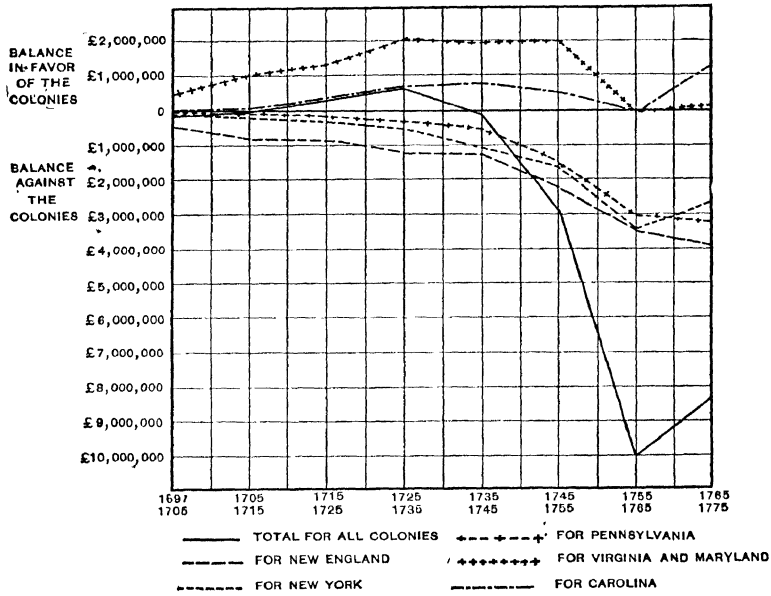
Manufactures

Parliamentary legislation affecting colonial industry was usually suggested by the Board of Trade and Plantations, a committee of the Privy Council intrusted with the oversight of Britain's possessions in America. The lord commissioners were empowered to inquire into the condition of the several plantations, the progress made in agriculture, trade, and manufactures, to receive complaints and petitions, and to make recommendations as a basis for imperial enactment. The first concern of the commissioners was to keep colonial industry to the channels that would furnish a revenue to the mother country, for the colonies were expected to provide the raw materials for England's manufactures and a market for the finished products.

Pitkin, Statistical View of U.S Ch. I.

From the first the colonists of New England found it difficult to pay for goods imported from the mother country.

The first shipload of exports from Plymouth (the *Fortune*, November, 1621) was made up of clapboards and beaver skins. Naval stores, masts, planking, tar, pitch, etc., were always in demand, but the supply decreased as the forests were cleared. Beaver and other furs brought a high price



THE BALANCE OF TRADE BETWEEN THE AMERICAN COLONIES AND GREAT BRITAIN, BY DECADES, FROM 1697 TO 1775

in London, but this, too, was a short-lived industry. It was fortunate for New England that the whale fisheries began to afford marketable products just as the fur trade was languishing. The spoil of the whaling voyages, however, enriched only a few coast towns. The farmers could raise nothing that found a ready sale in England. Moreover, the cost of imported goods was beyond their means. The transatlantic voyage was slow and the hazards great, freight charges were high and commissions excessive.

Contemporary records abound in complaints of the extravagant prices paid on this account. A shipload of goods sent to Plymouth in 1624, for instance, sold at a profit of seventy per cent. The Civil Wars (1640–1660) checked migration to New England, and the inflow of gold ceased. The small stock of coin in the colony was quickly exhausted, and the colonists were left with no means of meeting debts in London.

Bradford, 243.

Winthrop, Hist. of New England, I, 55–57.

Cloth Manufacture. — The General Court of Massachusetts strove to meet this difficulty by encouraging domestic manufacture. In 1640 the magistrates were directed to further the growing and preparation of flax and to consider measures for providing wheels and teaching the boys and girls how to spin not only flax but cotton and wool. In 1656 the selectmen of the several towns were ordered to require every family to furnish one or more spinners according to its capacity, each of whom was expected to spin three pounds of yarn, cotton, or wool every week for thirty weeks in the year. The penalty for nonperformance was a fine of twelve pence for every pound short.

Bagnall, Textile Industries of U S., I, Ch. I, II.

Abbott, Women in Industry, Ch. II.

Col. Laws of Mass., 141.

The raw material of cloth manufacture was scarce and dear. European flax had been introduced in 1629, but despite the efforts of the magistrates, not enough was raised for the home market. Cotton, a far more difficult fiber, was brought from the Barbadoes and the West Indies, but could only be spun when mixed with flax and was not in general use. Wool, the stuff most in demand, might not be had from the mother country, for the English government guarded with jealous care this much prized industry and prohibited the exportation of sheep or fleece. There were as yet few sheep in the colony and the only available supply of wool was found in Spain. The General Court of Massachusetts (1645) appealed to the towns within its jurisdiction to set about the preservation and increase of sheep. Residents were urged to purchase imported ewes, and friends in England meaning to come over were advised to bring with them "as many sheep as they

Weeden, I, 165–178.

Bishop, I, Ch. XIV

conveniently can." Connecticut enacted similar laws for increasing the supply of flax and wool.

The raw material once available, the people were soon able to manufacture their own clothing. Every farmhouse kitchen was a workshop where the women spun and wove the serges, kerseys, and linsey-woolseys, which served for common wear. By the close of the seventeenth century New England manufactured cloth in sufficient quantities for exportation to the Southern colonies and to the West Indies. As the industry developed, mills were erected for the more difficult processes of dyeing, weaving, and fulling, but the carding and spinning continued to be done in the homes. The Dutch of New Netherland and the Swedes along the Delaware were no whit behind their Yankee neighbors. In Pennsylvania prizes were offered for the finest weaves of cloth, and the artisans of Philadelphia acquired an enviable fame.

Weeden, I, 387–394.

American Husbandry, II, 257–267.

Bishop, I, 314.

Restrictive Legislation. — So long as the colonists confined themselves to making coarse cloth for family use, the British government showed no concern; but when goods of finer grade began to be woven and offered for general sale, the English woolen manufacturers became alarmed lest their colonial market suffer. Lord Cornbury, the avaricious and despotic governor of New York (1702–1708), reported to the Board of Trade, "I am well informed, that upon Long Island and Connecticut, they are setting up a Woollen Manufacture, and I myself have seen Serge made upon Long Island that any man may wear. Now if they begin to make Serge, they will in time make Course [*sic*] Cloth, and then fine; we have as good fullers earth and tobacco pipe clay in this Province, as any in the world; how farr this will be for the service of England I submit to better Judgments; but however I hope I may be pardoned if I declare my opinion to be, that all these Colloneys which are but twigs belonging to the Main Tree [England] ought to be Kept entirely dependent upon & subservient to England, and that can never be if they are suffered to goe on in the notions they have, that as they are

Callender, 29–44.

Doc. Hist. of New York, I, 711–712.

Englishmen, soe they may set up the same manufactures here as people may do in England; for the consequence will be that if once they can cloath themselves, not only comfortably but handsomely too, without the help of England, they who are already not very fond of submitting to Government would soon think of putting in Execution designs they had long harboured in their breasts. This will not seem strange when you consider what sort of people this Country is inhabited by."

In accordance with the recommendations of the lord commissioners, Parliament passed the Woolen Act (1699). No woolen goods might be exported from the colonies, nor sent from one colony to another, nor from place to place in the same colony with purpose to sell. In the following year the duty on woolens imported from England was removed. The result of this legislation was to check the manufacture of cloth for sale and to prolong for a century the hold of the English woolen merchants on the American trade. Fully half the exports to the colonies were woolen goods.

To a self-supporting community **leather** is hardly less important than cloth. There was an ample supply of the raw material in all the colonies, and deerskins and the hides of cattle and sheep were early utilized. The first tannery in New England was erected at Lynn in 1629. In the same year a shoemaker was sent over to Massachusetts Bay by the Plymouth Company. The community gave him fifty acres of land and £10 a year for his services. In 1635 Lynn set upon the manufacture of shoes and soon became famous for the excellence of its product. Bishop, I, Ch. XVI.

Great pains were taken to secure a sufficient stock of leather. In 1640 the General Court of Massachusetts enjoined upon the population the preservation of hides. "Whereas we are informed of the neglect of many in not saving such hides and skins as by casualty or slaughter come to hand," it was ordained that every hide must be sent to a tannery under a penalty of a £12 fine, and leather searchers were appointed by each town whose duty it was

to enforce the statute. No hides or unwrought leather might be exported from the colony. So successful was this policy that by 1650 Massachusetts was manufacturing shoes for sale in the other colonies. Like the making of cloth, this was in those days a domestic industry, and furnished a profitable winter occupation for the men and boys of the household. Many a New England farm still preserves among its outhouses the diminutive shoe shop where this work was carried on. In the middle colonies, too, leather manufactures were early developed. The industry was of prime importance, since not only boots and shoes, but coats, vests, doublets, breeches, and stockings were made of leather, especially for servants' use. Even women's skirts and aprons were fashioned from this durable material.

Bishop, I, 340–343.

The abundance of **beaver** gave the colonists a distinct advantage in the manufacture of hats. In response to a petition from the felt makers of London, Parliament instituted an inquiry (1731) and learned that ten thousand hats a year were produced in New England and New York. In Boston alone there were sixteen hatters, one of whom made on an average forty hats a week. The goods were exported not only to the Southern colonies and the West Indies, but to Ireland, Spain, and Portugal, where they came into competition with English-made hats. To guard the home industry, Parliament promptly ordered that "no hats or felts, dyed or undyed, finished or unfinished," should be "put upon any vessel or laded upon any horse or cart with intent to export to any place whatsoever." Persons undertaking such trade were to forfeit £500 for every offense. No negro could be employed in the manufacture of hats, and no white man who had not served seven years' apprenticeship. These restrictions well-nigh ruined the nascent industry.

American Husbandry, I, 256–258; II, 34–41.

The products of the Southern colonies did not come into conflict with English interests. Preoccupation in the raising of a few staples prevented the planters from undertaking manufactures. The several legislatures en-

acted statutes to encourage the production of raw materials, such as hides and wool, and offered bounties on linens, woolens, hats, hose, etc., but all to no avail. Nothing but the roughest cloth for the use of slaves was woven on the plantations. The by-industries of the New England farmhouse could not well be developed with unintelligent slave labor. Writing in 1705, Robert Beverley protested against this extravagant policy. "They have their clothing of all sorts from England; as linen, woolen and and silk, hats, and leather. Yet flax and hemp grow nowhere in the world better than there. Their sheep yield good increase, and bear good fleeces; but they shear them only to cool them. The mulberry tree, whose leaf is the proper food of the silkworm, grows there like a weed, and silkworms have been observed to thrive extremely, and without hazard. The very furs that their hats are made of perhaps go first from thence; and most of their hides lie and rot, or are made use of only for covering dry goods in a leaky house. Indeed, some few hides with much ado are tanned and made into servants' shoes, but at so careless a rate, that the planters don't care to buy them if they can get others; and sometimes perhaps a better manager than ordinary will vouchsafe to make a pair of breeches of a deerskin. Nay, they are such abominably ill husbands, that though their country be overrun with wood, yet have they all their wooden ware from England; their cabinets, chairs, tables, stools, chests, boxes, cart wheels, and all other things, even so much as their bowls and birchen brooms, to the eternal reproach of their laziness." The wasteful habits of the Southern planters suited the English merchants and manufacturers far better than New England thrift.

Phillips, I, 186–193.

Beverley, Bk. IV, Ch. XVII, XVIII.

The cost of importing **iron manufactures,** nails, agricultural implements, firearms, anchors, chains, etc., was so high that the colonists early undertook to provide themselves with these essential commodities. There was a ferruginous deposit in the swamps and ponds all along the coast from which iron of good quality might be pro-

Bishop, I, Ch. XVII

Swank, Hist. Manf. of Iron, Ch. X, XI.

duced. John Winthrop, Junior, one of the enterprising business men of Massachusetts Bay, secured capital and skilled laborers from England, and erected (1643) a smelting furnace near Lynn. The ore was got from Saugus Pond, wood for charcoal and water power for the blast furnace were near at hand, and the works were soon turning out seven tons of pig iron per week. A forge for the refining of the ore was set up in 1648, and a foundry for casting soon followed. Joseph Jenks, one of the workmen brought over from Hammersmith, designed important improvements in scythes, sawmill machinery, etc., and was a considerable factor in the success of the Lynn works. For twenty-five years farm tools and domestic utensils sufficient for the needs of the growing communities in eastern Massachusetts were manufactured here. Then, the supply of bog iron and of charcoal failing, the enterprise was abandoned. The General Court granted three thousand acres of land in Braintree to Winthrop and his partners in the hope of developing the manufacture of iron from the bogs of Monontocot River, but this ore deposit was exhausted within ten years, and the works were abandoned. More successful was the furnace built at Raynham (1656) by the Leonard Brothers, English forgemen first employed by the Lynn Company. The adjacent marshes sufficed for this and several other foundries in the town of Taunton. Somewhat later iron works were erected at Great Barrington (1731) and Lenox (1765) in the Berkshires. For the first century of our history, Massachusetts was the center of the iron industry, but the other New England colonies were not far behind. Rhode Island had an iron foundry at Pawtucket, set up by Joseph Jenks. John Winthrop moved to the Connecticut Valley in 1645 and began the smelting of iron at New London and New Haven (1658). The General Court granted exemption from taxation to all persons and property engaged in this important enterprise. The hill country of Connecticut proved to contain valuable deposits of hematite ore, and the iron mines of Litchfield County soon gave Connecticut precedence over

Massachusetts. A forge erected at Lime Rock in 1734 has been in continuous operation to the present day.

The manufacture of nails and tacks was a domestic industry that brought in considerable revenue to the farmers of New England. A small furnace was set up in the chimney corner, and in the winter season great quantities of nails and tacks were hammered out by the men and boys who would otherwise have been idle. With anvil and hammer a man could make two thousand tacks in a day. The rod iron was furnished by a neighboring slitting mill whose proprietor paid the nailmakers for their work and marketed the product.

There was no smelting of iron in New York until the middle of the eighteenth century, when the Ancram works were established on Livingston Manor. The ore was carried down from the Connecticut hills. The rich deposits of Orange County, New Jersey, were developed before the Revolution. One of the Leonards began the smelting of bog iron at Shrewsbury in 1674, but the magnetic ores were not discovered until 1710. This valuable mineral was mined in the Highlands and carried in leather bags on pack horses to the works at Whippany on the Passaic River. The bar iron was transported in the same toilsome fashion across the Orange Mountains to Newark for sale. A large part of this product, as well as that of the New York works, was shipped to England, and, since bar iron brought £20 per ton, it was a profitable export. Copper veins were discovered in the same metalliferous range and successfully worked by the Schuylers, who exported the ore, which was worth £40 per ton, to Bristol, England. The settlers of eastern Pennsylvania began to smelt iron ore and to cast stoves and rough utensils early in the eighteenth century. Some ore was mined along the Delaware and Susquehanna rivers, but the surpassingly rich deposits of the Alleghanies were not opened up till the nineteenth century.

Iron ore was one of the commodities shipped from Jamestown in 1608, and the London Company anticipated

Swank, Ch. IX, XXIII.

rich returns from this source. In 1619 skilled workmen were sent over to "set up three iron works" in Virginia, and two years later John Berkley, "gentleman," came out to take charge of the enterprise. Rich deposits of bog iron were found on Falling Creek, near Richmond, and a furnace was built, but in the Indian massacre of 1622 works and workmen were destroyed. The manufacture of iron was not resumed until a hundred years later, when under the auspices of Governor Spotswood, "the Tubal Cain of Virginia," the industry was placed on a stable foundation. Six hundred tons of iron were smelted in Spotswood's furnace in 1760. Furnaces were built at the falls of the James River near Richmond and on the Rappahannock near Fredericksburg. Here the ore was blasted from rocks near the surface and carried in baskets to the furnace. Some of the Virginia output was cast into domestic utensils, but the greater part was exported to England in pigs and bars. The House of Burgesses assisted in the development of these mines by grants of land and by the construction of roads.

Bishop, I, Ch. XVIII.

The Maryland Assembly offered (1719) one hundred acres of land to any citizen setting up furnaces and forges in the province. The first undertaking was made at the head of Chesapeake Bay by the falls on Principio Creek, capital and workmen being provided from England. The men were convicts sent over to serve out their term and the initial management was dishonest, but after years of disheartening effort, the enterprise was made to pay a considerable revenue. The greater part of the pig iron exported to England was shipped by this company. The Principio furnaces and Governor Spotswood's mines were the only iron works of any importance south of Pennsylvania, and these were engaged in the production of pig and bar iron rather than in manufacture.

Restrictive Legislation. — Now it happened that in England the iron industry was hampered by lack of raw material. The ore of Sussex and the supply of charcoal from the Weald were nearly exhausted, and the resources

of the "black country" were still unknown. Fully half of the pig iron consumed in the furnaces of Sheffield was imported from Sweden and Russia. The ironmasters bethought them that the supply might be had more cheaply from the colonies, and they urged upon Parliament the desirability of appropriate legislation. It was hoped that the twenty thousand tons a year needed to keep the English foundries going might be had from America, where fuel and water power were abundant and the cost of production low. Pig iron imported from the colonies could be paid for in manufactures, and thus another business interest would secure an advantage. The act of 1750 provided that pig iron imported from America might come into any British port duty free, while bar iron was made duty free at the port of London. Since European imports were subject to high duties, this gave an important advantage to colonial smelters and induced a considerable increase in the shipments. The interests of the British manufacturers were further guarded by the stipulation that "no mill or other engine for slitting or rolling of iron, no plating forge to work with a tilthammer, and no furnace for making steel" should be erected "in any of His Majesty's colonies in America." Mills already established were to be deemed a public nuisance. The effect of this legislation was a serious check to the development of iron manufactures in the colonies.

Bishop, I, 623–628.

Commerce

Wagon Roads. — The surplus products of industry, beaver skins, tobacco, or lumber, mean much or little to the producer, according to his chances of getting them to market. The Atlantic coast colonies were fortunate in their commercial opportunities. The short rapid rivers of New England are not usually navigable for freight boats more than a few miles above tidewater. By dint of numerous carries the Charles, the Merrimac, the Penobscot, and the Housatonic were made to serve the needs of local

Weeden, I, 110–115, 205–212, 310–314.

traffic, but the Connecticut was the only New England river that played any considerable part in general trade. Sea-going vessels made their way up this river to Hartford, where the freight was transferred to scows and rafts and so conveyed to Windsor Locks. As the interior was settled, it became necessary to supplement the waterways by roads. In 1639 the General Court of Massachusetts ordered that each town should construct a highway to connect with that of the adjoining town, and the Bay Road from Boston through Salem and Ipswich to Newbury was built this year. In 1654 land communication was established with the Providence Plantations by means of the Common Road that ran through Pawtucket Falls and Rehoboth. The Shore Road connected Providence with the settlements along the Connecticut coast and with New York. The Hartford Trail struck into the interior through Dedham, Dover, and Medfield to Hartford, while the Lancaster Road was carried directly west. The road builders often took advantage of the Indian trails, widening the footpath to a bridle path and later to a wagon road. It was a task of enormous difficulty where able-bodied men were so few, and material obstructions were but little modified. Hills could not be leveled nor marshes drained, nor could wagon bridges be built except in the immediate vicinity of a populous town. The Great Bridge from Boston to Cambridge was completed in 1662, but the public coach was not put on the road till seven years later. In 1704 Madame Knight made the greater part of the journey from Boston to New York on horseback and told an amusing tale of the horrors of the route. Transportation by land was much more costly than by water. The freight on a bushel of grain from Northampton by wagon to Windsor Locks was one shilling, from the Locks to Hartford by river scow, twopence, from Hartford to Boston by sailing vessel, sixpence.

Madame Knight's Journal.

In transportation by sea, New England had the great advantage of convenient harbors. Wherever a river met the tide, seaports such as Portland, Portsmouth, Boston,

COLONIAL ROADS
SCALE OF MILES
0 25 50 100
PETERS ENGR. BOSTON
NEW HAMPSHIRE
MAINE
VERMONT
NEW YORK
PENNSYLVANIA
NEW JERSEY
MARYLAND
DEL.
LAKE ONTARIO
LAKE ERIE
Newburyport
Boston
Hingham
Dedham
Lancaster
Providence
Rehoboth
Hartford
New Haven
Albany
Hudson R.
New York
Philadelphia
Delaware R.
Susquehanna R.
Baltimore
Potomac R.
Connecticut R.
INDIAN TRAIL
KING'S FARM
Longitude West from Greenwich
77°
75°
73°
71°
79°
42°
40°

and Newport prosecuted a thriving trade. Goods brought down from the farms by boat or wagon were loaded on to vessels bound for England or the West Indies. Long Island Sound conducted the traffic of New England to the great harbor at the mouth of the Hudson.

The waterways of New York and the middle colonies were unrivaled in the British possessions. The Hudson was navigable for ocean vessels as far as Albany, and the connection thence by way of Lakes George and Champlain to the St. Lawrence was easily made. Where the Mohawk breaks through the Appalachian range, an elevated plain led to Lake Ontario. By this gateway the Iroquois trail crossed to the Hudson and thence to Manhattan, and the pioneers easily widened the trail into a wagon road. The Delaware and the Susquehanna were waterways of prime importance to the settlers of Pennsylvania and New Jersey. The King's Path led from Perth Amboy to navigable water at Philadelphia, and the Chesapeake and Delaware bays were connected by wagon road. These exceptional transportation facilities gave rise to the ports of Philadelphia and Baltimore.

Bolles, Pennsylvania, II, Ch. XVII.

Waterways served so well the purposes of the plantation trade that the men of Virginia and the Carolinas made little effort to build roads. The higher lands between the river bottoms were comparatively barren and were therefore unappropriated, or, where included in a grant, were utilized as cattle ranges. Cross-country trade was infrequent and difficult, hence there were no towns of importance in the interior. Only where a produce-laden river joined the sea could commerce develop. Norfolk, Charleston, and Savannah were first-rate ports.

The Coastwise Trade. — The first commercial ventures were made in the Indian trade. The settlers sold corn and other foodstuffs, beads and trinkets, shirts and blankets, to the neighboring savages, while firearms, gunpowder and rum, though forbidden by the home government, made a considerable item in the stock of an Indian trader. The redskins offered in exchange game and furs.

Weeden, I, 88–97, 129–140.

Winthrop, I, 132, 135.

Twenty beaver skins was the price of a musket along the Mohawk River. Plymouth colony had trading posts on the Kennebec and Connecticut rivers, the men of Boston on the Penobscot and the Merrimac. The colonists came into sharp competition with the Dutch on the Hudson and with the French in Maine. The Dutch pretensions came to an end in 1664, but the French *voyageurs* had penetrated the upper St. Lawrence and the Great Lakes. Their ascendancy with the Indian tribes gave them control of the fur trade, and in the eighteenth century the traffic was well-nigh engrossed by these skillful diplomats.

Docs. Col. Hist. of New York, IV, 210.

The fishing stations along the New England coast afforded an increasingly lucrative commerce. At Piscataqua and Pemaquid, and the fishing villages of Cape Ann, on Sable Island, and among the French traders on the Canadian rivers, there was a steady demand for corn, salt pork, and other supplies. In the Southern colonies, too, there was a ready market for the products of Yankee industry, — cereals, live stock, shoes, and woolens. The merchants received in exchange tobacco, leather, timber, tar, and wheat. Trade with New Netherland was contraband until 1664, but much clandestine commerce was carried on. The men of Plymouth had a trading post at Manomet in Buzzard's Bay, where they stored their goods, tobacco (brought from Virginia), planks and pipe-staves, sack and rum, and received in exchange sheep, beaver skins, sugar, and linen cloth, and their factories on the Connecticut River were no less prosperous. In 1642 a fine stone tavern was built on East River to take advantage of the custom of the many strangers who touched at New Amsterdam on their way from New England to Virginia.

Bradford, 206, 281.

O'Callaghan, New Netherland, 259.

The West India Trade. — For few of the products of New England was there a market in the mother country. Cereals, meat, and fish were English staples, and so far as these goods were sent to England they came into competition with domestic products. The Corn Law of 1689 imposed duties on grains that were practically prohibitory; and other legislation forbade the importation into England

Weeden, I, 142–164.

Callender, 16–20.

of salted beef and pork. The only profitable market for the surplus crops of New England was in the West Indies. There her flour, fish, and lumber, her woolen and leather manufactures, were in great demand and could be exchanged for sugar, molasses, cotton wool, dyestuffs, etc., — the surplus products of a tropic clime. Brought back to Boston and Newport the molasses was made over into rum, and the cotton and dyestuffs into cloth, commodities that could be marketed at a considerable advance in price. The Bermudas sent potatoes and other vegetables, oranges and limes, luxuries for which the coast colonies were their only market. The exports of the middle colonies, grain, salt meat, and lumber, were also sent to the Caribbeans. The Southern colonies sent nothing to the West Indies and required nothing thence; hence trade with the islands was confined to the Northern ports.

Weeden, II, Ch. XII.

The Slave Trade. — The monopoly of the Royal African Company was broken in 1698, and this lucrative commercial opportunity was thrown open to any vessel flying the British flag. The traders of New England quickly secured their full share. Sloops from Boston, Newport, and Bristol sailed for the Gold Coast laden with hogsheads of rum. This was exchanged for captive negroes, or, perchance, for bars of gold and iron. The wretched human freight was carried to the West Indies and traded for sugar and molasses, or to Virginia, where negroes brought a good price in tobacco. Either cargo could be disposed of to advantage on returning to the home port, and the profits of this triangular commerce were enormous. A slave purchased for one hundred gallons of rum worth £10 brought from £20 to £50 when offered for sale in America. Newport could not, with her twenty-two still houses, manufacture rum enough to meet the demand.

Phillips, II, 49–53.

Abbot, Ch. III.

Felt, Annals of Salem, II, 289.

Weeden, I, 232–244, 337–378; II, 552–594, 607–623, 641–665.

Transatlantic Trade. — Old World markets offered a steady demand for the agricultural products of America. Fish, timber, furs, and tobacco made the bulk of the homebound cargoes in the seventeenth century; whale oil and whalebone, cider, rum, and rice figured largely in the

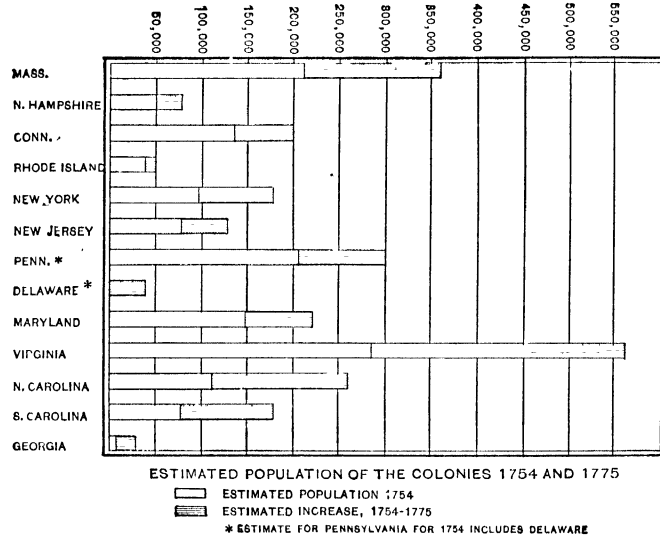
exports of the eighteenth. Returning vessels brought linen and woolen goods from England and Holland, iron and wool from Spain, salt from Portugal, spices from the Mediterranean, wine and fruit from Madeira and the Canary Islands. Each shipmaster (English, Dutch, or Spanish), selected the goods that he thought most likely to find purchasers in the colonies, and, once arrived in an American port, was fain to take in exchange whatever salable commodities were there to be had. In the search for a market for the tobacco, pipe-staves, beaver, or salt cod taken aboard, he might steer for England or the West Indies or the Mediterranean as he saw fit. A vessel not infrequently spent years in this roundabout trade before returning to her home port.

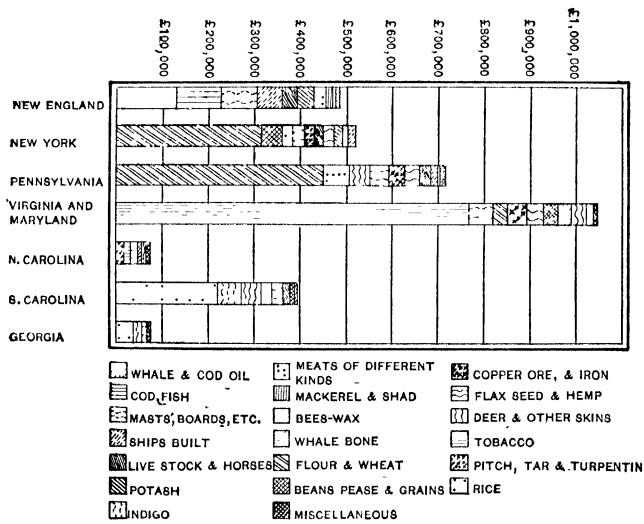
Restrictive Legislation. — The colonial policy of England during the seventeenth and eighteenth centuries was dictated by the theory that settlements were "plantations" whose industries must serve British interests. No mines producing gold and silver had been discovered, but money could be coined in trade. Tobacco, for example, by legislation of 1621, might be exported only in English ships and to English ports, where a duty varying from one to threepence a pound was levied. In due course this restricted market was overstocked, and the price fell from three shillings per pound in 1619 to twopence per pound in 1704. The tobacco planter was denied direct access to the Continent, where prices ranged much higher. Coastwise traffic was subject to a provincial duty of a penny a pound, but this tax was frequently evaded. It was not a difficult matter to load the hogsheads on to lighters and take them out under cover of night to the trader that lay off the coast waiting for the clandestine freight. Smuggling, in the mind of the outraged planter, was an entirely legitimate method of getting a fair price for his crop, and British men-of-war patrolled the coast in vain. The bayous of the Chesapeake nourished a breed of nimble sailors who gloried in outwitting the customs officers. One of these pirates scuttled his schooner to

Beer, Commercial Policy of England, 317–328.

Rabbeno, American Commercial Policy, 3–21, 48–91

Beer, 347, 349.





COLONIAL EXPORTS, ANNUAL AVERAGE, 1763–1773

elude his pursuer and brought her to the surface again when the danger was past, none the worse for a ducking.

The Navigation Acts. — England's jealousy of the Dutch carrying trade determined a policy that has had far-reaching influence on British and American shipping. In 1651 Cromwell's Parliament enacted a law that was reënforced (1660) immediately after the Restoration. The monopoly of British trade was given to vessels built and manned by British subjects. No products of Asia, Africa, or America might be imported into Great Britain or any of her dominions except in English ships. No European products might be imported except in English ships or in ships owned in the country where the goods were produced. All imports must be shipped direct from the country where they were grown or manufactured, and not from an intermediate port. The provision that vessels violating any clause of this act were liable to seizure and confiscation, together with the contraband cargo, brought on war with Holland. After the loss of New Amsterdam, Holland's flourishing trade with the British colonies shrank to meager proportions, and English vessels, whether built in Great Britain or in America, fell heir to the Atlantic carrying trade. This practical monopoly of colonial commerce meant an advance in freight rates, since the merchant ships were not at first adequate to the traffic; but the loss was soon made good to the colonies in the new impulse given to shipbuilding.

Beer, 327–340.

Weeden, I, 232–244.

Macdonald Select Charters, 106–116.

Andrews, Colonial Self-Government, Ch. I.

Colonial Shipping. — American shipyards had important advantages over those of Great Britain. Materials of the best quality were to be had at little cost. Masts of fir and planks of oak were supplied from primeval forests, everywhere there was pitch pine for the making of tar and turpentine, and hemp for cordage was soon provided. The rivers furnished water power for sawmills and brought lumber down to the harbors where the ships were built and launched, while the necessity for exercising a variety of crafts had developed in the colonists the Yankee knack that made them excellent shipwrights.

Wright, Indust. Evol of U.S., Ch. I, II.

Weeden, I, 120–129, 252–260.

Marvin, Ch. I. II.

New England began to build seagoing vessels after 1640 when, the tide of immigration from England being checked, few British ships came to the Northern colonies, and it was found necessary to provide for the needs of trade. At Newburyport and Salem on the Massachusetts coast, at New Bedford, Newport, Warren, and Providence on Buzzards and Narragansett bays, men set to work to provide for the expanding commerce. The supply of fishing smacks, whaling vessels, and barques for the coastwise trade was soon sufficient for domestic needs, and ships were even built to sell abroad. The shipyards at New London on the Thames and New Haven on the Connecticut were equally busy. Poughkeepsie and Albany on the Hudson furnished vessels for the trade of New York. At Wilmington and Philadelphia on the Delaware and in the harbors of the Chesapeake, boats were building apace. On the eve of the Revolution the annual output of the Atlantic coast was estimated at eighteen thousand tons. New England launched seventy sail, New York twenty, Pennsylvania twenty-five, while Virginia and Maryland combined produced but thirty vessels and South Carolina but ten. In spite of the ample supply of raw materials the industry developed slowly in the South, because capital and industrial enterprise were absorbed in agriculture, and because the Southern colonies experienced no such decline in commercial intercourse with Britain as forced the men of the North to provide for the carrying trade. Planters sometimes owned their own vessels, but they were usually content to rely on the ship sent out by their London factor, or the chance visits of the Yankee trading sloops.

Beer, Commercial Policy of England, 341–363.

Macdonald, 133–136.

The Enumerated Articles. — The Cavalier Parliament went a step farther than the Roundheads in securing the dominance of British interests in America. A clause was added (1663) to the Navigation Acts requiring that certain enumerated commodities might be exported from the British colonies only to Great Britain and her dominions. Cotton, indigo, fustic, and other dyewoods used in the

making of cloth were limited to the home market in the interests of manufactures. Sugar, tobacco, and ginger might not be exported direct to the Continent, but must pass through a British port that the government might secure the customs duty and the merchants a commission on the transfer. Thus far the limitation affected the West India trade chiefly, since none of these commodities except tobacco was produced on the mainland. But other products were added to the list from time to time as British interests seemed to demand: molasses, rice, and naval stores in 1705; copper, beaver, and other furs in 1722; whale fins, hides, iron, lumber, raw silk, and pearlashes in 1764. Vessels laden with enumerated goods must give bond to land the cargo in an English port whence it might be shipped to the Continent.

Docs. Col. Hist. of New York, III, 383–384

The legislation of 1663 restricted also the import trade. Not only were the staple products of the colonies limited to the English market, but goods imported from Europe must be brought via England that duties and commissions might be collected before the cargo was reshipped to America. As a concession to colonial interests, certain essential commodities were exempted from this requirement: salt for the fisheries of New England might be imported direct from Spain and Portugal; wines from the Western Islands need not make the roundabout journey to an English port; provisions, horses, servants, and (later) linen might be shipped from Ireland without paying toll to the English merchants.

Smuggling. — The object of this commercial policy was evident. The English or colonial shipmaster was enabled to charge high freights because of the exclusive privilege of carrying colonial goods. The English merchant was insured his profits on colonial trade since the major part of exports and imports, whether from Europe or the Orient, must pass through British warehouses. The English manufacturer was enabled to get his raw materials cheap and sell his finished goods dear by his practical monopoly of the colonial market. That this policy, if actually put

Weeden, I, 236–241; II, 658–663.

into execution, must work injury to America by adding to the costs of transportation, reducing the price of what the colonists had to sell, and advancing the price of what they must buy, was not so apparent to the comprehension of the statesmen who devised these regulations. Colonial industries escaped ruin only because the acts were evaded by a well-developed system of smuggling. Many a hogshead of tobacco found its way to Holland and France without paying tribute at an English port. Vessels laden with freight from the Continent lay offshore in the neighborhood of Cape Ann for weeks together, while dories and fishing smacks and lumber scows plied to and from, conveying the contraband goods to Gloucester and Salem. In 1700 one third of the trade at Boston and New York was in direct violation of the law. Royal governors and revenue officers protested in vain, for smuggling was upheld by public opinion, and some of the most reputable men of the colonies were engaged in this illicit business.

Weeden, II, 556–559.

Docs. Col. Hist. of New York, III, 44.

The Molasses Act. — More irritating still to the men of New England was the legislation that concerned the West India trade. Merchants had found greater profit in commerce with the French islands and Dutch Guiana than with the Barbadoes and Jamaica, for the English islands could not take all the goods offered by the Yankee traders, and profits had declined. Furthermore, the French sugar and molasses could be had at lower prices than the Jamaican. The French planter was the more economical producer, and his molasses was a drug in the home market because of a law excluding rum from France. Hence a brisk trade with these foreign colonies had developed to the prejudice of Great Britain's sugar islands. Protests were forwarded to the home government, and Parliament undertook to remedy the grievance of the English planters. A bill passed the House of Commons (1731) that prohibited the importation of sugar, molasses, and rum from any foreign colonies into Great Britain, Ireland, or any of the American colonies; also the exportation of horses

Beer, Commercial Policy of England, 405–420.

Macdonald, 248–251.

and lumber to foreign plantations. The House of Lords rejected the bill, arguing that the Northern colonies could not afford to buy English manufactures if this market for their agricultural products was cut off. The result of the debate was a compromise measure that passed both houses in 1733. "For the better securing and encouraging the trade of His Majesty's sugar colonies in America," practically prohibitory duties were imposed on foreign sugars. Rum and spirits were to pay ninepence per gallon, molasses and sirup sixpence, sugar five shillings per hundredweight. Trade with the French West Indies would have received a serious check but for the general practice of smuggling.

Credit Money

As the population of the colonies grew and business interests multiplied, the demand for capital with which to develop the latent resources of the country and for money to use in trade steadily increased. Neither wampum, bullets, nor staple products could serve the money need of these thriving communities. In 1690 Massachusetts hit upon what seemed to men of that day an inexhaustible fountain of wealth in the issue of credit money. The expedition against Louisburg had failed, and the soldiers, who were to have been rewarded out of the booty, returned home clamorous for pay. The treasury was empty, and the government determined to meet its obligations in promises. Bills of credit were issued to the amount of £40,000, but the notes bore no interest and were made payable at no fixed time. There was some skepticism as to their ultimate value, and they were received in exchange at but twelve and fourteen shillings in the pound. The government, however, succeeded in bringing the paper money up to par by making the bills receivable for taxes at five per cent advance over silver coin, and the public was assured that the notes would be redeemed in silver at the end of twelve months, but the date of redemption was

Weeden, I, 379–387.

Sumner, Hist. Am. Currency, 14–43.

Bullock, Pt. I, Ch. IV.

Davis, Currency and Banking in Mass. Bay, Pt. I.

Dewey, Financial Hist. of U.S., 18–30.

Callender, 63–68.

extended repeatedly until the holders of the notes became discouraged. Moreover, the bills were reissued as soon as redeemed. In 1711 another expedition to Canada rendered necessary a new issue of bills of credit. Massachusetts became responsible for notes to the amount of £40,000; while New York and Pennsylvania, joining in this expedition, met their proportion of the expense by issues of £10,000 and £2000, respectively. By 1733 Rhode Island, Connecticut, and New Hampshire had resort to this attractive expedient for meeting expenditures to which income from taxation was inadequate, and the Southern colonies soon followed the same pernicious example.

Weeden, II, 473–491.

The issue of paper money by a fully established government is a legitimate device for meeting a financial emergency when resort to immediate taxation is impracticable and when the obligation incurred is guaranteed out of the revenue of subsequent years; but the expedient is attended with grave dangers. It is always easier to contract a debt than to cancel it. The needy colonial governments deferred payment from time to time until public confidence in the issue was weakened and the bills began to depreciate in value. The loss fell on bankers who held the notes and on merchants who were obliged to receive them in exchange for goods. Farmers, on the other hand, who were purchasing implements and stock, thought the country needed more of this inexpensive money. The supply of capital was far short of the demand, and borrowers were obliged to pay interest as high as eight and ten per cent. It was urged that the government might suitably meet the emergencies of individual citizens by issuing bills of credit for the purpose of making loans at a reasonable rate of interest on real estate security. This seemed a brilliant plan, since it would meet three crying needs. It promised to furnish an income to the government, capital to landowners, and currency to the people. The argument was amply convincing to the legislators of that day, and in 1714 the General Court of Massachusetts directed the issue of £50,000 to be loaned to private persons at five per cent.

The loan was to run for five years, and the borrower undertook to pay back one fifth each year, giving a mortgage on his land as security. Subsequent issues brought the amount of these Massachusetts loans up to £260,000. The other colonies quickly adopted similar measures for meeting the general demand for capital, but the results were disappointing. The farmers were usually unable to meet their payments, the governments got into financial difficulties and failed to redeem their obligations, the bills soon fell into disrepute, and the whole country from New Hampshire to Georgia was flooded with a depreciated paper currency. The several issues of twelve distinct legislatures were mingled in hopeless confusion.

Davis, Currency and Banking in Mass. Bay, Pt. II.

The Board of Trade had advised the colonial governors to veto the bills authorizing the issue of credit money, but their opposition was vain. The irate legislators refused to vote supplies, withheld the governors' salaries, and so forced their approval of the popular measures. Effort was made to restore full purchasing power to the discredited currency by declaring the notes legal tender in payment of private debts and by imposing heavy penalties on creditors refusing to receive them. Business men of the colonies and merchants in London made vehement protest against these force laws.

In 1750 the paper money of Massachusetts exchanged for sterling at one eleventh of its face value, that of New Hampshire at one twenty-fourth, that of Rhode Island at one twenty-sixth. The depreciation was less in the Middle and Southern colonies, but everywhere the injustice done to capitalists and to widows and minors dependent on invested funds was great and increasing. The year following Massachusetts redeemed her outstanding bills in the silver accruing from the Louisburg indemnity, and soon after declared gold and silver the only legal tender in payment of debt, while the credit money of the neighboring colonies was rigorously excluded. The commercial advantages of specie were soon evident in an access of prosperity to the "silver colony." The West India trade had

centered in Newport; much of it was now transferred to Boston and Salem. Parliament reënforced the action of Massachusetts by prohibiting (1751) the four Northern colonies from issuing more bills of credit except in the emergency of war. In 1763 this prohibition was extended to the remaining colonies, and the legal tender quality of the bills was limited to the period originally fixed for their redemption. This restriction was dictated by superior financial wisdom, but it was bitterly resented by the advocates of a cheap and abundant currency.

Ripley, Financial Hist. of Virginia, 153–162.



Iron Dinner Pot
Cast at Lynn in 1645

CHAPTER IV

INDUSTRIAL ASPECTS OF THE REVOLUTION

Causes

THE French and Indian Wars (1754–1763) had momentous consequences for the American colonies. In the Peace of Paris, the claim of France to the St. Lawrence, the Great Lakes, and the fertile stretch of country between the Mississippi River and the Alleghanies was surrendered to Great Britain. The trading posts, forts, and mission stations were abandoned by soldier, priest, and *voyageur*, and the long race rivalry terminated in the triumph of the English. The Indian tribes were less to be dreaded now that the representatives of a hostile power no longer incited their plundering raids, while the placing of British garrisons at strategic points, Forts Duquesne, Niagara, and Detroit, assured the safety of the pioneer settlements. At the same time Spain yielded Florida in exchange for Havana, taken from her during the war, and the southern frontier of the British provinces was extended to the Gulf. The Cherokees soon became convinced that the advance of the white man could no longer be resisted and withdrew beyond the mountains.

Lecky, Hist. of England, III, Ch. XII

Beer, British Colonial Policy, Ch. IX.

Hulbert, Braddock's Road, Ch. I.

The seven years' contest had fully demonstrated the capacity of the colonies for self-defense. For the later campaigns they had furnished twenty-five thousand soldiers, clothed, armed, and paid out of appropriations made by the colonial assemblies. More than four hundred privateers were fitted out in American ports, and the damage they inflicted on French shipping contributed in no slight degree to the final victory. These services had been gratefully acknowledged by the British Parlia-

Maclay, Hist. Am. Privateers, 39–42.

ment, and large appropriations were voted in partial compensation.

The Imperial Régime. — Great Britain emerged from the Seven Years' War no longer an island kingdom, but an empire. Her colonial possessions, not only in America, but in India, had been enormously increased, and her statesmen were forced to devise a system of government commensurate with these new responsibilities. A harmonious administration of colonial interests and an adequate scheme of colonial defense were of prime importance. Both the lords of trade and the king's cabinet were convinced that the régime of "salutary neglect" must come to an end, and that vigorous measures must be taken to bring the American colonies under effective imperial supervision before they had quite outgrown such control. The commercial regulations, so long flouted and evaded, must be enforced, a standing army of not less than ten thousand British regulars should be stationed in America, and its maintenance provided, in part at least, by taxes imposed upon the colonies. George Grenville, the prime minister, and Charles Townshend, president of the Board of Trade, were primarily responsible for the new policy. They were, however, resolutely supported by George III, a king who took his functions seriously and to whom the royal prerogatives were sacred and above dispute.

Lecky, III, Ch. XII.

The authority of Parliament in the affairs of the colonies had never been defined. The Americans were exercising a measure of self-government far beyond that enjoyed by eighteenth century Englishmen. The several colonial assemblies were accustomed to legislate concerning all matters of internal interest, and their acts had been called in question only when they affected British trade. Internal taxes and customs duties for the purpose of raising revenue had hitherto been laid by the same authority and applied to the expenses of local government. Parliament had enacted commercial regulations with a view to securing monopoly of trade with the colonies, and duties had been imposed at colonial ports in order to prevent the impor-

Pitkin, Hist. of U.S., I, Ch. VI.

Ramsay, Am. Rev., I, Ch. II, III.


Longitude from Greenwich
Lake Winnipeg
JAMES BAY
Albany R.
East Main R.
CANADA
Lake of the Woods
Lake Nipigon
LAKE SUPERIOR
MINN.
Sault Ste. Marie
Ottawa R.
St. Lawrence R.
ME.
WIS.
Mississippi R.
LAKE MICHIGAN
MICH.
LAKE HURON
ONTARIO
IOWA
Detroit
LAKE ERIE
Niagara
N. Y.
Hudson R.
N.H.
MASS.
Boston
C. Cod
CONN.
R.I.
New York
Missouri R.
ILL.
IND.
OHIO
Ft. Duquesne
PENN.
N.J.
MD.
DEL.
MO.
Kaskaskia
Ohio R.
W. VA.
KY.
VA.
ATLANTIC OCEAN
TENN.
APPALACHIAN MTS.
Cape Hatteras
ARK.
Mississippi R.
Tennessee R.
N. CAR.
S. CAR.
Cape Fear
MISS.
ALA.
GA.
Savannah
LA.
New Orleans
St Augustine
GULF OF MEXICO
FLA.
BAHAMA ISLANDS
DISTRIBUTION OF ENGLISH POPULATION 1774.
SCALE OF MILES
0 50 100 200 300 400
NOTE.-The States have been lettered and the boundaries defined to date showing more clearly the location of the various points.

BORMAY & CO., N.Y.

tation of goods that came into competition with British interests. Internal taxation, however, and revenue duties had never been attempted. Grenville's great predecessors, Walpole and Pitt, had rejected proposals of this nature as impolitic. But the war had entailed heavy burdens; Great Britain was staggering under a debt of £140,000,000, half of which represented military expenses in Europe and America, and the English taxpayer was beginning to protest. The colonies, on the other hand, had been increasing in wealth and population with extraordinary rapidity, and the costs of local government were light. They were deemed abundantly able to meet some portion of the expenses henceforth to be incurred in their behalf.

Callender, 122-142.
Macdonald, 272–281.
Beer, British Colonial Policy, Ch. XIII, XIV.

The Sugar Act. — The change of policy was indicated in a series of parliamentary enactments proposing to raise a revenue from the "American Plantations." The duties laid in 1733 on sugar and molasses brought into the colonies from the French and Spanish West Indies, were meant to be prohibitory, and no revenue was anticipated or secured. In 1764 these duties were cut in half in the expectation that the distillers could pay the rates without unduly raising the price of their rum. The preamble to the Sugar Act cites the necessity of providing for the defense of the colonies as the reason for reducing the imposts.

Callender, 51–63.

The Sugar Act imposed duties on other imports — coffee, wines, silks, cambrics, and French lawns. The rates were not so high as seriously to diminish importation, and, being levied on articles of luxurious consumption, they were paid without much protest. Not so the duty on foreign molasses, for this jeopardized an important business interest. The duty of threepence a gallon, once enforced, advanced the price of molasses twenty per cent and absorbed all the profit of the rum distillers, since the price of rum could not be increased in proportion. Orders for molasses were withheld, and the merchants, having small prospects of return cargoes from the West Indies, detained their vessels in port or sent them elsewhere. The lumber and

flour, salt meat and fish, with which the trader would have been loaded, went begging for purchasers. Prices fell and the farmers lost their best market. Workmen were thrown out of employment, not only field hands, but sailors and lumbermen, distillers and gristmill employees. Governor Bernard of Massachusetts, by no means an advocate of colonial privilege, was moved to serious protest against the disastrous effect this ruthless tax would have upon the fisheries of New England. "Our pickled fish wholly, and a great part of the codfish, are fit only for the West India market. The British Islands cannot take off one third of the quantity caught; the other two thirds must be lost or sent to the foreign plantations, where molasses is given in exchange. The duty on this article will greatly diminish its importation hither, and being the only article allowed to be given in exchange for our fish, a less quantity of the latter will of course be exported, the obvious effect of which must be the diminution of the fish trade, not only to the West Indies, but to Europe, — fish suitable for both these markets being the produce of the same voyage. If, therefore, one of these markets be shut, the other cannot be supplied. The loss of one is the loss of both, as the fishery must fail with the loss of either." Bernard believed that a tax of one penny a gallon could be collected without jeopardizing the business interests involved.

Speeches of Gov. of Mass., 19.

The decline in the West India trade checked the inflow of Spanish coin and thus deprived merchants of the silver needed to meet their foreign obligations. The requirement that the obnoxious tax should be paid in specie was peculiarly irritating in view of the fact that the sole source of supply was stopped by means of these very duties. The prohibition of further issues of credit money, a measure wise in itself, but ill-timed, aggravated the difficulties of the situation. The supply of paper money began to run short just when the dwindling importations of silver rendered recourse to specie difficult. Domestic trade was seriously embarrassed, and business men the length and

breadth of the country were driven to the conclusion that their industrial interests could not be regulated to advantage by a legislature three thousand miles distant, most of whose members knew nothing whatever of American conditions.

If anything more were needed to provoke hostility to the Sugar Act, it was supplied in the provisions made for enforcement. The laxness of the years in which an expenditure of £8000 in collection had produced a revenue of £2000 was now replaced by great vigilance. Customs officers were required to reside at their posts and to render systematic accounts as guarantee of efficient service. Writs of assistance authorizing collectors to search private houses suspected of harboring smuggled goods had been granted in 1761 to check illicit trade with Canada, and they were now used with effect for inspection of the West India trade. The war vessels stationed along the coast were ordered to assist in the capture of smugglers, and their officers were sworn in for the revenue service. The courts of admiralty were empowered to try cases of evasion without recourse to jury trial. Serious friction was the inevitable result of these drastic measures.

Weeden, II, 671.

Several enactments calculated to lighten some of the limitations on colonial trade were adopted in 1765 and 1767. The suspension of the import duties on grains, salt meat, fish, and dairy products sent from the American colonies was probably suggested by scarcity in England, but the concession was none the less advantageous to the farming communities. If continued, it might go far toward offsetting the loss of the West India market. The removal of the duty on whale fins was intended to placate New England. An olive branch was offered to the Southern colonies in the shape of bounties on hemp and flax and raw silk. American hides, too, were exempted from duty in British ports. Rice, hitherto an enumerated commodity, was not exempted, but it was allowed (1730) to go to the Spanish colonies as well as to European ports south of Finisterre.

McCrady, II, 615.

The Stamp Act. — The amount of revenue derived from the duties levied under the Sugar Act proved disappointing, but Grenville was hopeful that £100,000 a year might be secured by a stamp tax. Such a measure was already in successful operation in Great Britain, and it would, he believed, work well in the colonies. In March, 1765, the Stamp Act passed both houses of Parliament with little comment, for few of the members anticipated any difficulty in its enforcement. Stamps varying in cost from halfpenny to £10 were required on licenses, deeds, contracts, wills, etc., and on everything printed for sale, such as books, pamphlets, almanacs, newspapers, and playing cards. Stamp distributors were appointed, whose duty it was not only to provide the stamps but to spy upon delinquents. They were ordered to frequent the law offices and the courts and to visit the printers' shops and report all cases of noncompliance. Neglect to affix the proper stamp was punished by fines varying from £5 to £50, and persons selling or hawking almanacs or newspapers not duly stamped were to forfeit forty shillings. The penalty for counterfeiting was death.

Despite these stringent provisions the Stamp Act produced no revenue. Men refused to buy the stamps, preferring to leave contracts unrecorded. Patriotic lawyers declined to accept documents bearing the official seal. Newspapers suspended issue or appeared with a death's-head printed in place of the required stamp. Boxes containing the hated emblems of imperial authority were burned or thrown into the sea. In South Carolina the courts were closed because the stamps could not be used. In Boston the stamp distributor was forced by threats of violence to resign his duties, the stamp office was destroyed, and the house of the lieutenant governor was burned to the ground. The citizens of New York were equally energetic in their rejection of the hated tax. In every town along the coast the efforts of the officers to enforce the use of the stamps were successfully resisted.

McCrady, II, Ch. XXVIII.

The struggle that followed cannot be accounted for on

economic grounds alone. The tax imposed a serious burden on certain business interests, but the political principle involved was far more important than any money loss and affected all classes. The colonists believed that they were entitled to all the rights of Englishmen resident in the British Isles, and that they should not be taxed by an assembly in which their interests were not represented. In this view they were supported by liberal-minded statesmen such as Pitt and Burke. George III and his ministers, on the other hand, had scant sympathy with popular rights, whether in England or America, and held to their own theory of colonial dependence. A series of resolutions, drawn up (1765) by a congress of delegates from nine of the thirteen colonies, was submitted to the king and to both houses of Parliament, but no answer was vouchsafed.

Resolutions of the Stamp Act Congress, Macdonald, 313–315.

Nonintercourse. — Argument having failed of effect, the colonists sought to reach the ear of the mother country through her trade interests. A form of protest very like the modern boycott was determined on. The merchants of Boston signed an agreement to import no goods from Great Britain until the obnoxious legislation should be repealed, and the merchants of New York and Philadelphia adopted similar resolutions. Retail dealers undertook in turn to sell none of the boycotted imports, and their customers, catching at this chance of expressing their indignation, agreed to buy articles of domestic manufacture only. The Daughters of Liberty, an enthusiastic organization of ladies, resolved to purchase no more British goods and to wear only homespun, and these loyal Americans conducted spinning matches where prizes were offered for the best day's work. The senior class in the "university at Cambridge" agreed (1768) to take their degrees "dressed altogether in the manufactures of this country." The students of Rhode Island College imitated this patriotic example in the year following.

Bishop, I, 365–383.

Callender, 143–159.

Meantime a systematic effort was being made to develop domestic manufactures as a substitute for imported goods. As early as 1751 prominent citizens of Boston had sub-

Bagnall, I, Ch. II, III.

scribed capital to a society for "Encouraging Industry and Employing the Poor," and the General Court voted £1500 to aid in establishing a "Manufactory House." Similar societies were organized in New York in 1764, and in Philadelphia in 1775. In these and many smaller towns linen and woolen cloth of a quality approaching the English goods was made up in considerable quantities. The supply of flax and wool being quite inadequate to the new demand, the production of these raw materials was urged upon the farmers. The killing of lambs was discouraged, and butchers exposing this meat for sale were boycotted by the patriotic.

The royal governors and other British officers underrated this movement, representing in their reports to the Board of Trade that the actual achievements of the newly established manufactures were slight; but the ministry soon became convinced that the Americans were in earnest. The demand for English goods fell off alarmingly. Merchants declined to take the risk of shipping the tabooed commodities, and vessels sailed with half a cargo or stayed in port, thus involving their owners in financial difficulties. Manufacturers realized the loss of the American market in diminished sales. Unable to dispose of the goods in stock, they closed their mills, and thousands of workmen were thrown out of employment. Petitions for the repeal of the legislation that had occasioned this business paralysis were forwarded to London, not only from colonial legislatures but from English merchants and manufacturers. Factors found the collection of debts from America increasingly difficult and added their plea to the general protest. The Board of Trade was beset by the angry representatives of great business interests, and petitions poured in at the rate of a dozen a day.

The Repeal. — The Stamp Act had been adopted almost without discussion, but the proposition to rescind brought on one of the longest and fiercest debates that had ever taken place in the British Parliament. Pitt, the consistent opponent of the imperial policy, proposed that the

Lecky, III, Ch. XII

Stamp Act should be repealed absolutely, totally, and immediately, and that the reason for repeal should be assigned; namely, that it was erroneous in principle; but even this warm friend of the colonies urged the assertion of Parliament's prerogative. "Let the sovereign authority of this country over the colonies be asserted in as strong terms as can be devised, and be made to extend to every point of legislation whatsoever; that we may bind their trade, confine their manufactures, and exercise every power whatsoever — except that of taking their money out of their pockets without their consent."

Franklin's Works, III, 407–450.

Franklin, then in London as agent of Pennsylvania, was examined before a committee of the House of Commons as to the temper of the Americans. He stated that they would never submit to the new tax unless compelled by force of arms. "The Stamp Act says, we shall have no commerce, make no exchange of property with each other, neither purchase, nor grant, nor recover debts; we shall neither marry, nor make our wills, unless we pay such and such sums; and thus it is intended to extort our money from us, or ruin us by the consequences of refusing to pay it." To submit, he argued, would involve the colonies in future requisitions, even more onerous and arbitrary. Early in 1766 the Stamp Act was repealed because, as the preamble recites, "the continuance of said act would be attended with many inconveniences and might be productive of consequences greatly detrimental to the commercial interests of these kingdoms." But the king's party had no intention of abandoning the principle at stake.

Attempt to vindicate Imperial Authority. — Just before the repeal, Parliament passed the Declaratory Act, stating in explicit terms that the "Colonies and Plantations in America have been, are, and of right ought to be subordinate unto and dependent upon the imperial crown and Parliament of Great Britain." Esteeming the Declaratory Act an empty threat, the colonists rejoiced in the withdrawal of the stamp tax as a victory for constitutional rights. The South Carolina Assembly voted to erect

a statue of William Pitt in grateful recognition of his services in securing the repeal, the Quakers of Philadelphia celebrated the king's birthday in new suits made of English cloth and gave their homespun to the poor, while in New York and Boston the merchants renewed their orders for English goods. The ultimate victory was, however, by no means assured. The king and his cabinet were more than ever bent upon vindicating the right of Parliament to derive a revenue from the colonies. Late in 1766 the Sugar Act was revised, the duties being lowered; that on molasses from threepence to one penny a gallon, in the expectation that the returns would increase. The expenses of the British garrisons were provided for in the Mutiny Act, which quartered the troops in specified districts, and required the inhabitants to furnish them fuel, light, and lodgings. The irritating obligation was deeply resented, especially in New York, Boston, and Charleston, where the refusal of the people to contribute was indorsed by the assemblies.

This new affront to imperial authority determined the government on drastic measures. Townshend, now the leading spirit in the cabinet, forced through Parliament three fateful enactments. The New York Assembly was suspended from legislative functions until the Mutiny Act should be respected in that province. Commissioners of customs were sent to America with powers adequate to the enforcement of the trade regulations. A new revenue tariff imposed duties on glass, painters' colors, paper, tea, wine, oil, and fruit imported into the colonies and the revenue anticipated from these imposts duties (£40,000 a year) was to be applied to the payment of the salaries of the king's representatives in America, the governors and judges, that they might henceforth be independent of the assemblies. The duties of the Townshend Act were not high, but they were levied on articles of general consumption and added to the cost of living for all classes and all sections. The proposal to render governors and judges independent of colonial legislatures was even more

McCrady, II, Ch. XXXII.

Bassett, The Regulators of North Carolina.

unpopular than provision for a standing army. The men appointed to colonial office were often mere favorites and younger sons of the lords of trade, and they neglected their duties. In the "back country" of the Carolinas lawlessness and crime were actually encouraged by the inefficiency of the justices.

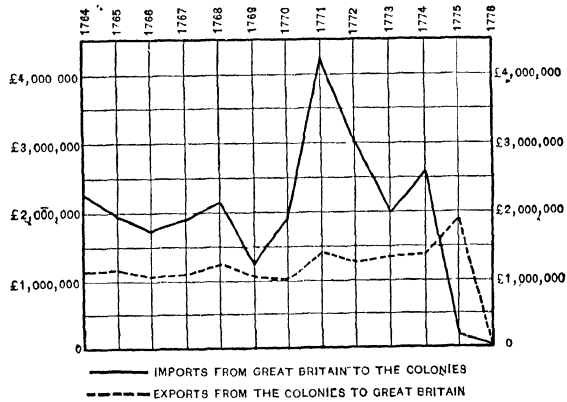
Renewal of Nonintercourse. — Resistance to this new manifestation of the imperial policy was even more widespread and systematic than that called out by the Stamp Act. The nonimportation movement of 1766 had been the work of individuals or of voluntary associations. The movement of 1767 and 1768 was sanctioned by political bodies and was therefore official. The men of Boston in town meeting assembled resolved that "the excessive use of foreign superfluities is the chief cause of the present distressed state of this town, as it is thereby drained of its money; which misfortune is likely to be increased by means of the late additional burdens and impositions on the trade of the Province, which threaten the country with poverty and ruin." Citizens were urged to abstain from the purchase of the taxed commodities. The General Court of Massachusetts indorsed Boston's action by the resolution that "this House will by all prudent means, endeavor to discountenance the use of foreign superfluities and to encourage the manufactures of this province." Similar resolutions were adopted by the legislatures of Connecticut, Virginia, New York, Maryland, and North Carolina. The artisans of Charleston under the lead of Christopher Gadsden assembled under the Liberty Oak and adopted nonimportation resolutions which were enforced by boycott of merchants importing English goods. More backward colonies, such as New Hampshire and Georgia, and more conservative, such as Rhode Island and Pennsylvania, entered into the movement later, and under compulsion. Committees of correspondence and supervision kept watch upon imports and threatened refractory parties, whether colonies or individuals, with nonintercourse.

Bishop, I, 372.

McCrady, II, Ch. XXXIV, XXXV.

The agreement to abstain from the purchase of English

goods was effectively maintained in the colonies where manufactures were sufficiently developed to supply immediate needs. The value of English goods imported into New England was £419,797 in 1768 and but £207,993 in 1769. New York imported £182,930 worth of goods in 1768 and but £74,918 in the following year. The patriots of Pennsylvania succeeded in reducing her imports from £432,107 in 1768 to £199,916 in 1769. But in the Southern colonies the most strenuous measures



TRADE BETWEEN THE AMERICAN COLONIES AND GREAT BRITAIN FROM 1764 TO 1776

could not prevent considerable clandestine trade. Planters' supplies were expressly excepted from the South Carolina boycott. Importation of English goods actually advanced between 1768 and 1769; in Maryland and Virginia from £475,984 to £488,362, in the Carolinas from £289,868 to £306,600, in Georgia from £56,562 to £58,340. The total falling off of £521,129 was, however, sufficient to produce a serious impression on English industries. A corresponding shrinkage of £191,248 in exports to the British Isles advanced the price of American goods to the English consumer and manufacturer. The experience of 1765 was renewed. The seaports and the

factory towns sent remonstrances to the government and besieged the House of Commons with petitions, and the ministry was finally obliged to yield. The Townshend Act was repealed (1770), but the tax of threepence a pound on tea was retained as evidence of imperial authority.

The Tea Tax. — Placated by the seeming victory, the agitators relaxed the boycott on English goods. The merchants gladly renewed their orders, and consumers rejoiced in the prospect of finer cloth than domestic looms could produce; but the embargo on English tea was continued. It had been the policy of the government to assure a monopoly in this popular beverage to the East India Company. All teas destined for the colonies must pass through an English port and pay duty there *en route* to America. The colonists had been accustomed to evade this irksome regulation, and fully nine tenths of the million and a half pounds annually consumed in America was brought directly from Holland or the Orient. The restrictive regulation was now enforced, but to render this monopoly more palatable the tax of a shilling a pound, hitherto collected at the British customhouses, was remitted in case the tea was consigned to an American importer. The East India Company's tea might thus pay the colonial duty and yet retail at a lower price than that charged for the smuggled article. The revenue anticipated (£16,000 per annum) would be but one fourth of the sum remitted in drawbacks, but the British government was determined to assert its authority despite financial loss. The colonists, on the other hand, were equally determined to vindicate their right to self-taxation. Three shiploads of tea arriving in Boston harbor in December, 1773, were boarded by a party of prominent citizens, and more than three hundred chests were thrown into the sea. At New York and Philadelphia the ships were not allowed to land their cargoes and were forced to carry the tea back to London. At Charleston the tea was taken from the consignees and stored in cellars, where it molded and became unsalable. Later importations were thrown into the harbor.

It was evident that the Americans objected to the tax on tea as strenuously as to the stamp tax, and that it could be collected only by force. Pitt and Burke urged conciliatory measures, but the king's ministers believed that there was no choice between the enforcement of the law and complete surrender, and they determined on enforcement. Boston, where defiance had been most outspoken, was selected as an example. The port was declared closed (March, 1774) "because the commerce of his majesty's subjects cannot be safely carried on there nor the customs payable to his majesty duly collected." Landing and shipping of merchandise was forbidden after June first, and men-of-war were detailed to maintain a blockade. The customhouse was removed to Salem. Since the business prosperity of Boston depended almost wholly on commerce, the blow threatened her very existence.

The Boycott Complete. — The cause of the beleaguered city was immediately espoused all along the coast. Salem offered to Boston merchants the free use of her wharves and warehouses. Subscriptions for the relief of the unemployed of the stricken city were taken up in New York and Philadelphia, while the planters of Virginia, Maryland, and South Carolina sent contributions of corn and rice. A solemn league and covenant was signed by patriotic citizens who bound themselves to abstain from all intercourse with Great Britain until the coercive legislation should be repealed. The Virginia Assembly (August, 1774) resolved that no English goods should be imported into that province after cargoes already ordered had been received. Vigilance committees were appointed to enforce this agreement, and offenders were to be blacklisted as the enemies of liberty. This third suspension of commerce with Great Britain was generally opposed by the merchants, who had learned by experience how heavy were the losses involved. In New York and Philadelphia, where the loyalist party was strong, opposition to the costly expedient was determined, and since these ports held a pivotal position, their defection would destroy the

effect of the boycott. The embargo policy was hotly debated in the Continental Congress convened at Philadelphia in September, but in the end, a nonintercourse and nonconsumption resolution was adopted to take effect December 1, 1774. The prohibition covered all English goods, East India Company teas, wines that had paid duty in British ports, sugar and molasses from the British West Indies, and slaves brought to the colonies in British vessels. In case the protested grievances had not been redressed in the interval, exportation of colonial products to Great Britain was to cease after September 10, 1775. (Rice was exempted from this embargo at the request of the South Carolina planters.) It was confidently expected that the inconvenience and distress occasioned in England by the loss of the colonial market would bring the government to terms. The boycott was more vigorously enforced than in 1765 or in 1768, and English imports declined from £2,590,437 in 1774 to £201,162 in 1775; but without effect. The king and his ministers were convinced that to yield now would be to forfeit for all time the claim to imperial authority.

McCrady, II, 764–770.

Nonexportation was attempted in due turn, but this phase of the nonintercourse policy was even more difficult to enforce. In the determination to find a market for their produce, planters evaded the vigilance committees quite as skillfully as they had evaded the king's officers. Virginia sent £73,000 worth of tobacco to England in 1775, and the Carolinas and Georgia £25,000 worth of rice and indigo. This was, however, but one tenth of the exports of the previous year. The shrinkage in total exports between 1774 and 1776 amounted to £1,269,882. The sudden collapse of the American trade, which had hitherto meant one third her maritime commerce, produced serious industrial disturbance in England, but the effect for the colonies was even more disastrous. Merchants were ruined, farm produce glutted the domestic markets, and workmen suffered, for many industries were at a standstill. On the very eve of the Revolution the accustomed supply of arms and ammunition was suddenly cut off.

Pitkin, Hist. of U.S., I, 399, 500–510.

Far from abandoning the principle expressed in the Declaratory Act, Parliament proclaimed Massachusetts in a state of rebellion and ordered additional troops to America. The fishermen of New England were denied access to the Grand Banks, and at the same time (March, 1775) trade was interdicted between the rebellious colonies and all other ports than those of Great Britain, Ireland, and the British West Indies. Nine months later all intercourse with the colonies was prohibited. American vessels when captured on the high seas were declared forfeit, their cargoes were liable to seizure, their seamen might be impressed into the royal navy. In the following March the Continental Congress authorized American vessels to fit out as privateers and so to carry on an armed trade in defiance of the embargo. "The die is now cast," wrote the king. "The colonies must either submit or triumph." The colonists, on their part, were being driven to the conviction that nothing short of complete separation would insure their interests against prejudicial legislation

Restraining Act, Macdonald, 368–374, 391–396.

Pitkin, Hist. of U.S., I, 495–497.

Declaration of Independence, 1776. — The consistent endeavor of the British government to render the colonies a source of profit to the mother country had imposed intolerable shackles on industrial development. Colonial trade had been monopolized by British ships, colonial products had been limited to English ports, colonial manufactures had been restricted or suppressed. The fishing villages of New England were impoverished by the Sugar Act, and the rum distilleries stood idle. At the silent wharves of Boston the merchantmen lay accumulating barnacles in place of profits. In the forests of Maine and New Hampshire hundreds of mast trees, marked with the broad arrow that reserved them for the royal navy, rotted wastefully away. Again and again conflicts broke out between the surveyor-general of the king's woods and the lumbermen who held by "swamp law." The farmers of New York and Pennsylvania protested vigorously against the imposition of quitrents and manorial obligations. In the "back country" of the Carolinas the regu-

Address to the People of Great Britain, Pitkin, Hist. of U.S., I, 473–482.

Ramsay, History of South Carolina, I, Ch. VI.

lators, weary of misrule, had taken matters into their own hands and declared the county of Mecklenburg independent of Great Britain. The grievances of the colonists were not theoretical, but practical and urgent. One fourth of the signers of the Declaration of Independence were merchants or shipmasters. John Hancock, the first delegate to affix his signature to that momentous document, was known as the prince of smugglers, and was even then contesting suits in the admiralty courts that involved £100,000 in penalites.

Industrial Consequences

In the seven years' conflict that followed on the assertion of independence, the chances of success seemed about equally divided. England was handicapped by distance from the scene of war. Soldiers, arms, and equipment must be transported across three thousand miles of stormy sea. The mother country was, moreover, heavily burdened by an unprecedented national debt. Her resources in the way of taxes and customs revenue were, however, assured, for she had a standing army in thorough training and the largest and best equipped navy afloat. The seceding colonies had no treasury and no navy. Their fighting force was made up of militia companies furnished in uncertain levies by thirteen distinct state governments. The troops knew little of army discipline and were seldom adequately provisioned; but the Americans were good marksmen, and they excelled the British in physical endurance and in the self-reliance developed by the vicissitudes of pioneer life. They had the great advantage of fighting over well-known country and under familiar conditions, an advantage fully offset, to be sure, by the material losses necessarily sustained in the country that must submit to the ravages of war.

Callender, 168–179.

The most serious weakness of the seceding colonies was their lack of union. The only central government was the Continental Congress, — a deliberative body with no

constitutional authority to lay taxes or to levy troops. Congress might requisition men and supplies, but had not power to enforce compliance. Each state sent its militia into the field when its own boundaries were invaded, but was loath to furnish troops for a distant campaign. The taxes levied by the state legislatures were expended by the same authority, and they were slow to make over any of their scanty revenues to the general treasury. The ultimate success of the colonists was due to political divisions in England and the French alliance, rather than to the strength of their own defense.

Ramsay, Am. Rev., II, App. IV.

National Bankruptcy. — The long controversy had bred in the Americans a hearty abhorrence of taxation. The people who had repudiated the authority of Parliament would not readily respond to the levies of the state legislatures. Both state and continental governments were obliged, therefore, to resort to the issue of bills of credit in order to meet the expenses of the initial campaigns. This easy method of meeting financial obligations had been discredited in the eyes of business men by previous experience of such issues and by the commercial advantages Massachusetts had derived from the resumption of specie currency. The mass of the people, however, were convinced that there need be no difficulty in giving this fiat money full purchasing power. It was cheap and convenient and would remain in circulation, whereas the unpatriotic British coins persisted in abandoning the country. Six of the colonies had already issued paper money before the outbreak of hostilities. When Congress assumed responsibility for the general defense, the New York Assembly forwarded recommendations for the issue of bills of credit, "since it is clearly impossible to raise any sum adequate by tax." "Do you think," argued one of the delegates in the Continental Congress, "that I will consent to load my constituents with taxes when we can send to our printer and get a wagon-load of money, one quire of which will pay for the whole?"

Bolles, Financial Hist. of U.S., I, Bk. I, Ch. III, IX, X.

Callender, 180–195.

Webster, Political Essays, 8.

In June, 1775, one week after the appointment of the

Dewey, Ch. II.

White, Money and Banking, Bk. II, Ch. II.

Sumner, Hist. Am. Currency, 43–54.

Ramsay, Am. Rev. App. II.

Sumner, Financier and Finances of the Am. Rev., I, Ch. IV.

commander-in-chief of the Continental army, Congress authorized the issue of $2,000,000 in bills of credit. These notes entitled the bearer to receive a given number of Spanish milled dollars at a time and place not specified. The responsibility for redeeming the notes was distributed among the several colonies in proportion to population, and each colony was to meet its respective obligation in four annual payments dating from November 30, 1779. Another $1,000,000 was issued in July and $3,000,000 more before the end of the year. Early in 1776, when news came that the English government was to send over foreign mercenaries, still greater appropriations were called for, and Congress had ordered the issue of $14,000,000 before the Declaration of Independence was signed. The bills, imperfectly guaranteed and bearing no interest, were less acceptable to government creditors than specie, and Congress, well aware that further issues would weaken public confidence in the redeemability of the notes, cast about for other means of meeting military expenses.

In October, 1776, a loan was authorized. Bonds were issued to the amount of $5,000,000, bearing interest at the rate of four per cent. They did not find a ready sale. The rate of interest was too low and the credit of the government too uncertain to render this an attractive investment. Later bond issues bore six per cent interest, but capitalists were loath to risk their money on so dubious a venture. Benjamin Franklin succeeded in borrowing $6,000,000 from France, and John Jay undertook to secure aid from the Spanish government; but less than $35,000,000 was derived from loans at home and abroad. In November, 1776, Congress had resort to the then entirely honorable expedient of raising money by a government lottery. One hundred thousand tickets were printed and placed on sale, and the sanguine authors of this scheme hoped to secure $1,500,000 in specie; but the prizes, treasury certificates payable in five years with interest at four per cent, were not sufficiently alluring to delude many into taking lots. In December of this same year Con-

gress requested the state legislatures, with whom the taxing power then rested, to raise the much needed revenue from their several constituencies; but the state authorities had their own expenses to meet, and had reason to dread the storm that might follow an attempt to levy taxes. No more than $6,000,000 was ever derived from the state requisitions. Congress then recommended the state governments to confiscate the property of British sympathizers to the needs of the Revolution and to authorize the payment of debts due British merchants into their own treasuries and in paper money. Some $16,000,000 was secured in this unworthy fashion.

Sabine, Loyalists of Am Rev., I, Ch. XI, XII.

Van Tyne, Loyalists in Am Rev, Ch. XII, XIII.

In October, 1778, when $63,000,000 in bills of credit had been issued and one dollar in specie was worth five in paper, Congress, finding this a costly method of provisioning the army, urged the several states to furnish supplies in kind. Virginia was requested to contribute twenty thousand barrels of Indian corn, and the Northern states sent flour, beef, rum, and hay. The cost of transporting these stores was often great, since the army might be distant from the source of supply, and the device was soon abandoned. The state governments did, however, authorize the commissioners to seize food, fuel, and clothing wherever needed, giving certificates of indebtedness in exchange. This most irritating and unequal form of requisition was only justified by the extremities to which the army had been reduced in the previous winter at Valley Forge. It was a hand-to-mouth policy, and placed the American authorities in unfortunate comparison with the British commissariat, where supplies were purchased in good gold and silver coin.

All other expedients proving inadequate, Congress was finally forced to fall back on the emission of bills of credit. In the first eight months of 1770, $100,000,000 was issued, and the purchasing power of the paper dollar declined from one sixth to one twentieth that of specie toward the close of that year. In September Congress, aghast at the prospect of rapid depreciation, resolved to limit the total

issue to $200,000,000, and addressed a circular letter to the American people stating the guarantee for the ultimate redemption of the notes. John Jay argued that the fulfillment of this obligation was pledged on the faith of the confederated states, each of which had assumed its due portion of the debt. The resources of the country were limitless, population was increasing with extraordinary rapidity, the tax-paying capacity of the states would be amply sufficient to meet the payments before they fell due. Even though the war debt should amount to $300,000,000, the quota falling upon the individual citizen would be slight. It was inconceivable that an obligation assumed under circumstances so solemn and compelling should ever be repudiated. "A bankrupt, faithless republic would be a novelty in the political world. . . . The pride of America revolts from the idea; her citizens know for what purposes these emissions were made, and have repeatedly plighted their faith for the redemption of them; they are to be found in every man's possession, and every man is interested in their being redeemed." Eloquent and forceful as was the appeal, it could not stay the decline in value of the currency. Before the end of the year a paper dollar was worth but two or three cents in specie, and Congress had been obliged to issue notes up to the $200,000,000 limit. No further issues were authorized.

Public Papers of John Jay, I, 218–236.

The forty several emissions of Continental currency amounted to $241,552,780, but since notes were occasionally cancelled, probably no more than $200,000,000 were in circulation at any one time. In this respect, therefore, Congress kept to its resolution, but not so with the pledge to redeem. The notes were never taken up at their face value. In November, 1780, when the bills were exchanging for specie at one hundred to one, Congress recommended the states to recall them in exchange for bills of new tenor at the rate of forty to one, and some $119,400,000 were thus canceled. In 1790, $6,000,000 more were taken at the United States Treasury in payment on government bonds at the rate of one hundred to one. The remaining $75,000,000 were

Schuckers, Revolutionary Finances, 125.

Sumner, Hist. Am. Currency, 55–60.

lost or destroyed as worthless paper. The depreciation of the Continental currency was accelerated by state issues to the amount of $209,524,000. These bills circulated quite as freely as the congressional notes, and brought the volume of currency up to $450,000,000, a grand total greatly in excess of the business needs of the country. The decline in purchasing power had been due almost as much to excessive issue as to the lack of confidence in the ultimate redemption of the notes.

The effect of meeting the military emergency by credit money was equivalent to a heavy and unequally distributed tax, the greater part of which was borne by the immediate creditors of the government. The obligations represented in bills of credit, loans, and certificates of indebtedness amounted to $650,000,000, fully one third of which was repudiated. If specie had been available, the cost of the war might have been met by an expenditure of $135,693,000.

Pitkin, Stat. View, 26, 27.

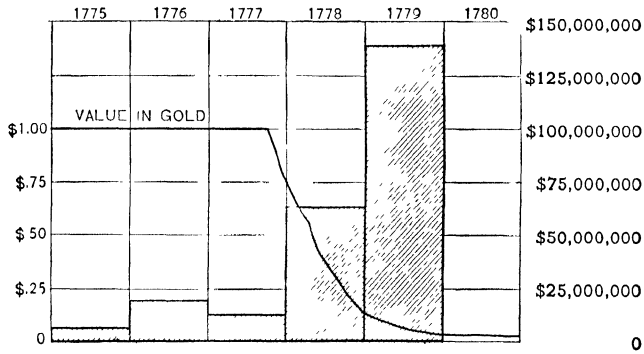
Bolles, Financial Hist of U S., II, Bk. I, Ch. III.

It would be difficult to prove that the central government, as then constituted, could have met the financial emergency in any other way. The debates of the period show a full recognition of the dangers of the road on which the government had entered. The limit of $200,000,000 was originally set for the emission of Continental currency as the point that might not be passed in safety. Congress repeatedly protested against further state issues and besought the state assemblies to withdraw their bills from circulation, but in vain. The state authorities were in equally serious straits and quite as unable to get back to a specie basis. Desperate efforts were made to sustain the value of the paper money. In vain Congress solemnly resolved that "any person who shall hereafter be so lost to all virtue and regard for his country as to refuse the bills or obstruct and discourage their currency or circulation, shall be deemed, published, and treated as an enemy of the country, and precluded from all trade and intercourse with its inhabitants"; the most loyal adherent of the Revolution would not receive the bills at par. In vain the

McLaughlin, Confederation and Constitution, Ch. IV.

Bolles, Financial Hist. of U.S., I, Bk. I, Ch. XII.

states declared the bills legal tender in payment of all debts, public and private, and imposed heavy penalties on persons refusing to receive them; men preferred forfeiting their property outright to receiving worthless bills in exchange. In vain did price conventions undertake to check the rise of prices by fixing on a maximum limit for wages of labor, boat and carriage fares, inn charges, prices of manufactures, farm produce, and imports; the scale had to be advanced from year to year to keep pace with the decline in the value of money, until the rates of 1780



CONTINENTAL CURRENCY, EMISSIONS AND DEPRECIATION

were twenty times the prices prevailing in 1774. Even so it was impossible to enforce the legal tariff. Farmers would not bring their produce to market nor would merchants import goods to be sold for depreciated paper. Finally men abandoned the use of money altogether and had resort to barter. When, in the last years of the war, the specie brought in by the English army and the French fleet came into general circulation, the Continental currency disappeared and prices dropped to the former level, in accordance with an economic law stronger than any statutory enactment.

Bolles, Financial Hist. of U S., I, Bk. I, Ch. XI, XVI.

The depreciation of the currency had a demoralizing effect on business relations. Debtors were enabled to meet their obligations in legal tender worth but a fraction

of the value received. Trustees defrauded their charges by paying over their remittances in paper. Speculators trafficked in money of varying values, clearing profits off the fluctuations from time to time and from place to place, and thus made fortunes out of the national disgrace. The extraordinary advance in prices was regarded as sufficient justification for the intimidation of merchants and the forcible seizure of goods. "Speculation, Peculation, Engrossing, forestalling," wrote Washington, "afford too many melancholy proofs of the decay of public virtue. . . . Nothing, I am convinced, but the depreciation of our currency . . . aided by stock-jobbing and party dissensions, has fed the hopes of the enemy."

Writings of George Washington, VII, 291.

McLaughlin, Ch. IX.

Writings of George Washington, VII, 388.

Commercial Gains and Losses. — With the achievement of independence, American trade was set free from the restraints imposed by England's colonial policy. Immense benefits were anticipated from this emancipation. "Our commerce," wrote John Jay, "was then confined to Great Britain. We were obliged to carry our commodities to her market and, consequently, sell them at her price; we were compelled to purchase foreign commodities at her stores and on her terms and were forbidden to establish any manufactures incompatible with her view of gain. In future the whole world will be open to us, and we shall be at liberty to purchase from those who will sell on the best terms and to sell to those who will give us the best prices." These hopes were not immediately realized. The nonintercourse policy had involved merchants and shipowners in financial embarrassment. Parliament's prohibition of American trade, first with foreign countries and then with the British dominions, had been rigorously enforced by an effective navy, and commercial ventures were abandoned because the risks were greater than the chances of profit. Many merchants took out letters of marque and reprisal and armed their vessels. Three or four hundred privateers rendered valiant service throughout the war, defending our coasts and attacking merchantmen and men-of-war flying the Union Jack on the high seas.

Public Papers of John Jay, I, 230.

McLaughlin, Ch. V.

Maclay, Pt. I, Ch. IV–XVI.

Some six hundred prizes fell to their share, and the prize money went far toward offsetting the losses of the merchant marine.

Callender, 196–220.

The major part of our transatlantic trade had been with Great Britain and her dependencies. Independence placed us outside of the Navigation Act and deprived us of the commercial advantages hitherto accorded American vessels in British ports, and this commerce received a serious check. The younger Pitt, the constant friend of America, proposed (1783) that the commercial relations between Great Britain and the United States be established on the principle of reciprocal benefit. American ships were to be admitted on the same terms as those of any independent nation, and the goods brought in should be subject only to such duties as were imposed on goods from the British colonies. This wise and liberal policy was set aside because protested by the English shipping interest. It was urged that American vessels, built more cheaply and manned more easily than were their British competitors, would soon secure the whole Atlantic trade, and that the United States was likely to become a more dangerous rival than Holland had been. British subjects were forbidden to purchase American-built ships. Not only were American vessels classed as foreign under the Navigation Act, but the seceded territory was treated as thirteen distinct states, and an American vessel was excluded unless her cargo consisted of the products of the particular state where her owners resided. In 1783 an Order in Council denied American vessels access to the ports of the British West Indies under any conditions, and forbade the importation of fish, beef, and pork from the United States, even when carried in English ships. More than one third the vessels clearing from Boston and New York in the decade before the Revolution had sailed for these ports, and under the new regulations American merchants forfeited a trade worth $3,500,000 a year. To the planters of Jamaica and the Bahamas this arbitrary prohibition was nothing less than disaster. Fifteen thousand slaves died of starvation in the next four years.

Pitkin, Hist. of U.S., II, 186–192.

Marvin, Ch. III.

Sheffield, American Commerce, 1–6, 134–218.

Callender, 208–220.

Other business interests experienced the ill effects of separation. Exports, such as indigo, naval stores, and hemp, dwindled because of the withdrawal of the bounties formerly paid by the British government. In place of this stimulus, duties levied in the English ports actually checked the exportation of these articles. The ship-builders, too, lost their best market, and the whalers were no longer on an equal footing with their British competitors. Moreover, the prohibitory duties of the Corn Law were imposed upon our agricultural products. Our trade with the French and Spanish West Indies, with Europe and the Orient, free so far as ships were concerned, was hampered by prohibitions and restrictions on the goods that might be imported.

The Congress of the Confederation attempted to negotiate a commercial treaty with Great Britain that should secure more advantageous terms, but these overtures were rejected. English merchants were well content with the trade regulations enacted by their own government, and English statesmen openly denied the ability of Congress to enforce any commercial agreement upon thirteen unruly states. In other directions Congress was no more successful in protecting the commercial interests of American citizens. Spain claimed proprietorship in both banks of the Mississippi and, by consequence, the monopoly of trade along that important waterway. The attempt to negotiate a treaty giving American vessels equal rights failed. The settlers west of the Alleghanies bitterly protested the surrender of their only means of reaching a market, and plotted secession. Negotiations with other European courts came to little result. Said Washington, "We are one nation to-day, thirteen to-morrow, who will treat with us on these terms?"

Pitkin, Hist of U S., II, Ch. XVII.

Callender, 221–231.

Conflicting commercial legislation was the inevitable result of the diverse interests of the states. Massachusetts and New Jersey originally declared for free trade in the interests of commerce. Virginia continued to levy an export duty on tobacco and an import duty on liquors as the

Hill, First Stages in U. S. Tariff Policy, 490–527.

Pitkin, Stat. View of U S., Ch. II.

Stanwood, American Tariff Controversies, I, Ch. II.

easiest means of securing a revenue. Pennsylvania, Rhode Island, and New York, and eventually Massachusetts, laid heavy taxes on foreign luxuries, such as wines, tea, coffee, sugar, and coaches, in the interest of revenue, and imposed duties on certain manufactures in order to protect domestic industries against English competition. New York and Pennsylvania discriminated against foreign (especially British) traders by doubling the duties on goods imported in British vessels. Even interstate commerce, *e.g.* in tobacco, was subjected to imposts. The Atlantic coast was thus divided into thirteen distinct customs districts, each pursuing an independent policy, and the state authorities not infrequently came into conflict as to the limits of their respective jurisdictions. Virginia and Maryland were at loggerheads over the navigation of the Potomac, while Pennsylvania and Delaware disputed control of the Delaware River. Soon it became evident that Congress could not bring Spain and Great Britain to terms nor negotiate other commercial treaties without power to make and enforce uniform regulations.

Development of Manufactures. — Independence put an end to the restrictions imposed by Parliament on American manufactures. Woolen cloth and beaver hats could now be sent to any market at home or abroad, and slitting mills, foundries, and steel furnaces might be erected without let or hindrance. The nonimportation resolutions and the embargo combined to stop the inflow of foreign goods, and the special demands created by the war gave extraordinary stimulus to certain industries. Cannon, muskets, anchors, etc., no longer to be had from England, were wrought in the foundries of East Bridgewater, Canton, Springfield, and Easton, Massachusetts. Considerable steel was made into muskets at Lancaster, Pennsylvania, and at Trenton, New Jersey. The Sterling works cast the guns for the battleship *Constitution* and the links of the iron chain that was stretched across the Hudson at West Point as a barrier against the British fleet. At the Principio works in Maryland the English owners having



REEL AND SPINNING WHEEL STILL USED IN KENTUCKY MOUNTAINS

lost control, cannon balls were cast for the use of the Continental army. The fact that the Washington family held one twelfth interest in the plant may have determined this patriotic service.

Salt was another necessity that had now to be produced at home, the supply from Portugal and the West Indies being cut off by the war. The salt works along the New England coast immediately doubled their capacity. Tanks for boiling the brine were set up at New Bedford and on the "back side" of Cape Cod. The salt wells of Onondaga County, New York, long known to explorers and pioneers, began to produce for the market in 1788.

U. S. Census, 1900, IX, 532.

Dwight III, 79–81.

The textile industries experienced no slight advantage from the decade during which domestic manufactures had the monopoly of the American market. Clothing for the army as well as for ordinary wear was made up at home, and many a militiaman went to the war clad in a suit made of wool shorn from his own sheep, spun and woven and fashioned by the women of his household. Production was stimulated by the war demand, and every community strove to produce greater skill, better implements, and more raw material. Governor Colden of New York had reported to the Board of Trade in 1765 that "all the wool in America is not sufficient to make stockings for the inhabitants," but systematic effort increased the supply to the point of meeting immediate need in the decade following. The New York society for the "Promotion of Arts, Agriculture, and Economy" offered premiums for linen yarn, linen cloth, woven stockings, etc. The sum of £10 was proposed for the first three stocking frames of iron that should be set up in the colony, a medal for the first flax mill run by water power, and £30 for the first bleaching field. At the Manufactory House on Tremont Street, Boston, a spinning school was opened where expert mistresses taught this useful and popular art. William Molineux, the director, boasted that they had "learned at least three hundred children and women to spin in the most compleat (*sic*) manner." A dozen looms were kept

Bishop, I, 383–423.

Bagnall, I, Ch. III.

Weeden, II, 732–733.

busy weaving woolens, linen, duck, and sailcloth, and a bleaching yard, fulling mill, and dye works were operated on the same premises; but the occupation of Boston by British troops and the subsequent siege ruined this enterprise. The American Manufactory, set up on the corner of Ninth and Market Streets, Philadelphia, employed some five hundred people in making linen and woolen cloth. The yarn was supplied by women who spun in their own homes the flax and wool furnished them by the company. The business was suspended with the British occupation; but another Philadelphia factory, established by Samuel Wetherill, successfully filled a large contract for army clothing, woven and made up in the same shop. Reading and Lancaster were also important manufacturing centers. In New Jersey there were forty-one fulling mills for finishing the cloth woven in the farmhouses, but no factories. The linen and woolen factory of Baltimore, opened in 1776, was granted a subsidy by the state legislature, and several private enterprises were soon established. Everywhere north of the Chesapeake the output of linen and woolen cloth was sufficient for domestic needs. Farther south the native cotton was the only available fiber, and spinning wheels and looms were scarce. Nevertheless, the patriotic managed to clothe themselves and their slaves with homespun, and a considerable industry was developed. In 1786 Jefferson wrote to a friend: "The four southernmost states make a great deal of cotton. Their poor are almost entirely clothed with it in Winter and Summer . . . the dress of the women is almost entirely of cotton manufactured by themselves, except the richer class, and even many of these wear a good deal of home-spun cotton. It is as well manufactured as the calicoes of Europe."

Phillips, II, 314–330.

The Farmer's Opportunity. — Certain agricultural interests suffered from the withdrawal of the British bounties. The turpentine industry felt the effect of falling prices, and the indigo planters were ruined. Lumbermen discovered that full license to fell the finest trees hardly compensated for the failure of the British bounties. These losses were

eventually made good by the opening of new markets in Europe and by the increase in the domestic demand consequent on the rapid growth of population. For the rice and tobacco planters, the removal of all restraint on the destination of their exports was an unqualified advantage.

Of even greater importance to the agricultural future of the country was the abolition by the state legislatures of every vestige of feudal land tenure. The agitation was begun by Thomas Jefferson in Virginia and was taken up by the democratic leaders of the other Southern states. Primogeniture no longer determined the line of inheritance and perpetuated great estates, while entail and all other restraints on the transfer of landed property ceased. The payment of quitrents was no longer required, and the fee simple titles became absolute and unconditioned. The rights of the proprietors to the unsettled districts of Pennsylvania and Maryland terminated, and these estates, together with the crown lands, lapsed to the state. New York and Massachusetts sold their western lands in large tracts to speculators who resold at an advanced price to actual farmers. So the fertile lowlands that formed the ancient bed of Lake Ontario and Lake Erie were settled, and prosperous little communities developed.

Sato, Land Question in U.S., 273–277.

Weld, 172–173.

Randall, Life of Jefferson, I, 194–229, 397–400.

Shepherd, Proprietary Government in Pennsylvania, 1–93.

Weld, II, 325–338.

The Antislavery Movement. — The importation of African slaves had been regarded as a temporary necessity that would cease when immigration and the natural growth of population should render the supply of white labor sufficient. Even in the Southern colonies, where slave labor was evidently profitable, it was keenly felt that the planter's money gain was more than offset by the social and political evils that might accrue to the community. South Carolina, Maryland, and Virginia had each attempted to restrict the importation of slaves by laying customs duties, sometimes so high as to be prohibitory. Any serious check on the slave trade was, however, quite inconsistent with British policy, and adverse legislation was promptly vetoed. The Royal African Company was importing annually (1713–1733) from five to ten thousand slaves

Dubois, Suppression of the Slave Trade, Ch. II–V.

American Husbandry, I, 228–229, 246, 264, 415–424, 427–428; II, 25, 29, 345, 395.

to the American colonies, and its stockholders had great social and political influence. After the monopoly was withdrawn, private merchants urged the continuance of this highly profitable trade. In 1717 Maryland laid a duty on imported slaves. Virginia had imposed a duty of £5 in 1710, but the bill was rejected by Governor Spotswood because of the check on importation. Similar bills passed the House of Burgesses in 1723, 1766, and 1769, only to be disposed of by veto. South Carolina laid import duties ranging from £10 to £100 and proposed to devote the revenue collected to defraying the expense of bringing in white servants. In 1760 the legislature passed a law forbidding the importation of slaves into this colony; but the act was disallowed by the Privy Council, and the governor who had signed it was reprimanded. In 1772 the Virginia Assembly addressed a protest to the king. "The importation of slaves into the colonies from the coast of Africa hath long been considered as a trade of great inhumanity, and under its present encouragement, we have too much reason to fear will endanger the very existence of your majesty's American dominions. . . . Deeply impressed with these sentiments, we most humbly beseech your majesty to remove all those restraints on your majesty's governors of this colony, which inhibit their assenting to such laws as might check so very pernicious a commerce."

McCrady, II, Ch. XIII, XX.

Phillips, II, 29–30.

Tucker, Dissertation on Slavery, 45.

In the Northern colonies the economic as well as social and political advantage was with free white labor, and but few slaves were held. The trade in slaves was, however, a highly profitable one. Duties were levied at the ports both for revenue and to discourage importation, but the trade was left untrammeled by the provision that the duty should be remitted in full when the slave was reexported. Boston and Newport and other New England ports became open slave marts where slaves brought from the Gold Coast were held until a suitable market should be found.

The struggle for independence wakened a keener ap-

preciation of human rights. Slavery had long been protested by the Society of Friends on religious grounds, and the protection given to the slave trade by Great Britain was resented as an ugly phase of her selfish colonial policy. Virginia, in her nonimportation resolutions of 1769, had recommended that merchants import no slaves and purchase none imported until the Townshend Acts should be repealed, and the nonimportation movement of 1774 called out declarations from both Virginia and North Carolina against the further importation of slaves. Massachusetts (1771 and 1774) and Delaware (1774) undertook to prohibit importation, but their bills were vetoed by the royal governors. The Rhode Island Friends succeeded in securing a law forbidding the importation of negroes; but a permissive clause allowed vessels belonging to that colony to bring in slaves that could not be sold in the West Indies, provided the master gave bond to deport every such slave within the year. Connecticut alone achieved absolute prohibition of the slave trade (1774) before the war. On October 15, 1774, the Continental Congress, in behalf of all the colonies, resolved: "We will neither import nor purchase any slave imported after the first day of December next; after which time we will wholly discontinue the slave trade, and will neither be concerned in it ourselves nor will we hire our vessels nor sell our commodities or manufactures to those who are concerned in it." This remarkable declaration called out little comment except in Georgia. There the planters put up a strong opposition, and the ratification of the agreement was delayed until the threat of a boycott forced the laggard colony to fall into line. On April 3, 1776, Congress voted that no slave "be imported into any of the thirteen colonies"; but this prohibition marks the high-tide of the anti-slavery movement.

Locke, Anti-Slavery in America.

In the original draft of the Declaration of Independence the king of Great Britain is charged with waging "cruel war against human nature itself, violating its most sacred rights of life and liberty in the persons of a distant people

Writings of Jefferson, I, 28.

who never offended him, captivating & carrying them into slavery in another hemisphere, or to incur miserable death in their transportation thither. . . . Determined to keep open a market where MEN should be bought & sold, he has prostituted his negative for suppressing every legislative attempt to prohibit or to restrain this execrable commerce." Spite of the great influence of Jefferson and the efforts of the Virginia and Massachusetts delegates, this denunciation of the slave trade was struck out of the final form, "in complaisance to South Carolina and Georgia, who had never attempted to restrain the importation of slaves, and who, on the contrary, still wished to continue it. Our northern brethren also, I believe, felt a little tender under those censures; for though their people had very few slaves themselves, yet they had been pretty considerable carriers of them to others."

Writings of Jefferson, I, 34.

The basis for this accusation of complicity was soon removed. In the years immediately following on the adoption of the Federal Constitution, the Northern states without exception barred the slave traders from their ports. Massachusetts, in 1780, abolished slavery within her jurisdiction. Before the close of the eighteenth century, gradual emancipation had been ordained by law in all the New England states, as well as in New York and Pennsylvania. The emancipation movement found expression in the generous offer made by most of the Northern states of full and complete freedom to any negro or indentured servant who would enlist for service in the Continental army, while Congress undertook, at Washington's urgent request, to recoup the masters of enlisted servants by grants from the public domain. One of the important effects of the Revolutionary War was to convert a considerable number of emancipated slaves and indentured servants into free laborers and farmers.

The Conquest of the Ohio Valley

The struggle for independence had two distinct phases. The first and best known, the revolt against British rule, was the work of the Atlantic coast colonies; the second and hardly yet appreciated, the winning of the Western territory, was the achievement of the pioneers who pushed across the mountains and took possession of the country drained by the streams that empty into the Mississippi. North of the Ohio River and south of the Tennessee, two great Indian confederacies held sway, the Iroquois and the Cherokee. Between these hostile "nations" lay a debatable country which no Indian tribe dared claim. A rich, heavily forested region, teeming with game, it was frequently raided by hunting parties seeking deer, elk, or buffalo, or by war bands in pursuit of human prey; but the aborigines planted nothing more substantial than summer camps within the "dark and bloody ground." This unoccupied territory was the path of least resistance for the impending westward movement of white civilization. It was claimed by Virginia in virtue of the "sea to sea" grant made to the London Company by James I, but the paper title would have counted for little had not the land been peopled by Virginians. The fact that the most practicable mountain passes opened from Virginia gave her citizens first entry into the new territory, and thus she became the mother of the first commonwealths beyond the mountains. From the Great Valley four natural highways led across the Alleghanies: up the Potomac to Fort Cumberland, over the pass and down the Youghiogheny to the Monongahela, and so down to Fort Pitt and the Ohio, and thence by raft, keel boat, or schooner to the Falls. This last portion of the route was speedy but hazardous, for the river was treacherous except at high water, and hostile Indians lurked in the forests of the northern shore. The Greenbriar and Kanawha cut a second pass over which, the rivers being impracticable, a road was later built into the heart of Kentucky. But most of the

Roosevelt, I, Ch. V, VI, VII.

Winsor, Westward Movement, Ch. IV, VI.

Imlay, Description of Western Territory.

Semple, Ch. IV.

Hulbert, Braddock's Road, Ch. VI, VIII

James Flint, Letters from America, 97, 105, 109–110.

Hulbert, Boone's Wilderness Road.

men who crossed the mountains in the Revolutionary period chose the path over Cumberland Gap. This route was comparatively free from Indians and practicable at all seasons. The Tennessee River, navigable for boats of light draft, from its source in Holston Valley till it empties into the Ohio, made another highroad into the wilderness; but this river was far more difficult than the Ohio, and its banks were infested by Indian freebooters, the Chickamaugas. Nevertheless this was the usual route into the southwest territory.

Roosevelt, I, Ch. X, XII; II, Ch. VIII, XI.

The Backwoods Settlements. — Adventurous hunters, French and Spanish Creoles, as well as Americans, had penetrated the wilderness beyond the mountains in pursuit of game and pelts. Indefatigable traders from Philadelphia and New York floated their merchandise down the rivers and followed the buffalo trails far into the interior, carrying on stout pack horses the rum, firearms, and trinkets that were to be exchanged at fabulous profit for skins and furs. Surveyors, sent out by state authorities or by land speculators, ran their boundary lines through the primeval forest with infinite toil and no little danger, but since each party worked quite independently, their surveys resulted in an inextricable tangle of conflicting claims. None of these, however, were settlers; they but prepared the way for the real westward movement. The coming of the pioneer farmers, the men who proposed taking up land and building homes, coincided with the epoch of the Revolution. By 1770 tidewater Virginia was full to overflowing, and the "back country" of the Blue Ridge and the Shenandoah was fully occupied. Even the mountain valleys of the Yadkin, the Watauga, the French Broad, and the Holston, were claimed by colonies of sturdy pioneers. Before the Declaration of Independence the oncoming tide of home seekers had reached the crest of the Alleghanies.

Weld, I, 214–216, 230–234.

The invading wave gathered in its tide men of diverse races and conditions. Scotch-Irish and Germans moved south along the Great Valley from Pennsylvania or up the

seagoing rivers from Charleston. Dutch from the Hudson, Swedes from the Delaware, Huguenots from the port towns, "followed the immigration." Every man who felt the need of elbowroom and had pluck and muscle for the vicissitudes of the frontier, ventured his fate in *Kenta-ke.* Younger sons of planters seeking land, redemptioners who had served their terms and others escaped from service, political offenders and ne'er-do-weels, outlaws of every type, sought a chance to better their fortunes in the new world beyond the mountains. The adventure was as great as that made by the first settlers at Plymouth and Jamestown. The journey across the Appalachians was quite as serious an obstacle as the transatlantic voyage, the costs were no less, and the dangers far greater. The men and women who had the hardihood to make this trip, by foot or on pack horse, over the Indian-haunted trails, were steeled for the multiform adversities of the backwoods.

The first permanent settlement in Kentucky was financed by the Transylvania Company, a business association organized by Richard Henderson, a surveyor from North Carolina, a "man of no inconsiderable abilities and more enterprise." He secured title to the region between the Kentucky and the Cumberland rivers by treaty with the Cherokees and immediately sent a party of thirty men under guidance of Daniel Boone, the famous hunter and surveyor, to clear a trail from the Holston to the Kentucky and to build there a palisaded fort. On the 20th of April, 1775, Henderson arrived in Boonesborough with the bulk of the colonists. There he opened a land office and proceeded to grant farms in tracts of four hundred acres and upwards. Henderson anticipated a revenue from quitrents due on the land and from the trade that would develop with the settlements, but he was disappointed. The unruly pioneers refused to pay rent, and the Virginia authorities protested his Indian title, so the Transylvania Company came to grief; but the grants made to actual settlers were ultimately confirmed in fee simple by the legislature of Virginia.

Thwaites, Daniel Boone, Ch. IX.

Three other settlements were founded in Kentucky in 1775, Harrodstown, Boiling Spring, and St. Asaphs or Logan's Station. In 1779 John Robertson, the leading spirit of the Watauga colony, led a migration along the Cumberland River to the Bluffs and there founded Nashboro. Every such settlement centered in a palisaded village where the families were housed during the Indian raids. Each settler felled the trees, planted corn, and built a log hut in the land assigned him; but the cabins in the isolated clearings could not be defended against serious assault.

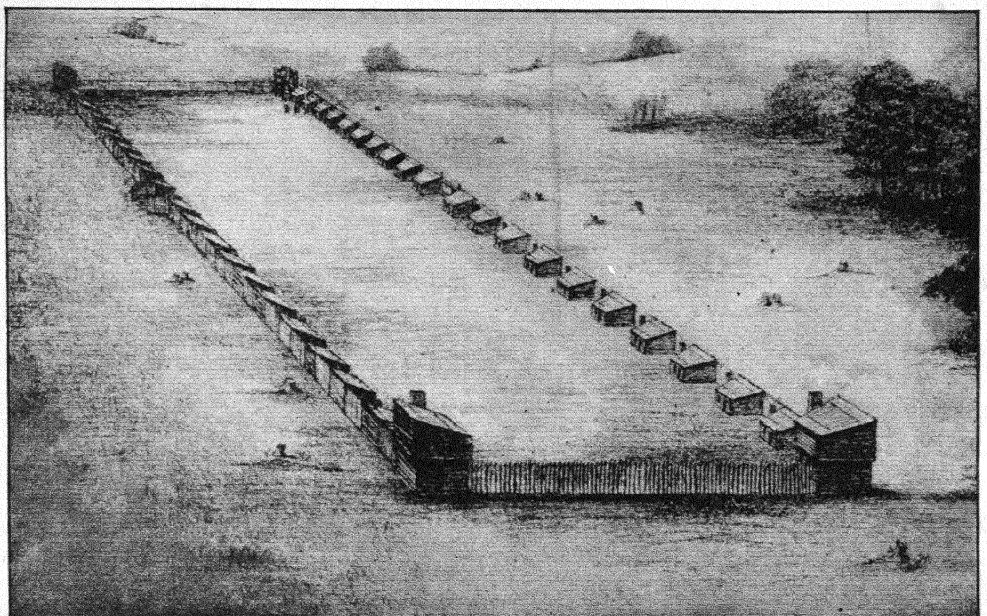
Imlay, 149.

Roosevelt, I, Ch. XI; II, Ch. I-V; III, Ch. II, VII; IV, Ch. I, II.

Winsor, Westward Movement, Ch. VIII, XIII.

Indian Wars. — Ever since the acquisition of this territory in 1763, it had been the policy of the British government to withhold the lands from settlement in the interest of the fur trade. Now that the settlers were also rebels, a systematic effort was made to drive them back to the seaboard. Cameron, the representation of King George on the Carolina frontier, incited the Cherokees to take the warpath against the invaders, and throughout 1776 the border settlements were ravaged by fire and tomahawk. The Watauga men, aided by militia from Virginia, North and South Carolina, and Georgia, finally succeeded in forcing the tribes to make peace and to yield a considerable portion of their lands to the Americans. Thenceforth the pack trains of the pioneers traveled the Wilderness Road free from the fear of molestation.

In Kentucky the contest against the Indians and their British allies proved an even more serious affair, for Hamilton, the British commander at Detroit, supplied the Iroquois with arms and bribed them to raid the American outposts. No frontier settlement, from Fort Pitt and Fort Henry on the Ohio to the palisaded villages of Kentucky, was exempt from their cruel assaults. The ferocity of the savages was matched by the fury of the backwoodsmen, many of whom cherished an hereditary hatred of England, most of whom had lost wife or child or friend through this latest development of British policy. All the toil and suffering that had gone to the building of the frontier



BRYANT'S STATION

Plan drawn by George Rogers Clark.

settlements seemed likely to end in ruin, when Colonel George Rogers Clark, the most adroit of Indian fighters, determined to carry the war into the enemy's country. Having secured funds and ammunition from Patrick Henry, then governor of Virginia, he issued a call for volunteers. The mother state could spare no men; but the "long hunters" of the frontier found here their opportunity to pay off old grudges, and they rallied to Clark's standard at Fort Pitt. Four companies of picked men with their equipment floated down the Ohio to the mouth of the Tennessee, and there, disembarking, they marched overland to the French settlements on the Kaskaskia and the Wabash. Taken by surprise, the *habitants* surrendered without a blow; they were quite as well content to be "congress men" as king's men, since both were alien powers. The Indian chiefs, gathered at Cahokia, were overawed by the prowess of the "long knives," and Clark's diplomacy soon persuaded them to make peace with the Americans. Hamilton, then in winter quarters at Vincennes, preparing an attack on Fort Pitt, was caught off his guard and forced to yield his little garrison (1778). Thus Congress became the dominant power both north and south of the Ohio, and thus, when five years later peace was made with Great Britain, all the British territory between the Great Lakes and the Floridas was ceded to the United States.

Peace and Prosperity. — The country once freed from danger of Indian outrage, settlers crossed the mountains "in shoals." Twelve thousand people came out in 1784 to Kentucky alone. When the first United States census was taken, fifteen years after the building of Boonesborough, there were more than seventy thousand whites in Kentucky and thirty-five thousand odd in Tennessee. There were probably in 1790 four hundred thousand settlers on the rivers that flow into the Mississippi.

Roosevelt, II, Ch. VII, X, XII; III, Ch. I; IV, Ch. V.

North Carolina opened a land office in the Watauga Valley in 1778 and offered farms on easy terms. Every head of a family might take up six hundred and forty

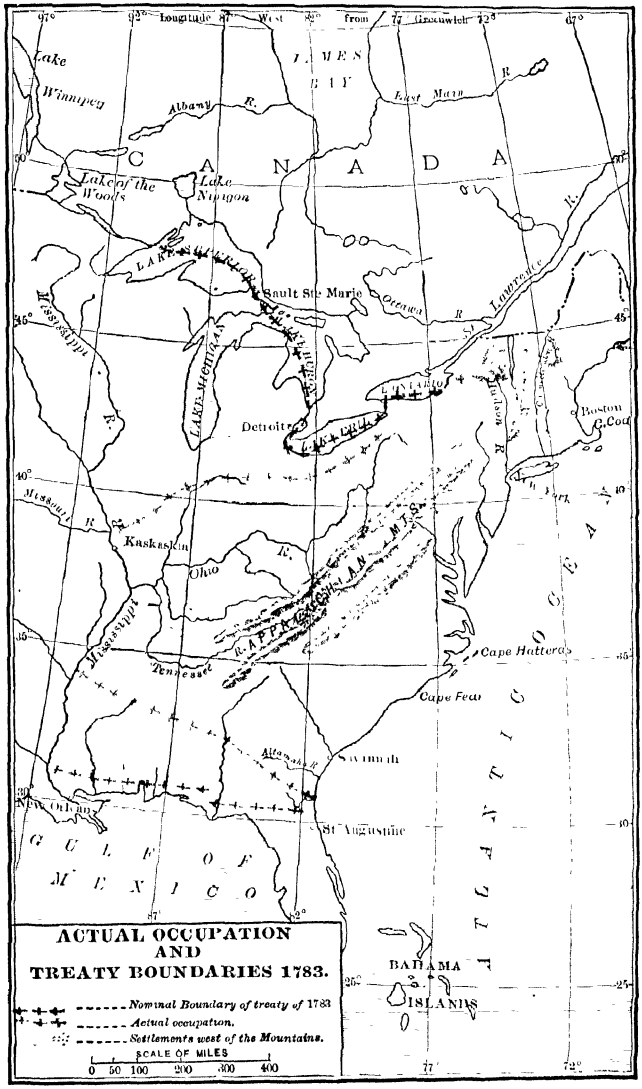
acres on his own account, one hundred for his wife, and one hundred for each child. The price was $10 per hundred acres; but since this might be paid in depreciated currency or set off against military service, the settlers had no difficulty in securing full title. South Carolina offered similar terms for her Cherokee lands in 1784. Virginia (1779) offered the Kentucky pioneers four-hundred-acre tracts at the rate of $2.50 per hundred, on condition that a house should be built and corn planted within the year. Every man who could prove such a "cabin right" had a preëmption claim to one thousand acres more at a cost of $40 per hundred. Clark's men were rewarded in bounty lands north of the Ohio, three hundred acres each, while the arrears of pay due the soldiers of the Continental army were made good in the same inexpensive fashion.

Michaux, 225–228.

A contemporary writer has left a careful statement of what such a pioneer might accomplish. "A log-house is very soon erected, and in consequence of the friendly disposition which exists among those hospitable people, every neighbor flew to the assistance of each other upon occasions of emergency. Sometimes they were built of round logs entirely, covered with rived ash shingles, and the interstices stopped with clay, or lime and sand, to keep out the weather. The next object was to open the land for cultivation. There is very little under-wood in any part of this country, so that by cutting up the cane, and girdling the trees, you are sure of a crop of corn. The fertility of the soil amply repays the laborer for his toil; for if the large trees are not very numerous, and a large proportion of them the sugar maple, it is very likely from this imperfect cultivation that the ground will yield from fifty to sixty bushels of corn to the acre. The second crop will be more ample; and as the shade is removed by cutting the timber away, great part of our land will produce from seventy to one hundred bushels of corn from an acre. This extraordinary fertility enables the farmer who has but a small capital to increase his wealth in a most rapid

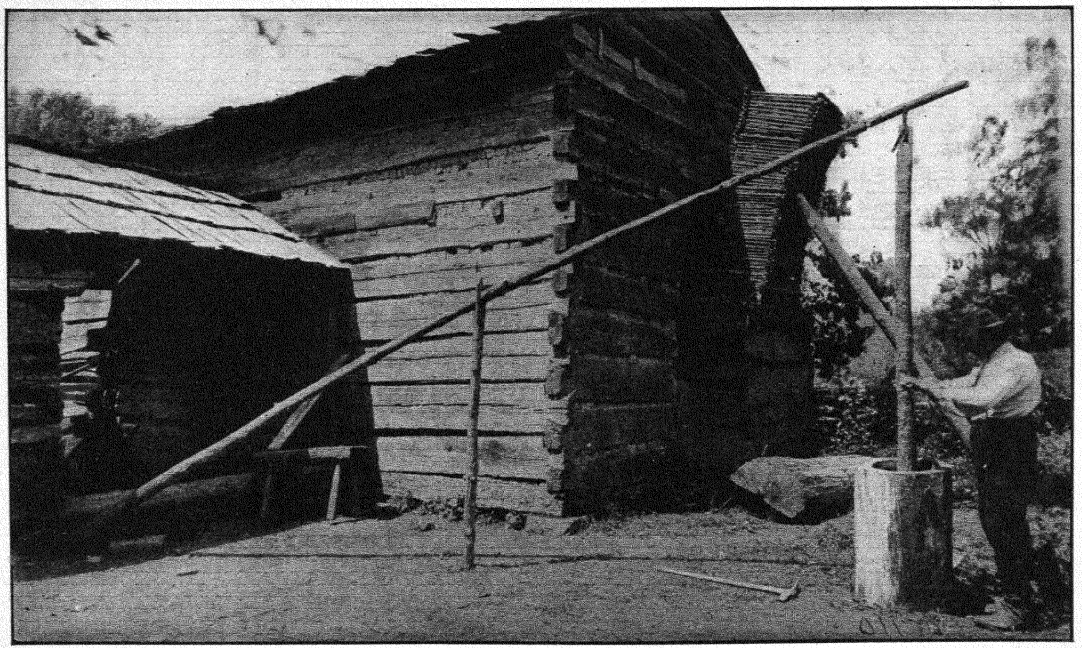
Imlay, 134–136.

Drake, Pioneer Life in Kentucky, 42.


Longitude West from Greenwich
Lake Winnipeg
Albany R.
James Bay
East Main R.
CANADA
Lake of the Woods
Lake Nipigon
Lake Superior
Sault Ste. Marie
Ottawa R.
St. Lawrence R.
Mississippi R.
Lake Michigan
Lake Huron
Detroit
Lake Erie
Lake Ontario
Boston
Cape Cod
Missouri R.
Kaskaskia
Ohio R.
Appalachian Mts.
Cape Hatteras
Tennessee
Cape Fear
Savannah
Alatamaha R.
New Orleans
St. Augustine
GULF OF MEXICO
ATLANTIC OCEAN
BAHAMA ISLANDS
ACTUAL OCCUPATION AND TREATY BOUNDARIES 1783.
Nominal Boundary of treaty of 1783
Actual occupation.
Settlements west of the Mountains.
SCALE OF MILES
0 50 100 200 300 400

manner (I mean by wealth the comforts of life). His cattle and hogs will find sufficient food in the woods, not only for them to subsist upon, but to fatten them. His horses want no provender the greatest part of the year, except cane and wild clover; but he may afford to feed them with corn the second year. His garden, with little attention, produces him all the culinary roots and vegetables necessary for his table; and the prolific increase of his hogs and poultry will furnish him the second year, without fearing to injure his stock, with a plenty of animal food; and in three or four years his stock of cattle and sheep will prove sufficient to supply him with both beef and mutton; and he may continue his plan at the same time of increasing his stock of those useful animals. By the fourth year, provided he is industrious, he may have his plantation in sufficient good order to build a better house, which he can do either of stone, brick, or a framed wooden building, the principal articles of which will cost him little more than the labor of himself and domestics; and he may readily barter or sell some part of the superfluous productions of his farm, which it will by this time afford, and procure such things as he may stand in need of for the completion of his building. Apples, peaches, pears, etc., he ought to plant when he finds a soil or eligible situation to plant them in, as that will not hinder, or in any degree divert, him from the object of his aggrandizement. I have taken no notice of the game he might kill, as it is more a sacrifice of time to an industrious man than any real advantage." Once cleared and brought under cultivation, the limestone soil yielded amazing crops of corn, hemp, and tobacco. The buffalo herds, indispensable support of the backwoodsmen, disappeared from the cultivated districts. Cattle were pastured on the native grasses and increased both in weight and numbers, while the horses brought from Virginia grew strong and fleet beyond seaboard standards.

Manufactures and trade developed with population and security. Shoes were substituted for moccasins, and linen



GRINDING CORN WITH SWEEP MILL

and woolen cloth for buckskin, all being made up at home. Tanneries were set up for the tanning of hides, and the primitive hand mills were superseded by gristmills run by water power. Saddlers, blacksmiths, wheelwrights, and carpenters earned good wages in the growing towns. Sugar was manufactured from the sap of the forest maples. Salt was evaporated from the saline springs or "licks" on the Kanawha in sufficient quantities to supply the settlements by 1793. It sold at from $3 to $5 a bushel; but this was less than the cost of transporting it by pack horse across the mountains. A retail store was opened at Louisville in 1783, and goods imported from Philadelphia by way of the Ohio were sent by wagon road or pack trail to the thriving settlements of the interior. There was as yet little money in circulation, and exchange was effected by barter: salt, peltries, bear's grease, and corn bearing a fixed money value. Even taxes were paid in produce. A compound unit, one half beef, pork, bear meat, or venison, one fourth corn, one eighth salt, and one eighth money, was legal tender along the Cumberland.

James Flint, Letters from America, 129, 279–280.

Michaux, 167, 203–204.

Lambert, II, 526–527.

McMaster, Hist. of People of U.S., III, 485–486

CHAPTER V

NATIONAL BEGINNINGS

Formative Legislation

Callender, 221–238.

The Federal Constitution. — The necessity of establishing a central government with powers adequate to the raising of a revenue, the maintenance of a uniform and stable currency, the negotiation of treaties with foreign nations, and the arbitration of interstate concerns, had been rendered abundantly evident by the difficulties of the war just closed and by four years' experience of anarchy under the Confederation. The thirteen independent states were forced to set up a central authority endowed with all the powers that had been denied to the British Parliament. The Federal Congress, though fully representative of the interests of the people, was regarded with suspicion by the state governments, and power to legislate for business interests, even of a general nature, was grudgingly conceded. Congress was accorded power "to lay and collect taxes, duties, imposts and excises" in order "to pay the debts and provide for the common defense and general welfare of the United States," "to regulate commerce with foreign nations and among the several states," "to coin money and regulate the value thereof," to maintain copyrights and patents, to establish post-offices and post roads. As an offset to commercial restrictions likely to be imposed by the Federal Congress, the Southern representatives secured a clause forbidding the levy of duties on exports.

The states, on their part, surrendered the right to coin money, emit bills of credit, or make anything but gold and silver legal tender in payment of debt, and agreed to

lay no tonnage duties or duties on imports without the consent of Congress. The levying of such indirect taxes has been relegated in practice to the United States government. No state was permitted to enter into any agreement or compact with another state or with a foreign power, and exclusive authority to negotiate treaties was vested in the President and Senate.

Elliot's Debates, V, 457–532.

An attempt to rid the young nation of the blight of African bondage by prohibiting the importation of slaves was made in the Constitutional Convention. The opponents of slavery urged that the slave trade should be stopped at once and for all time; but the devastations of war had considerably reduced the labor force of the Southern states, and the delegates from South Carolina and Georgia asserted that their constituents would never accept the new form of government if it meant the cutting off of further supplies. The debate resulted in compromise. Congress was to impose no restraint on the slave trade before 1808, thus allowing the rice states an interval of twenty-one years in which to stock their plantations. The Northern states gave evidence of the sincerity of their anti-slavery convictions in the immediate prohibition of all traffic in slaves at their own ports. The offsetting concession to the commercial interests of the North was the omission from the Constitution of the amendment, urged by Southern planters, requiring a two-thirds' majority for the adoption of any restrictions on navigation.

Dubois, The Slave Trade, Ch. VI, VII.

Lambert, Travels, II, 163–174.

Brissot de Warville, Travels in U.S., 274–300.

Legislation in Behalf of Shipping. — The merchants of the seaports, finding their trade injured by the British Navigation Act, were demanding compensating protection. One of the first petitions received by the Federal Congress was drawn up by the shipping interests of Baltimore. It stated that "among the advantages looked for from the national government is the increase of the shipping and the maritime strength of the United States of America by laws similar in their nature and operation to the British Navigation Acts." The shipmasters of Charleston, South Carolina, and the shipwrights of Philadelphia, petitioned

Bates, Am. Marine, Ch. VII.

Am. State Papers, Finance, I, 5–8, 108.

to the same effect, begging that Congress would relieve the disasters that had fallen on shipyards throughout the United States in consequence of the decline in that branch of business. A Massachusetts representative, Mr. Goodhue, proposed that duties to the amount of sixty cents per ton be levied on all foreign vessels coming into our harbors, as an offset to the restrictions imposed on American vessels in British and Continental ports. This tonnage duty was protested by Tucker of South Carolina. "Some States, it is well known, have more tonnage than is sufficient to carry all their small productions to a market; of course, a duty on foreign ships will not affect them. Other States, which have considerable quantities of more bulky articles to export, and require a greater number of ships, having few or none of their own, must consequently be subjected to the whole of the additional duty; for, whether the vessels be foreign or American, the freight will be the same. Much of the produce of South Carolina is carried off by foreigners, and in American shipping a considerable quantity is exported. The duty will be paid equally, in either case, by the shipper, for the freight of American vessels will be raised to an equality with the other; and of all this money so paid, there comes into the Treasury that part only collected from foreigners; the rest, as I said before, goes as bounty to benefit the owners of American ships."

Annals of Congress, 1789–1791, I, 176–191, 233–289.

Of the 437,641 tons of shipping employed in the commerce of the United States, about one third was owned by foreigners. The proportion varied from 10 per cent foreign tonnage in the ports of Massachusetts to 67 per cent in those of Georgia. It was evident that the commercial states would gain far more by discriminating duties than an agricultural state such as Virginia, where few seagoing vessels were built or owned and where 52 per cent of the exports was carried by foreigners. The result of the debate was the Navigation Act of 1789, by which preference was given in the ports of the United States to vessels either built or owned by American citizens. Such ships were to pay tonnage duties at the rate of six cents per ton

Annals of Congress, 1789–1791, I, 258, 259.

of hold capacity; vessels built in the United States but partly or wholly owned by foreigners must pay thirty cents per ton; vessels built and owned abroad, fifty cents. All vessels engaged in the coastwise trade and carrying American products, unless they were both built and owned in the United States, were to pay fifty cents tonnage duty at every entry. The more stringent regulation of 1817 declared the forfeiture of all goods taken on board a foreign vessel to be transported from one to another United States port. The effect of this legislation was to give American shipmasters the monopoly of the coastwise trade, a monopoly that has persisted to the present time. In foreign commerce, vessels owned and built in the United States were given so considerable an advantage that they were able to offer lower freight rates than their competitors and so secure the lion's share of the trade. By the Tariff Act of 1789 our ships were given a further advantage, in that ten per cent was deducted from the customs duties collected on goods imported in American bottoms.

Marvin, Ch. XV.

The effect of discriminating duties, and of the law of 1792 excluding foreign-built vessels from American registry, was soon evident in the rapid increase in the number of vessels flying the American flag. The shipyards were busy building craft for the coastwise and ocean trade, and foreigners engaged in transatlantic commerce naturalized in the United States that they might participate in the privileges secured to American shipmasters. The total tonnage registered for the foreign trade rose from 123,893 in 1789 to 981,019 in 1810, and the proportion of foreign trade carried on in United States vessels increased from 23.6 per cent to 91.5 per cent during the same interval.

Holmes, U.S.A., 187–195, 208–210, 216–236.

Abbot, Ch. I.

Marvin, Ch. IV, VI

The most notable development of these years was in trade with the Orient. Commerce with India and China, hitherto monopolized by the East India Company, was fostered by special discrimination. The tariff of 1789 levied an extra duty of 12.5 per cent on goods imported from India and China in foreign vessels. Tea paid a duty of from six to twelve cents per pound when imported in

Annals of Congress, *1789–1791*, I, 168–170.



DISTRIBUTION OF POPULATION, 1790

American vessels direct from China; when brought in an American vessel from a British or European port, the duty paid varied from eight to twenty-six cents; but if the whole journey was made in foreign bottoms, the charge was from fifteen to forty-five cents. Thus the East India Company's monopoly was effectually broken so far as commerce with America was concerned. The "China trade" centered in Boston, Salem, and Providence. At these ports Yankee clippers took on lumber, naval stores, salt fish, rum, and ginseng, then made their way round the Cape of Good Hope, exchanging the cargo *en route* for Madeira wine, the precious metals, and other goods suited to the Oriental trade. Arrived at its ultimate destination, these goods were bartered for tea, spices, coffee, silks, nankeen, India muslins, saltpeter, etc., — articles of great value in proportion to bulk. On returning home, this cargo might be sold at a profit or reshipped for some European port. Trade with the Orient went far toward compensating the merchants of New England for the exclusion of American vessels from the ports of the British West Indies.

Marvin, Ch. X.

Hawthorne, Introduction to Scarlet Letter.

Michaux, 231–233.

Kimball, East India Trade of Providence.

Congressional legislation in behalf of commerce was not limited to discrimination against foreign shipping. In 1790 was passed the Act for the Government and Regulation of American Seamen. Under this law a written contract, specifying the voyage for which service was undertaken and the rate of wages to be paid, must be signed by master and man and recorded by a United States official. Seamen deserting the ship forfeited their wages and might be reclaimed and forced to serve to the end of the voyage. The captain, on the other hand, was required to furnish suitable living accommodations, and was liable to penalty if he abandoned an American sailor in a foreign port. An act of 1802 provided for the erection of lighthouses along the coast, especially on Long Island Sound, light money being provided by a special tax of fifty cents per ton on foreign vessels. In 1807 an appropriation of $50,000 was made for the coast survey.

Abbot, Ch. X.

Pitkin, Hist. of U.S., II, 185–192.

Commercial Treaties. — The governments of Europe were eager to secure to their subjects some share in the American trade hitherto monopolized by Great Britain. Early in the course of the War for Independence overtures were made by our commissioners at the courts of Holland, France, and Spain looking toward commercial negotiations.

McLaughlin, Ch. VI.

On the same day on which the treaty of alliance was concluded between Louis XVI and the seceding colonies (January 30, 1778) a treaty was signed establishing mutually advantageous trade relations between France and the United States of America. Fishing rights on the Grand Banks were to be shared on equal terms by French and American fishermen, trade with the French West Indies was thrown open to our vessels, and France was assured the most favorable terms in American ports. The two nations entered into important guarantees concerning the exemption of neutral trade from the devastations of war. The citizens of each were permitted to trade freely with the enemies of the other, and the principle that free ships make free goods and free passengers was clearly enunciated.

Snow, Treaties and Topics in Am. Diplomacy, 12–31.

Stark, Abolition of Privateering.

Only munitions of war and persons engaged in the military service of the enemy were subject to capture. Privateering was abandoned so far as affected the signatory powers, "the citizens of each party" being "prohibited from taking commissions from a third party to cruise against each other." The introduction of these advanced principles of international law into the first treaty negotiated by the United States had deep significance. In the next ten years most of the nations of Europe followed the lead of Russia and France in the effort to secure neutral trade against the devastations of war. Benjamin Franklin negotiated the treaty with Prussia (1785) in which the exemption of private property from confiscation and the immunity of neutral ships was guaranteed, and privateering was abandoned as between the contracting parties. Contemporary treaties with Sweden, Denmark, and Portugal were framed to the same intent. In his treatises on war and on privateering, our first great diplomatist

Franklin's Works, On War, X, 60–62; On Privateering, VIII, 246–249.

clearly stated his own conviction that war, though a necessary evil, should do as little harm as might be to non-combatants.

In 1795 a treaty of commerce was concluded with Spain. The merchant ships of either nation were declared inviolate in the event of war, and their cargoes not subject to seizure. No citizen of Spain or of the United States was to take out letters of marque from a hostile power with the intent to prey upon American or Spanish commerce, and such privateers were to be treated as pirates in the admiralty courts. The only serious occasion for war between the two nations was successfully adjudicated. Spain conceded the western boundary of the United States to be the middle channel of the Mississippi, and free navigation of that river to the Gulf was temporarily granted, together with rights of deposit at New Orleans.

Pitkin, Hist. of U.S., II, 512–519.

On the eve of the Napoleonic Wars — a contest that was to endure for twenty years and to involve eventually not only England and France but all the states of Europe — the United States proclaimed her own neutrality and sought to secure from the combatants stipulations as to the rights of neutral trade. In the commercial treaty with Great Britain negotiated by John Jay in 1794, no satisfactory stipulations as to neutral trade were obtained. Not arms and ammunition only, but naval stores and foodstuffs destined for the enemy's use were regarded contraband of war and subject to seizure with or without indemnification, and the privilege of privateering was upheld, in spite of the urgent representations of the American commissioner. Some abatement of the Navigation Acts was, however, secured. American vessels were accorded access to the ports of the British dominions in Europe and Asia, but this concession was offset by the limitations retained on the West India trade. American vessels not above seventy tons' burthen were to be allowed to trade with Jamaica and the Barbadoes, provided they carried only goods produced in the States or in these islands; but this grudging concession was made on condition

Pitkin, Hist. of U S., II, Ch. XXII, XXIV, XXV.

Pitkin, Statistical View, 198–219.

that our government would surrender the right to transport molasses, sugar, coffee, cocoa, or cotton from America or the British West Indies to any part of the world. The price of entry to the coveted ports was to be the loss of the carrying trade in the products of these islands, except to American markets. This article of the treaty was rejected by the Senate, and commerce with the British West Indies only continued on sufferance.

Notwithstanding its unsatisfactory character, the terms of the treaty with England gave great offense to France. The Directorate declared the treaty of 1778 at an end; damaging restrictions were imposed on our commerce with the French West Indies, flour and salt fish — our stock in trade — being excluded, and it was decreed that hereafter French men-of-war and privateers would "treat neutral vessels either as to confiscation, as to searches or capture in the same manner as they shall suffer the English to treat them." The American government found itself involved in a troublesome controversy with the representatives of the new Republic, who naturally held that France was entitled to some return service for the aid rendered the United States in the closing years of the Revolutionary War. President Washington and his advisers had much ado to keep French sympathizers in the United States from making war on England, the common antagonist.

Taussig, Tariff Hist. of U.S., Ch. I, II. Rabbeno, 111–133. Sheffield, 4.

Legislation in Behalf of Manufactures. — The various industries set on foot during the war when there was little or no importation and domestic goods had a practical monopoly of the home market, were threatened with ruin now that the Peace had opened our ports to the commerce of the world. English manufacturers had an accumulated stock of woolens, cotton cloth, and ironware that must be disposed of even at a loss. They were ready to sell their goods at 25 per cent below London prices in order to recover their American custom. European merchants also were eager to gain admission to the promising market hitherto monopolized by Great Britain. Ships bearing sail duck and linen from Holland and Russia, muslins, nankeens,

and silks from India and China, thronged our ports. They found eager purchasers, for wealthy Americans had had enough of homespun and seized their first chance to buy finer stuffs. In the year following the Peace, $18,397,335 worth of goods was brought into the country, and but $3,746,725 was exported in exchange. By 1790 we had accumulated an unfavorable balance of trade to the amount of $53,992,655. The discrepancy had to be made good in gold and silver, commodities that could not well be spared. American manufacturers protested that, handicapped as they were by high-priced labor and lack of machinery, they could not compete in an open market with the products of English factories and Oriental looms, and they begged for protection. A petition addressed to Congress by the tradesmen and manufacturers of the town of Baltimore represented the sentiment of the manufacturing sections of the country. "Since the close of the late war, and the completion of the Revolution, they have observed with serious regret the manufacturing and the trading interest of the country rapidly declining, and the attempts of the State Legislatures to remedy the evil failing of their object; that, in the present melancholy state of our country, the number of poor increasing for want of employment, foreign debts accumulating, houses and lands depreciating in value, and trade and manufactures languishing and expiring, they look up to the Supreme Legislature of the United States as the guardian of the whole empire, and from their united wisdom and patriotism, and ardent love of their country, expect to derive that aid and assistance which alone can dissipate their just apprehensions, and animate them with hopes of success in future, by imposing on all foreign articles, which can be made in America, such duties as will give a just and decided preference to their labors; discountenancing that trade which tends so materially to injure them and impoverish their country; measures which, in their consequences, may also contribute to the discharge of the national debt and the due support of the Government."

Pitkin, Statistical View, 30.

Annals of Congress, 1789–1791, I, 115–116.

Annals of Congress, 1789–1791, I, 102, 168, 192–231, 291–317, 324–336.

Stanwood, Am. Tariff Controversies, I, Ch. III.

The levying of customs duties, not merely for revenue, but for the protection of home manufactures, was fully debated in the first session of the Federal Congress. In the very able tariff debate of 1789, the interests of the several sections of the country were clearly brought out. The delegates from the manufacturing states — Pennsylvania, New York, Massachusetts, and Connecticut — suggested that the opportunity be utilized to "protect our infant manufactures" against the competition of low-priced foreign goods. They urged that duties should be so laid as to advance the price of the competing import to the point at which the domestic product could sell with profit. The agricultural states were, in general, opposed to import duties, since they were accustomed to rely upon foreign manufactures, and the enhanced price would amount to a tax on consumption. Each delegate advocated protection for the products of his own state, but deprecated the duties on commodities purchased by his constituency. For example, Fitzsimons of Pennsylvania proposed protection for the steel industry recently established in that state, but Tucker of South Carolina protested that "the smallest tax on steel would be a burden on agriculture." A compromise of these interests was effected at fifty-six cents a hundredweight. Fitzsimons advocated a duty on beer, representing that the brewing industry, both in Philadelphia and New York, was one "highly deserving of encouragement." Malt liquors were, he argued, less intoxicating than rum, and as an element of diet were far preferable. This consideration, together with the indirect advantage that would accrue to the growers of hops and barley, induced Congress to impose a duty of five cents a gallon on ale and beer. Pennsylvania's delegates further desired protection for her paper manufactures, arguing that the capacity of the mills established to meet the demands of the revolutionary press was sufficient to supply the markets of this and the neighboring states with the coarser grades of paper, and that the industry would be ruined if the protection accorded by

Bishop, I, 250–262.

Bishop, I, 195–208.

the state tariff was now withdrawn. A duty of 7.5 per cent ad valorem was voted without debate. The chandlers of Philadelphia and those of Roxbury, Mass., had brought the manufacture of wax, spermaceti, and tallow candles to such a degree of perfection that they expected in a few years to provide for the needs of the western hemisphere; but they must be protected against wholesale importations from Ireland and Russia. It was urged that candles might eventually be made in America "cheaper than could be imported if a small encouragement was held out to them, since the raw materials were to be had in abundance." This tax on light was protested by Tucker in the interest of consumers; nevertheless, a duty of two cents a pound was imposed on tallow and six cents on wax and spermaceti candles. Carroll of Maryland asked for and secured a duty of ten per cent on glass manufactures in the behalf of works recently established near Fredericktown.

Bishop, I, Ch. X.

The manufacturing interests of New England were by no means neglected. Connecticut delegates asked that the iron works of Litchfield County should be secured in their hold on the home market, and a duty of 7.5 per cent was accordingly laid on ship's anchors. Fisher Ames of Massachusetts asked for a protective duty on nails. This, he argued, was a domestic industry, requiring small capital and no machinery, and employing labor that would otherwise be wasted. "In winter, and on evenings when little other work is done, great quantities of nails are made even by the children; perhaps enough might be manufactured in this way to supply the continent," since "the business could be prosecuted in a similar manner in every state exerting equal industry." Madison and Tucker protested in the interest of the men who were building houses and ships, but a duty of a cent a pound was granted. The manufacturers of beaver hats in Boston, New York, and Philadelphia had greatly profited by the removal of the British restrictions on exportation and the monopoly of the home market consequent on the war. They were now accorded a protective duty of 7.5 per cent, lest the

Annals of Congress, 1789–1791, I, 157.

business be injured by the cheaper felt hats imported from England. The manufacture of wool cards had come to be an industry of importance in the neighborhood of Boston, because of a labor-saving machine that reduced by half the number of workingmen required to bend the wire, and a duty of fifty cents per dozen, amounting to 7.5 per cent ad valorem, was accorded them. Protective duties were also laid on boots and shoes and galoshes. Leather manufactures were in a flourishing state because raw material in the shape of hides, bark for tanning, and oil for dressing was abundant and cheap, and no machinery was required. The business was carried on in the shop of the master craftsman with the assistance of half a dozen apprentices and journeymen. The war demand, coupled with the exclusion of foreign goods, had given a marked impulse to this industry. Lynn boasted two hundred master craftsmen and six hundred other workmen, and was exporting from one to three hundred thousand shoes per year. The leather industry centered then, as now, in the maritime counties of Massachusetts, but it had developed to considerable proportions in Connecticut, Pennsylvania, Delaware, New Jersey, and Maryland. Farther south where hides were tanned for exportation and nothing but the coarsest shoes for field laborers were made up on the plantations, the tax on fine wear was felt to be a burden.

Bishop, I, 497–498.

Bishop, I, 450–464.

The interests of the Yankee farmers were considered in the laying of import duties on cheese and cider, though the proposition to levy customs charges on salt beef, pork, and butter was rejected on the ground that since we produced already more of these articles than we could consume and none was imported, such duties would be useless. Duties on nails, boots and shoes, ready-made clothing, etc., gave welcome protection to the by-industries of the farmhouse. Yankee fishermen were protected against the competition of their Canadian rivals by a duty of fifty cents a quintal on dried, and seventy-five cents a barrel on pickled, fish. South Carolina delegates were quite ready to accept protection in the shape of a duty of sixteen cents a pound on

indigo, and were reconciled to the duty on candles because beeswax was a product of that state. A duty on hemp was urged in the interests of the farmers of the Ohio Valley, where thousands of acres of native hemp were seeking a market, but this tax of sixty cents a hundredweight on their raw material was protested by the cordage manufacturers. Since the home-grown hemp could not supply the ropewalks of New England, and half the amount needed was being imported from the Baltic, the manufacturers protested that the prosperity of the cordage industry would be jeopardized unless a compensating duty was levied on imported goods. The New England representatives secured a duty of seventy-five cents a hundredweight on tarred and ninety cents on untarred rope, and two dollars a hundredweight on pack thread. Both duties were denounced by the shipping interest of Massachusetts on the ground that a rise in the price of cordage would enhance the cost of ships, and by the merchants of South Carolina because more costly ships would mean higher freight rates.

The conflict of interest between producer and consumer, between the producer of the raw material and the producer of the finished article, gave rise to protracted controversies among the representatives of rival industries. A duty of two cents a bushel was laid on coal in behalf of the mines recently opened near Richmond, Virginia. They were capable, it was believed, of supplying the whole of the United States if their owners might be protected against the competing product brought over from England as ballast, but this duty was protested as a tax on fuel by the manufacturers of Pennsylvania. The rich deposits of their own state had not yet been discovered. A duty of ten cents a bushel was laid on salt, primarily for revenue, though it gave incidental protection to the nascent salt works of New Bedford and Syracuse. We had imported from Europe and the West Indies, in 1769, more than a million bushels, at a cost of one shilling a bushel. The duty nearly doubled the price, and the tax was energetically

Annals of Congress, 1789–1791, I, 125–138, 192–231, 324–335.

opposed by the spokesmen of the New England fisheries. The cattlemen of the "back country" of the Carolinas and the pioneer farmers beyond the mountains were also large consumers of salt and could ill afford any addition to the already heavy cost of this necessity. The duty of fifteen cents a gallon on Jamaica rum was hotly contested by a Georgia delegate, not only because his constituents were of the consumers of this beverage, but because rum was an essential factor in their lumber trade with the West Indies. This growing commerce would be jeopardized if the principal return cargo was subjected to so heavy a duty. When the rate was lowered to ten cents, the New England representatives urged that the tax of eight cents a gallon on molasses be reduced in proportion, arguing that molasses was not only the raw material of the distilleries, but an article of general consumption, especially among the poor, and that it was an indispensable factor in New England's West India trade. The strenuous endeavors of Fisher Ames and his colleagues finally secured a reduction of the duty on molasses to two and one half cents a gallon, with a drawback in case the rum was exported for sale. Other raw materials, such as barley, dyestuffs (except indigo), undressed hides, furs, and all the metals, were admitted free of duty. The loss to the government in the way of potential revenue was considerable, but it was evidently unwise to levy taxes on imports so greatly needed by manufacturers. Increasing returns were realized, however, from the purely revenue duties levied on coffee, tea, sugar, wines, and other luxuries and from the five per cent ad valorem duty imposed on all non-enumerated imports. The customs receipts ($4,000,000 in 1791) were soon adequate to the ordinary expenses of the government.

Annals of Congress, 1791–1793, 971–1034.

Hamilton's Report on Manufacturers. — In 1791 Alexander Hamilton, Secretary of the Treasury, submitted to the House of Representatives a report on the status of manufactures, in which the contemporary argument for protection was clearly set forth. According to this great financier, industrial conditions fully justified the levying

of customs duties, not merely for revenue, but for the sake of defending our infant manufactures against the competition of countries better equipped for the production of these goods. American manufacturers were handicapped by scarcity of labor and capital. They must pay higher wages and higher interest rates than their English rivals, and they had not as yet secured textile machinery. These disadvantages would soon be overcome if adequate encouragement were held out to adventurers in this line of business. For high-cost labor would be substituted labor-saving machinery and operatives of a cheaper grade could be utilized, *e.g.* "Women and children are rendered more useful, and the latter more easily useful, by manufacturing establishments, than they would otherwise be. Of the number of persons employed in the cotton manufactories of Great Britain, it is computed that four sevenths, nearly, are women and children; of whom the greatest proportion are children and many of them of a tender age." The report called attention to the fact that emigration from the Old World was bringing crowds of artisans to our ports, seeking employment in a country where wages were high and the cost of living low; thus the deficiency in supply would soon be made good. Capital, too, would be attracted from abroad by the promising opportunities for investment here offered.

Rabbeno, 287–324.

Taussig, State Papers and Speeches on the Tariff, 1–107.

Stanwood, I, Ch. IV.

Hamilton's Works, IV, 70–198.

Annals of Congress, 1791–1793, 982.

Hamilton recommended the protection of textile manufactures, metal and glass works, sugar refineries, together with all the finished products from leather, wood, and cereals, but not in the interest of the manufacturers alone. Our merchants might be compensated for their losses in transatlantic commerce by the development of domestic trade and the raw materials of the Southern would be exchanged for the manufactures of the Northern states, to the mutual advantage of both sections. Our farmers and planters and lumbermen who were finding the foreign market for their products increasingly precarious would soon realize the advantage of a home market in the manufacturing towns, with their growing demand for food-

stuffs and raw materials. Consumers would be obliged to pay higher prices for the protected commodities during the initial years of this policy, but the burden would be fully offset by ultimate gains. Prices would eventually fall under the operation of domestic competition, to a point lower than that at which the foreign commodity, subject to heavy freight rates, could be furnished to the American market. "When a domestic manufacture has attained to perfection, and has engaged in the prosecution of it a competent number of persons, it invariably becomes cheaper. Being free from the heavy charges which attend the importation of foreign commodities, it can be afforded, and accordingly seldom or never fails to be sold cheaper, in process of time, than was the foreign article for which it is a substitute. The internal competition which takes place soon does away with everything like monopoly, and by degrees reduces the price of the article to the minimum of a reasonable profit on the capital employed. This accords with the reason of the thing and with experience." According to Hamilton, the United States could not afford to remain an agricultural community, dependent on foreigners for the purchase of supplies and the disposal of surplus products. National self-sufficiency was essential to national independence, and every class and section must benefit in the end by the promotion of an all-round industrial development.

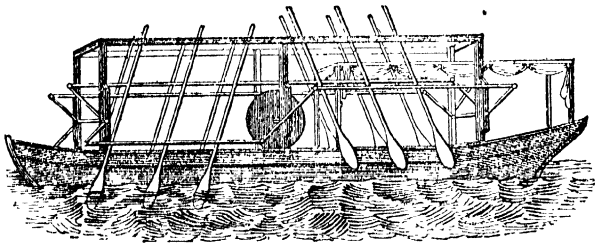
Annals of Congress, 1791–1793, 1001–1002.

The tariff legislation of the years immediately following was quite in the spirit of Hamilton's recommendations. There was a steady increase of duties on manufactured articles, the usual rate of 1789 being 7.5 per cent, that of 1792 being 10 per cent, that of 1795, 15 per cent. Raw materials, with the exception of indigo, hemp, and molasses, were left free from taxation. The list of revenue duties was increased, articles of luxury, such as lemons, oranges, olives, spices, raisins, and wines, being selected to supply the government income.

Rabbeno, 134–145. Dewey, 80–84.

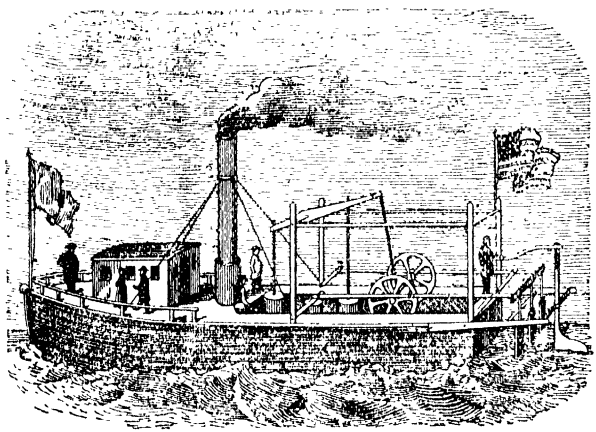
The Patent Law. — Among the early enactments intended to promote the industrial development of the

country, none was wiser or more timely than the patent law. The Act of 1790 secured to the inventor of "any useful art, manufacture, engine, machine, or device, or any



FITCH'S SECOND BOAT

improvement therein not before known or used," exclusive monopoly of the sale of such patent for a term not exceeding fourteen years. Under this guarantee of the benefits



FITCH'S THIRD BOAT

accruing from a successful process, inventive genius received a notable stimulus. One of the first to apply for a patent monopoly was John Fitch, the designer of a steam engine adapted to the propelling of a boat. The petitioner

U S. Census, *1880*, IV. Report on Steam Navigation in U.S., 1–4.

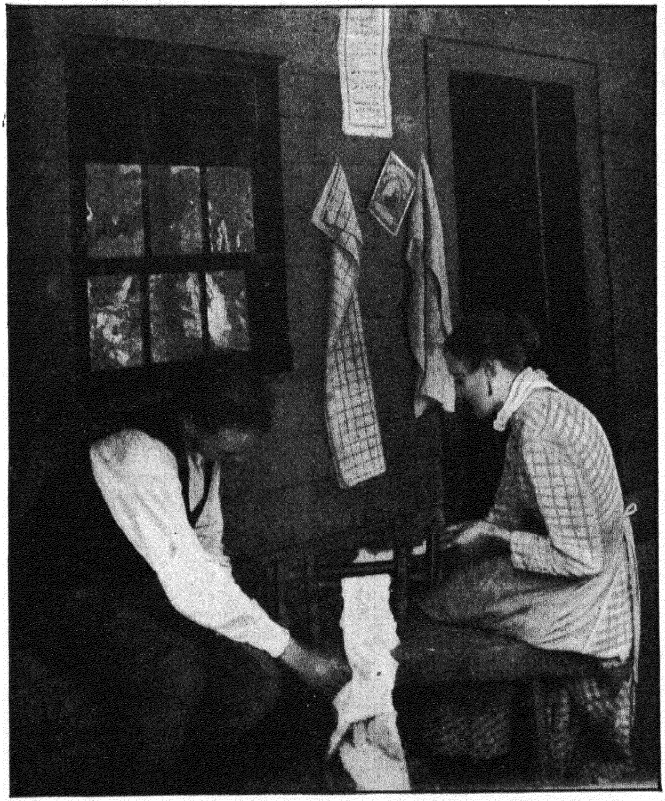
"trusts no interference with him in propelling boats by steam, under any pretence of a different mode of application, will be permitted; for should that be the case, the employment of his time, and the amazing expense attending the perfecting of his scheme, would, whilst they gave the world a valuable discovery, and to America peculiar and important advantages, eventuate in the total ruin of your petitioner; for a thousand different modes may be applied by subsequent navigators, all of them benefiting by the expense and persevering labor of your petitioner, and thus sharing with him those profits, which they never earned." He prays, therefore, that he may be granted an "exclusive right to the use of steam navigation for a limited time." Fitch anticipated that his invention would greatly benefit the trans-Alleghany territory. "The western waters of the United States, which have hitherto been navigated with difficulty and expense, may now be ascended with safety, conveniency, and great velocity; consequently, by these means, an immediate increased value will be given to the western territory; all the internal waters of the United States will be rendered much more convenient and safe, and the carriage on them much more expeditious; that from these advantages will result a great saving in the labor of men and horses, as well as expense to the traveler." The patent was allowed, and Fitch's steamboat, propelled by paddles, made her first voyage on the Delaware in 1787. Regular trips were made from Philadelphia to Trenton, Wilmington, Gray's Ferry, and return for the four summer months of 1790, but the experiment was soon abandoned.

Brissot de Warville, 235–237.

A more immediately successful invention was Eli Whitney's saw gin for removing seeds from the cotton boll, patented in 1793. The East Indian method of extracting the seeds by hand or by roller mill had been in use. By the new process the cotton was dragged through a wire screen by means of toothed cylinders revolving toward each other, and the seeds thus separated from the lint. A slave could clean by hand roller only five or six pounds of

Hammond, Cotton Culture and Cotton Trade, Ch. I.

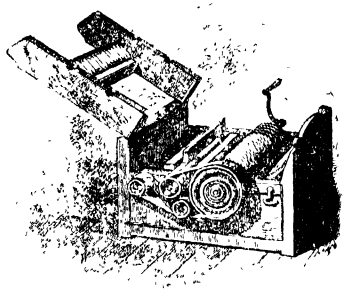
Bishop, I, 252–356.



CLEANING COTTON WITH ROLLER GIN

cotton in a day, the mill turned out but sixty-five pounds; while the new machine, when run by horse power, ginned from three hundred to one thousand pounds of cotton per day. Hitherto, the native short-fiber cotton had sufficed for the plantation industries of the Southern states, but the Northern cotton manufacturers had imported the long staple variety from India, Brazil, and the West Indies. In 1786 some experiments were made in the growing of West India cotton in the sea islands off the coast of South Carolina and Georgia, and three casks of this cotton were sent to London and sold for 4*s.* 6*d.* per pound. Under the stimulus of a protective duty of three cents a pound, laid in 1790, more cotton seed was planted and the crop of 1791 amounted to nine thousand bales. The cotton gin rendered practicable the cleaning of the short-fiber cotton which could be grown in the hill country. Thousands of acres were soon brought under cotton culture, and the South had a new staple crop of transcendent importance. In 1792 the Southern states sent 630 bales of cotton wool to England; the year following the introduction of the cotton gin, 7000 bales were exported; by 1800 the amount was 79,000 bales.

Writings of George Washington XI, 358.



WHITNEY'S COTTON GIN

Other inventors proposing labor-saving machinery for agricultural processes secured protection under the patent law. A machine for the threshing of grain was patented in 1799, and another for cutting grain in 1803. A plow with a mold board of iron cast all in one piece was patented in 1797. But the farmers were slow to adopt new-fangled notions, and, spite of the high cost of labor, continued to use the wooden plow clumsily plated with wrought iron. They sowed their grain by hand, cut it with sickle or

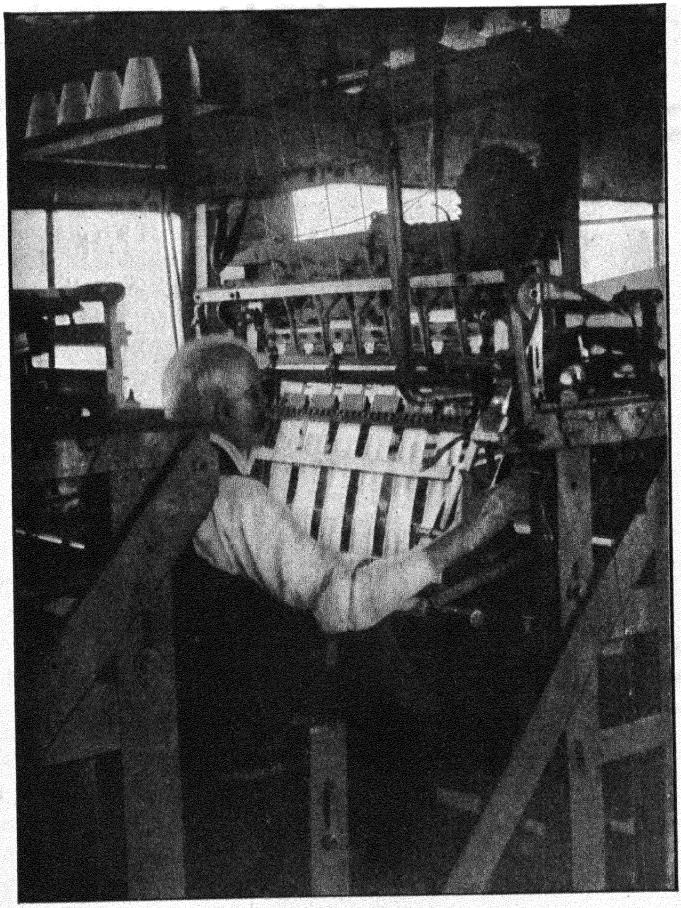
cradle scythe, and threshed it out with flail and winnowing sieve.

14 Geo. III, c. 71. 21 Geo. III, c. 37.

The cloth workers showed more enterprise. Strenuous efforts were being made to procure the textile machinery which the British government was jealously guarding lest England lose her recently acquired supremacy in cotton manufactures. The Beverley Company, in a petition for aid from the General Court of Massachusetts (1790), set forth the difficulties of the situation: "The extraordinary price of machines unknown to our mechanics, intricate and difficult in their construction, without any model in the country, and only to be effected by repeated trials, and long attention; one instance among many of the kind is a carding machine, which cost the proprietors $1100, and which can now be purchased for $200. The extraordinary loss of materials in the instruction of their servants and workmen, while so many are new, and the additional losses sustained by the desertion of these, when partly informed, and by the increase of wages to prevent it, in consequence of the competition of rival manufactories. The present want of that perfection and beauty in their goods, which long-established manufactories can exhibit, from the skill of their workmen, but principally from the use of machines which your petitioners have as yet found too expensive for them to procure." A few spinning jennies and stocking looms had been brought over, spite of the vigilance of the British customs officials. A spinning frame to be operated by a crank turned by hand and carrying thirty-two spindles was set up in Providence in 1788, but the machine was too heavy to run by hand, and the attempt to adapt it to water power was unsuccessful. Tench Coxe, a Philadelphia manufacturer, had contracted with an English firm for a full set of Arkwright machinery, but the contraband models were seized and confiscated by the customs officers. However, a few skilled artisans from Scotland and Ireland had succeeded in evading detection and emigrated to the United States. In 1790 one Samuel Slater, who had been employed in the

White, Memoir of Slater, Ch I, II, III, VI, X.

Wright, Indust. Evol. of U.S., Ch. X.

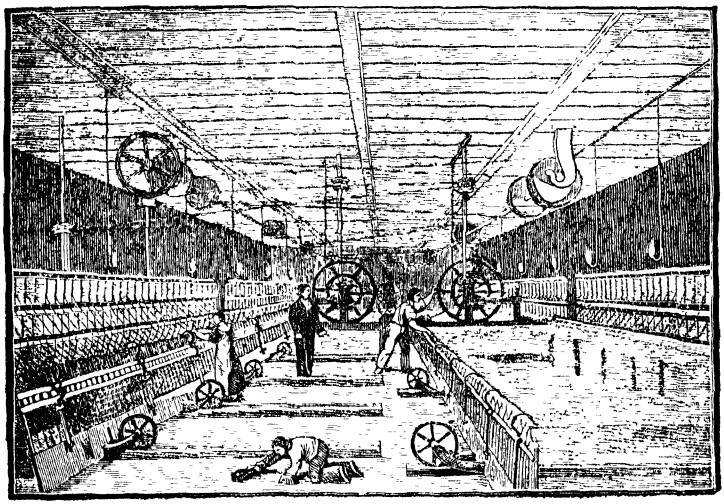


STOCKING LOOM WEAVER

Arkwright factory, attracted by an advertisement of the Philadelphia Society of Artists and Manufacturers for a machine to make cotton rollers, determined to venture his fortunes in America. On arriving he entered into a contract with Moses Brown of Providence to build and operate a complete spinning mill, with carding, roving, and spinning machines, at the falls of the Pawtucket River.

Bagnall, I, Ch. VI.

White, Memoir of Slater, Ch. I–IV



SPINNING ROOM IN SLATER'S MILL

Slater had not dared to bring with him any models of the English machines. He was obliged to draw the plans, direct the mechanics who fashioned the parts, supervise the construction of the factory and the regulation of the water power, and, finally, instruct the workmen how to operate the machinery. The Pawtucket mill was a success from the start, and thus Samuel Slater inaugurated a new industry, one destined to absorb much of the capital and entrepreneur ability of New England. The water frame was patented in 1791, and other improvements and inventions followed in quick succession. American manu-

Montgomery Practical Detail of Cotton Manufacture, 141–155.

facturers were so enterprising, and American laborers proved so intelligent, that the original disadvantages were rapidly overcome, and the manufacture of cotton cloth of the coarser grades was soon established on a firm basis.

Bolles, Financial Hist. of U.S., II, Bk. I, Ch. VIII.

Regulation of the Currency. — There could be no real industrial prosperity without an adequate supply of money, and the attention of Congress was early called to the necessity of providing a medium of exchange that should have stable and uniform value. The bills of credit, thoroughly discredited by the close of the war, had dropped out of circulation, and the supply of metal money was insufficient to effect business exchanges even at the trade centers. The specie brought in during the war was of varying standards and denominations. English shillings and sovereigns, French crowns, Spanish reals and pieces of eight, passed current, to the endless confusion of traffic; but the reviving trade with Havana brought in considerable silver, and the Spanish dollar was the coin most frequently handled. This came, by consequence, to be the unit of value in most general use, and by 1790 had superseded the English denominations.

Dewey, 98–105.

Brissot de Warville, 145–149, 176–178.

Annals of Congress, 1789–1791, II, 2112–2141.

When Hamilton, the financier of Washington's cabinet, was called upon to submit to Congress plans for a new coinage system, he suggested the dollar as the most convenient money unit, since it was familiar and popular. He recommended that both gold and silver be declared legal tender in exchange, since, though gold was the more stable metal, the supply was insufficient to provide the needed volume. The Coinage Act of 1792 established a bimetallic currency, both metals being coined freely at the mint in the ratio of fifteen to one. The silver dollar was to contain 371.25 grains of pure silver, while 24.75 grains of pure gold went to the making of a gold dollar. The latter denomination was actually coined only in multiples, *i.e.* eagles, half eagles, and quarter eagles. For fractional currency, the decimal system, suggested by Jefferson, was adopted, the smaller denominations being coined in copper.

Hamilton's Works, I, 275–325.

The available supply of metals, gold, silver, and copper,

was so far short of the money need of the country that a paper substitute was a physical necessity. The power to "emit bills of credit and make them legal tender in payment of debt" was not conceded to the Federal Government by the Constitution, a clause conferring such authority having failed to pass in the Constitutional Convention by a vote of nine states to two. Bank notes issued with sufficient guarantee of redemption might, however, be made to serve the purpose. Hamilton proposed that the Federal government meet the actual currency needs of the country by establishing a national bank authorized to issue a credit money on safe business principles. The solvency of the bank was to be maintained by the subscription of four fifths of its $10,000,000 capital in government bonds paying 6 per cent interest, and redemption of the notes was limited to this readily convertible stock. The most successful model for such a credit money was the Bank of England, but the method had been successfully tried by the bank of North America in Philadelphia, the bank of New York in that city, and the Massachusetts bank of Boston. The business advantages of a national as compared with a state bank were emphasized in Hamilton's report. The sale of bonds would afford a safe investment for idle capital, the property of women, minors, etc., the country over; out of the accumulation of small capitals, the bank could make loans to business men, thus enabling them to set upon enterprises otherwise impossible; the notes might not, as the Constitution was then interpreted, be given legal tender value, but being redeemable on demand and receivable for taxes at par, they would serve all the purposes of specie. The national bank issue would be a welcome addition to the volume of the currency and would, Hamilton believed, ultimately supersede private bank issues, since the redemption of the notes was assured by government bonds, and since they would pass current in all parts of the country and facilitate exchange between distant sections.

Bolles, Financial Hist. of U.S., II, Bk. I, Ch. VII.

Hamilton's Works, III, 388–443.

Annals of Congress, 1789–1791, II, 2082–2112.

The Bank of the United States was chartered in 1791.

Conant, Modern Banks of Issue, 334–340.

Holdsworth, First National Bank.

The stock was over-subscribed by four thousand shares within two hours after the opening of the books, and the bank was opened for business in December of that year. The results were all that Hamilton had anticipated. The special demand for government bonds brought these certificates up to par and placed the credit of the United States on an assured basis. The national bank notes, being readily convertible, were everywhere received as equivalent to specie, and the issues of the more dubious state banks were speedily discredited. The success of this great financial enterprise once guaranteed, the business interests of the country rallied to the support of the central government, for every man who held United States bonds or dealt in national bank notes was concerned to maintain the solvency of the Federal Treasury. The management of the bank was conservative and wise, and as a business enterprise it was eminently successful, paying 8 per cent dividends from the start. Nevertheless, when, in 1810 and 1811, the proposition to recharter the National Bank came before Congress, there was general opposition on the part of the Democrats, who held that the Federal government had no constitutional authority to establish such an institution. The partisans of the state banks, moreover, denounced the national bank as un-American, and scorned the "British gold" that had been attracted to this investment. Gallatin, the Secretary of the Treasury, used all his influence in behalf of the bank, declaring that neither the government nor the people could easily dispense with this important financial agent; but in vain. The bill to recharter failed by a narrow majority. In the House the vote stood sixty-five to sixty-four; in the Senate it was defeated by the casting vote of the Vice-President.

The Westward Movement

Turner, Rise of the New West.

The first decade of our national history witnessed a great wave of migration into the trans-Alleghany territory. The era of the trapper and the trader, of the "long hunter"

and the self-appointed Indian fighter, had passed. The experimental stage was at an end, and now that some measure of peace and security was attained, men of wealth and breeding began to move into Kentucky and Tennessee, taking their families and household goods, together with slaves and capital sufficient to exploit the natural resources of the country. The pioneer farmer gave way to the planter, and tobacco culture and stock raising on a large scale superseded the primitive industries of the back woods. Many soldiers of the disbanded army, finding it impossible to regain industrial foothold in the Atlantic states, came into the newly acquired territory to take up their bounty lands and make a fresh start in life; and emigrants from Ireland, Great Britain, and Germany crossed the sea in ever increasing numbers, seeking among the people that had broken free from Old World trammels opportunity to earn a living as independent farmers. Speculators, too, crossed the mountains, bearing titles more or less valid to vast tracts of virgin forest, hoping to reap fortunes from the inevitable rise in price. Washington had protested against the "rage for speculating in and forestalling of land on the No.West of the Ohio," asserting that "scarce a valuable spot, within any tolerable distance of it, is left without a claimant. Men in these times talk with as much facility of fifty, an hundred, and even 500,000 acres, as a gentleman formerly would do of 1000." He urged that Congress should "fix such a price upon the lands . . . as would not be too exorbitant and burthensome for real occupiers; but high enough to discourage monopolizers."

Roosevelt, III, Ch. I, VI, VIII.

Winsor, Westward Movement, Ch. XIII, XIV, XVIII

McMaster, III, Ch. XVI.

Winterbotham, Hist. View of the U.S., III, 281–339.

Franklin's Works, III, 398–409.

Writings of George Washington, X, 416–419.

Michaux, Travels, 222–250, 276–282.

The Ordinance of 1787. — The settlement of the territory north of the Ohio River was undertaken under national auspices, since the difficulties were too great to be mastered by individual enterprise. The Northwest Territory was occupied by powerful Indian tribes resentful of invasion and ever ready to take the warpath, while British garrisons still held strong forts on Lake Erie, — Detroit, Sandusky, and Miami, — pending the adjudication of war claims.

Roosevelt, III, Ch. VI.

Winsor, Westward Movement, Ch. XIV.

Sato, 282–298.

Hinsdale, Old Northwest, Ch. XIV, XV, XVIII, XIX.

Jurisdiction of the territory was disputed by Virginia, Pennsylvania, New York, Connecticut, and Massachusetts, each of which claimed to have inherited some portion from the original British grants. The lands were unsurveyed and the form of government undetermined, and the soldiers who had received grants in this wilderness thought them about as valuable as "quarter sections of the moon."

McLaughlin, Ch. VII, VIII.

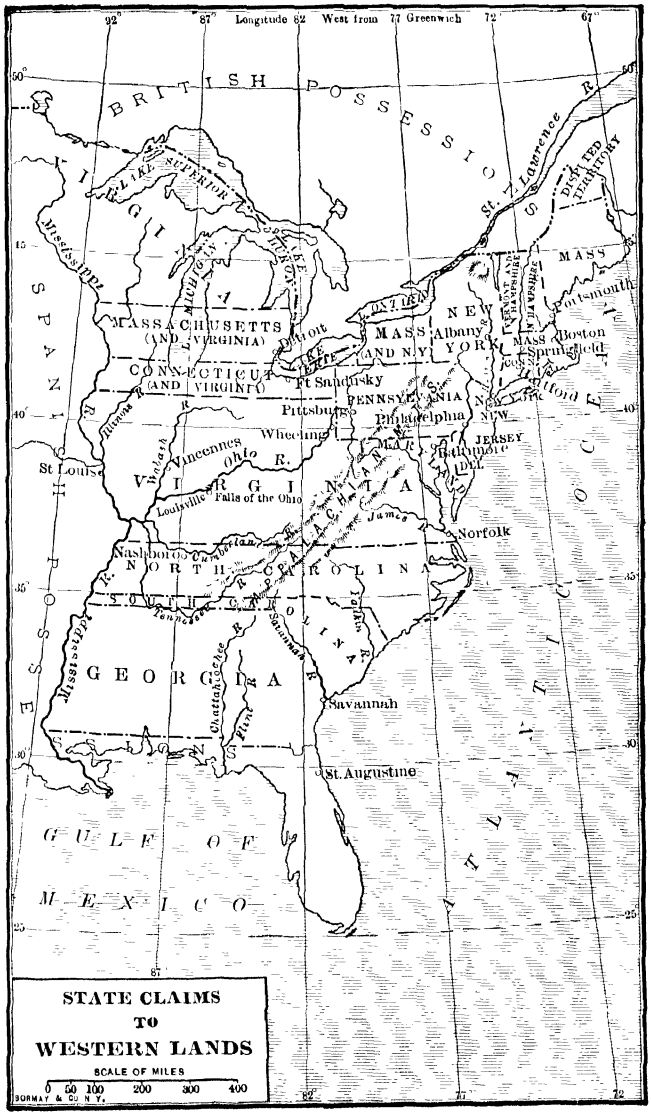
The bringing order out of this chaos was the last work of the Congress of the Confederation. The several states were induced to cede their unsubstantial claims to the central government; United States troops were sent to hold the Indians in check, and peace was finally concluded with the tribes along the Scioto (1784). A systematic survey of the land was undertaken in the following year, and the country was mapped out by ranges into townships, sections, and quarter sections. The section, one mile square, and containing six hundred and forty acres, became the typical farm. The land was offered to individual bidders by auction sale at a minimum price of $1 per acre, plus a small charge to cover the actual cost of survey. In 1787 a group of New England men, two hundred and eighty-five of them officers of the Continental army, petitioned Congress to determine the conditions of settlement in that part of the Northwest where their bounty lands were to be located. Their representative, Dr. Manasseh Cutler, submitted the conditions that the would-be settlers held essential: political and civil liberty, religious toleration, and the prohibition of slavery. The Ordinance of 1787 guaranteed representative government to the people who should inhabit the Northwest Territory, and provided for the ultimate formation therein of from three to five states that should be coördinate under the Constitution with the original thirteen. Thus was it settled for all time that the new colonies were not to be exploited for the benefit of the parent states, but were to become autonomous and coördinate commonwealths. Schools and the higher education were to be maintained by the proceeds of land sales, one section in every town-

Donaldson, Public Domain, Ch. VI.

Webster, Political Essays, 485–500.

Sato, 335–378.

Donaldson, Ch. V.


Longitude 82 West from 77 Greenwich
BRITISH POSSESSIONS
Mississippi R.
Michigan L.
Lake Superior
Lake Erie
Lake Ontario
St. Lawrence R.
Hudson R.
MASS
MASSACHUSETTS (AND VIRGINIA)
CONNECTICUT (AND VIRGINIA)
MASS (AND N.Y.)
NEW YORK
Albany
Boston
Springfield
Portsmouth
Detroit
Ft Sandusky
PENNSYLVANIA
Pittsburg
Philadelphia
NEW JERSEY
Baltimore
DEL
Wheeling
Vincennes
Ohio R.
Indiana
St Louis
VIRGINIA
Louisville
Falls of the Ohio
Norfolk
James R.
Nashboro
NORTH CAROLINA
SOUTH CAROLINA
Tennessee R.
Savannah R.
Pedee R.
Missisippi R.
GEORGIA
Savannah
Chattahoochee R.
Flint R.
St. Augustine
GULF OF MEXICO
ATLANTIC OCEAN
SPANISH POSSESSIONS
STATE CLAIMS TO WESTERN LANDS
SCALE OF MILES
0 50 100 200 300 400
BORMAY & CO N.Y.

ship being reserved for its public school. By far the most important clause in this fundamental compact between the original states and the settlers of the territory was the stipulation that neither slavery nor involuntary servitude, except for crime, was to be admitted into the region. Persons already held as slaves were not emancipated, and fugitive slaves taking refuge in the territory were to be restored to their masters; but slavery as a labor system was forever debarred.

McMaster, III, 521–528.

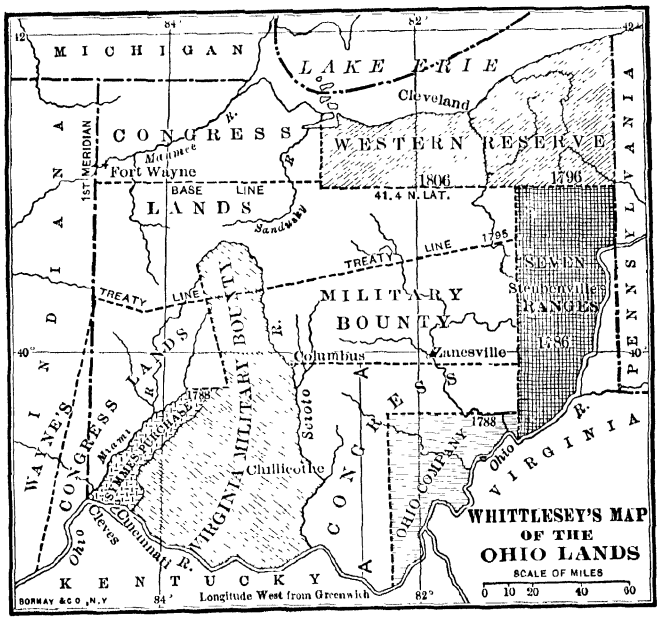
Immediately after the passage of the Ordinance, the Ohio Company purchased one million five hundred thousand acres of land at the mouth of the Muskingum River and, in New England fashion, founded a town, Marietta, under the guns of Fort Harmar. In the same year the Miami Company, under direction of J. C. Symmes, purchased one million acres farther down the Ohio, and there, between the Little and Great Miami rivers, Cincinnati was built. Symmes's settlers were also soldiers, but they came from the Middle states. During the latter half of 1787 more than nine hundred boats floated down the Ohio, carrying eighteen thousand men, women, and children, and twelve thousand horses, sheep, and cattle, and six hundred and fifty wagons. The westward journey was no longer difficult, dangerous, or even expensive. An experienced pioneer thus describes the trip as it might be made in 1793.

Roosevelt, III, 15.

Imlay, 142–144.

"Travellers or emigrants take different methods of transporting their baggage, goods, or furniture, from the places they may be at to the Ohio, according to circumstances, or their object in coming to the country. For instance, if a man is travelling only for curiosity, or has no family or goods to remove, his best way would be to purchase horses, and take his route through the Wilderness; but provided he has a family, or goods of any sort to remove, his best way, then, would be to purchase a waggon and team of horses to carry his property to Redstone Old Fort or to Pittsburg, according as he may come from the northern or southern States. A good waggon will cost, at Philadelphia, about £10 (I shall reckon everything in

sterling money for your greater convenience), and the horses about £12 each; they would cost something more both at Baltimore and Alexandria. The waggon may be covered with canvas, and, if it is the choice of the people, they may sleep in it at nights with the greatest safety. But if they should dislike that, there are inns of accommo-



dation the whole distance on the different roads. To allow the horses a plenty of hay and corn would cost about 1*s.* *per diem*, each horse; supposing you purchase your forage in the most economical manner, *i.e.* of the farmers, as you pass along, from time to time as you may want it, and carry it in your waggon; and not of inn-keepers, who must have their profits. The provisions for the family I would purchase in the same manner; and by having two or three camp kettles, and stopping every evening when the weather

is fine upon the brink of some rivulet, and by kindling a fire they may soon dress their food. There is no impediment to these kind of things, it is common, and may be done with the greatest security; and I would recommend all persons who wish to avoid expence, as much as possible to adopt this plan. True, the charges at inns on those roads are remarkably reasonable, but I have mentioned those particulars as there are many unfortunate people in the world, to whom the saving of every shilling is an object; and as this manner of journeying is so far from being disagreeable, that in a fine season, it is extremely pleasant."

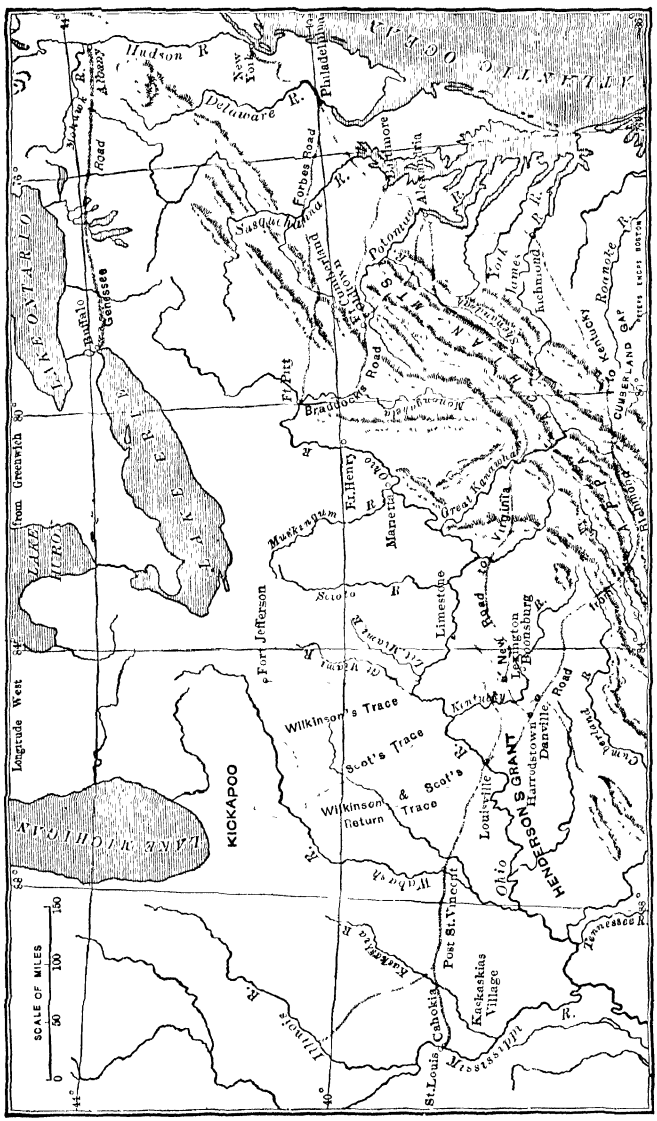
Flint, Recollections of the Last Ten Years, 13–16.

Once arrived at Pittsburg or Wheeling, it was easy to build a flatboat and float down to the intended location. After 1787 the Ohio was the popular route — the great artery through which the lifeblood of the nation was driven into the new West. In 1792 there were twenty-five hundred people on the Ohio Company lands, and two thousand in the Symmes settlement. By 1800 there were thirteen hundred settlers in the Connecticut Reserve on Lake Erie, and the population of Ohio territory amounted to fifty-five thousand souls.

Hinsdale, Old Northwest, Ch. XIX.

South of the Ohio. — Into the lands south of the Ohio River settlers were free to bring their slaves. Tobacco, hemp, and cotton could be grown to advantage by slave gangs, and the climate was too warm to make field labor popular for the white race. When Kentucky was admitted to the Union in 1792, her constitution contained no restrictions on slavery. When the Southwest Territory was organized in 1790, the Ordinance embodied all the provisions of the Northwest Ordinance except the prohibition of slavery, and North Carolina had made her cession conditional on the free importation of slaves into this territory. When the Mississippi territory was acquired by the United States and its territorial government was established in 1798, all the articles of the Ordinance of 1787 were adopted "excepting and excluding" this much-debated restriction.

South of the Tennessee the conditions of settlement



ROADS AND TRAILS INTO THE WESTERN TERRITORY.

Roosevelt, IV, 186–192.

Haskins, The Yazoo Land Companies.

Am. State Papers, Public Lands, II, 877–880.

Dwight, I, 218–222.

Lambert, 205–211.

differed from those that obtained in the Ohio Valley, north or south. Georgia had withheld this territory from the national jurisdiction for a full decade after the other claimant states had ceded their Western lands. In the interval several speculative land companies had been chartered and allowed to establish title to vast tracts. The lands were sold to the highest bidders without regard to the character of the settlements that might be planted. The purchasers sent their overseers into the country with gangs of negro slaves to clear the forests and plant cotton in the fertile upland valleys. Cotton, like tobacco and rice, is a crop that requires a large amount of unskilled labor at certain seasons of the year. It can be cultivated most economically in extensive tracts by gangs of cheap laborers. Since the industrial advantage rested with the great estates, the man without capital was forced down into the pine barrens or back into the hills where the clay soil was unsuited to the cultivation of cotton. Little else remained available when the United States land offices were finally established.

Donaldson, Ch. VIII.

Sato, 385–409.

The Sale of Public Lands. — The public domain was originally regarded as an important source of revenue that would be adequate to the extinction of the national debt. One dollar per acre was, however, hardly sufficient to cover the costs of survey and registration, and, since wholesale purchasers got considerable reductions on this price, the actual income on account of land sales fell short of expectations. In 1796 the price to individual settlers was raised to $2 per acre, but payments might be made by installment. To secure his claim, a man must deposit one twentieth of the purchase price, in addition to the costs of survey, registration fee, etc., amounting to $11; one fourth of the total price must be paid within forty days, one half within two years, three fourths within three years, and the whole sum within four years after entering the claim. Six hundred and forty acres might thus be taken up with cash to the amount of $331. Ready money was scarce, but it was not impossible to secure

this sum at the rate of wages then prevailing, and many men took out land patents with no provision for meeting later installments other than the proceeds of the crops yet to be sown. Under the most favorable circumstances this was a safe venture; but if the land failed to yield a paying crop, or if it lay remote from a market, the farmer could not meet his installments as they fell due and became hopelessly involved in debt. Under the law of 1800, his farm reverted to the government and was resold, but since he had probably put considerable labor and some money into the land, he yielded title only under protest. Congress was frequently petitioned to pass relief acts for individuals or for whole districts, extending the time within which the installments might be paid. Finally (1821) the credit feature of the Act of 1800 was repealed, and the price of agricultural lands was fixed at $1.25 per acre. All the advantages of the credit system were, however, secured to bona fide settlers by the preëmption acts. The first act of this nature was passed in 1801 in behalf of the settlers on the Miami Company's lands. Symmes had failed to fulfill the terms of his contract and the title was forfeited. To prevent injustice to the men who had taken up land within the tract, Congress provided that actual settlers should have first rights in the resale and at a non-competitive price. Other preëmption acts were passed for other special cases until, in 1830, a general law was enacted, which, being renewed from year to year, ultimately established the "squatter's right." Even more serious difficulty arose where the land had been sold to speculators. Irresponsible adventurers sometimes secured large tracts on credit, and at a wholesale price, five or ten or twenty-five cents per acre, relying upon receipts from sales to meet the annual installments due the government. In the Genesee country, whence wheat might be shipped to eastern markets, this was a safe venture, but the farmers of the Ohio Valley were fairly choked with their own produce and had much more trouble in meeting money obligations.

Am. State Papers, Public Lands, I, 75, 109, 112, 127–131, 909–910; II, 439–441.

James Flint, Letters from America, Letter XII, 175–181.

Martineau, I, 332–337.

Weld, II, 325–338.

Need of Transportation Facilities. — The pioneer farmer found no difficulty in supplying his family with the necessities of life, — food, shelter, and clothing, — but to provide means of purchasing the articles that could not be grown or manufactured on the place, he must dispose of his surplus crops. Philadelphia was the market to which the settlers in the Ohio Valley looked for the supplies of salt and iron, firearms and gunpowder, without which they could not support life. The goods came by pack horse or wagon over the Lancaster turnpike and Forbes Road to Pittsburg and thence down the river to Limestone or Louisville or beyond. During the spring floods there was little hazard in floating even heavily loaded scows over the Falls. The return voyage was more difficult. A crew of six men could pilot a vessel of sixty tons burden downstream, but twenty were necessary to propel a boat of five tons capacity by sail or oar up current. At Louisville the cargo must be unloaded and carried round the Falls. The costs of the return voyage were so great that it was not often attempted. Traders usually broke up the scow into planks and sold them as lumber, preferring to make the eastward journey overland. The products that the Western farmers could send to the seaboard — grain, cattle and hides, hemp and tobacco — were so bulky that the transportation charges ate up all the profits, and they exchanged for Eastern manufactures in ruinous disproportion. A cow and her calf were given for a bushel of salt, while a suit of "store clothes" cost as much as a farm. The value of most manufactured commodities was enhanced in the American markets by the protective duties that brought the price of foreign goods up to the domestic cost of production.

Semple, Ch. V. Michaux, Travels to the Westward of the Alleghany Mts, 132–187.

Imlay, 51, 106–107.

Roosevelt, I, 116, 122.

More promising outlets for Western farm products lay by way of the Great Lakes and the St. Lawrence to Montreal and Quebec, and by way of the Mississippi to Natchez and New Orleans. Either way the advantages of transportation were with the outgoing freight. From these British and Spanish ports the goods might be shipped to

Boston, New York, Philadelphia, or Charleston, or directly to European markets. As trade developed, boats were built at Pittsburg, Marietta, and Louisville, and sent directly to the West Indies, where cargoes of grain and salt meat were exchanged for rum and silver. Return traffic, in case the goods were bulky, or could transport themselves, as cattle, horses, and slaves, followed the buffalo trails or the pioneer roads back to the settlements. Since both the British and the Spanish frontiers offered abundant opportunities for smuggling, the profits of this foreign trade were far greater than could be derived from commerce with the Eastern markets. There developed, in consequence, a marked antagonism of interest between the agricultural communities beyond the mountains and the manufacturing sections of the seaboard.

Michaux, 145, 250–266.

The Cumberland Road. — No statesman was more interested in the trans-Alleghany country, or saw more clearly the necessity for adequate transportation facilities, than President Washington. As a young surveyor he had blazed the trail across the divide between the Potomac and the Monongahela, named, from his Indian guide, Nemacolin's path, and he was in command of the Virginia troops that widened the trail into the road that was traversed by Braddock's army. Under the royal proclamation of 1763, Washington had been awarded bounty lands on the Ohio River, and his holdings between the Great and Little Kanawha amounted to thirty thousand acres. At the close of the Revolutionary War, the ex-commander-in-chief made a journey over the mountains to look after this property. On his return he addressed a letter to Benjamin Harrison, Governor of Virignia, urging that the state undertake the building of a wagon road across the mountains and so establish commercial connections with her trans-Alleghany territory. "The Western settlers (I speak now from my own observation) stand as it were upon a pivot. The touch of a feather would turn them any way. They have looked down the Mississippi until the Spaniards, very impoliticly I think for themselves,

Hulbert, Washington's Road, Ch. I, IV, V, VI.

Hulbert, Cumberland Road.

Writings of George Washington, X, 324–325, 350–352, 361–366; XI, 32, 195–199.

Writings of George Washington X, 408–409.

threw difficulties in their way; and they looked that way for no other reason, than because they could glide gently down the stream; without considering, perhaps, the difficulties of the voyage back again, and the time necessary to perform it in; and because they have no other means of coming to us but by long land transportations, and unimproved roads. These causes have hitherto checked the industry of the present settlers; for except the demand for provisions, occasioned by the increase of population, and a little flour, which the necessities of the Spaniards compel them to buy, they have no incitements to labor. But smooth the road and make easy the way for them, and then see what an influx of articles will be poured upon us; how amazingly our exports will be increased by them, and how amply we shall be compensated for any trouble and expense we may encounter to effect it. . . . It wants only a beginning. The western inhabitants would do their part toward its execution. Weak as they are, they would meet us at least halfway, rather than be driven into the arms of, or be dependent upon, foreigners."

Commissioners were later appointed by Maryland and Virginia to consider means of improving the navigation of the Potomac and conferences were held in Alexandria (1785), Annapolis (1786), and Philadelphia (1787), but not till trade with the back country began to assume proportions that interested eastern merchants, was effective action taken. New York, Philadelphia, Baltimore, and the new national capital were situated on waterways that led far into the interior; but their citizens saw that the full advantage of this opportunity would not be realized until goods could be freighted across the mountains. In 1802 Congress voted to appropriate one twentieth of the proceeds of the sale of Ohio lands to the making of "public roads leading from the navigable waters emptying into the Atlantic to the Ohio" and on through the Northwest Territory, as might prove serviceable. The Cumberland Road, or the National Turnpike, as it was known in its westward extension, diverged from Braddock's Road

Weld, I, 53–79.

at Uniontown, Pennsylvania, crossed the Monongahela River at Redstone Old Fort and the Ohio at Wheeling. The surveyors followed a pioneer route, Zane's trace, to Zanesville, but thereafter struck directly west through Columbus and Indianapolis to Vandalia, by 1838. The costs of transportation by wagon road are always higher than by water because of the wear and tear on roadbed, vehicle, and draught horses. Hence the bulk of traffic abandoned the pike wherever river transportation was available, *e.g.* at Brownsville on the Monongahela and at Wheeling on the Ohio; but the interior sections of Ohio, Indiana, and Illinois were opened up to settlement and trade in much the way Washington had foreseen.

McMaster, III, 463–464.

Writings of George Washington, X, 375–377, 402–414, 428, 475–476; XI, 42, 163, 359–360.

Gallatin's Plan. — Impressed by the necessity of opening up the interior, and convinced that private enterprise was inadequate to the task, Albert Gallatin, Secretary of the Treasury, submitted to Congress (1808) a comprehensive scheme of internal improvements which he proposed should be undertaken in whole or in part by the national government. The succession of peninsulas jutting out into the Atlantic from Cape Cod to Cape Hatteras interrupted coastwise navigation and offered vexing obstacles to commerce. They should be cut by a series of canals large enough for ocean vessels. The dangerous outside passage from Boston to New York could be avoided by a canal across the narrow neck of land between Cape Cod Bay and Buzzards Bay. Water communication between Delaware and Chesapeake bays would do away with a long roundabout voyage, and a canal between Norfolk and Elizabeth City, Virginia, would facilitate commerce between the Chesapeake and Albemarle Sound. The last two enterprises were already undertaken by private companies, but the work should be carried to completion by national appropriation. Other local improvements, such as the canalizing of the Merrimac River, the Middlesex Canal connecting Boston with Lowell, the Schuylkill and Delaware, the Schuylkill and Susquehanna canals, were projects worthy of national aid. Canal communication

Am. State Papers, Miscellaneous, I, 724–921.

Rept. Inland Waterways Commission, 1908, 534–581.

should be established from the Hudson River to Lake Champlain and to Lake Ontario, and between the Mississippi and Lake Pontchartrain at New Orleans. The series of turnpikes connecting Boston with New York, Philadelphia, Baltimore, and Washington should be improved and extended so that a great post road running from Maine to Georgia might insure transportation between the principal seaports.

Moore and Jones, Travelers' Dictionary.

Between the seaboard and the Western states communication should be furthered by the improvement of the Santee, James, Potomac, and Susquehanna rivers, and by the building of post roads to connect the headwaters of navigation on the eastward flowing streams with the corresponding western rivers — the Tennessee, Kanawha, Monongahela, and Allegheny. Water transportation in the Mississippi Valley should be bettered by canals around the Falls of the Ohio and the Niagara rivers. The pioneer roads radiating from Pittsburg to Detroit, St. Louis, and New Orleans must be taken over by the national government, since local resources were insufficient to their satisfactory completion.

Gallatin's scheme of internal improvements was frustrated by preoccupation in the war with England, but the most important of his projects were later accomplished.

Roosevelt, IV, Ch. VI, VII.

The Louisiana Purchase. — Beyond the Mississippi lay a vast unknown territory, claimed by France and Spain and France in turn, but tenanted only by Indian tribes.

Semple, Ch. VI.

The settlements at St. Louis and St. Charles were mere agricultural villages inhabited by the French refugees from Vincennes and Kaskaskia and by the trappers and *voyageurs* employed by Chouteau's fur trading company.

Sato, 298–316.

The region to the north and west was *terra incognita.* Indian traders had pushed up the Mississippi to the Falls of St. Anthony and along the Missouri to the Mandan villages; a few adventurous Americans had visited the trans-Mississippi country and learned something of its infinite possibilities; Daniel Boone, driven from Kentucky by the inroads of civilization, was trapping and farming along the

Hosmer, Louisiana Purchase.

lower Missouri; Philip Nolan was corralling wild horses on the plains threaded by the Brazos River; but as yet the land was not coveted for its own sake. The chief significance to the frontier settlers of the west bank of the Mississippi lay in the danger that the commandants stationed at St. Louis and New Orleans might interfere with their traffic down the river. In 1801 the coveted right of deposit at New Orleans was actually suspended, and the Westerners clamored for aid, lest the trade so essential to the prosperity of the American settlements be strangled by the jealous Spaniards. When Louisiana territory was ceded to Napoleon Bonaparte (1801) and the ambitious First Consul proposed to found a colonial empire in this realm discovered by La Salle, President Jefferson became alarmed. A special envoy was dispatched to Paris and negotiations for the transfer of New Orleans with the Floridas or Louisiana were set on foot. Fortunately for the peace of the Mississippi Valley, Bonaparte had the sense to see that to maintain his authority at New Orleans would cost more men and money than he could well spare. On renewal of the war with England (1803) he was easily induced to cede the whole Louisiana territory to the United States for $15,000,000.

Jefferson's Works, VIII, 144, 190, 206, 209, 249, 262–263, 295.

No man in that day knew the extent and resources of the region thus unexpectedly acquired. Captain Robert Gray of Boston in the course of a trading voyage along the Northwest Coast (1792) had come upon the mouth of a great river which he named after his good ship *Columbia*. Vancouver, the English explorer, sent a sloop to explore the river in this same year, and made a thoroughgoing survey of Puget Sound, taking possession of the region in the name of Great Britain; but what lay between the Pacific Coast and the Missouri River was still to be discovered. At the suggestion of President Jefferson (1802), Congress authorized an exploring expedition which was to ascend the Missouri to its source and cross the watershed that separated the eastward from westward flowing streams in the hope of coming upon the upper reaches of

Winsor, Narr. and Crit. Hist. America, VII, 556.

Marvin, Ch. V.

Laut, Pt. IV, Ch. XI.

Thwaites, Rocky Mt. Exploration, 62–208.

the river discovered by Gray ten years before. In the spring of 1804 Captains Lewis and Clark set out from St. Louis on this arduous enterprise. They wintered at Mandan, negotiating treaties of peace and establishing trading relations with the Indian tribes. During the summer of 1805 the little party pushed on up the Missouri to the Great Falls and beyond to the mountain barrier that marked the confines of Louisiana. There they cached their boats, and, finding Indian guides and horses, they crossed by Lolo Pass to the western slope of the Rockies. It was a task of enormous difficulty, but pluck and endurance brought the explorers at last to the Clearwater River. There they built canoes and so floated down the mighty River of the West to the Pacific. The return journey was successfully accomplished the following summer, and the heroic captains reached St. Louis in September, 1806, having achieved a feat unparalleled in the annals of exploration.

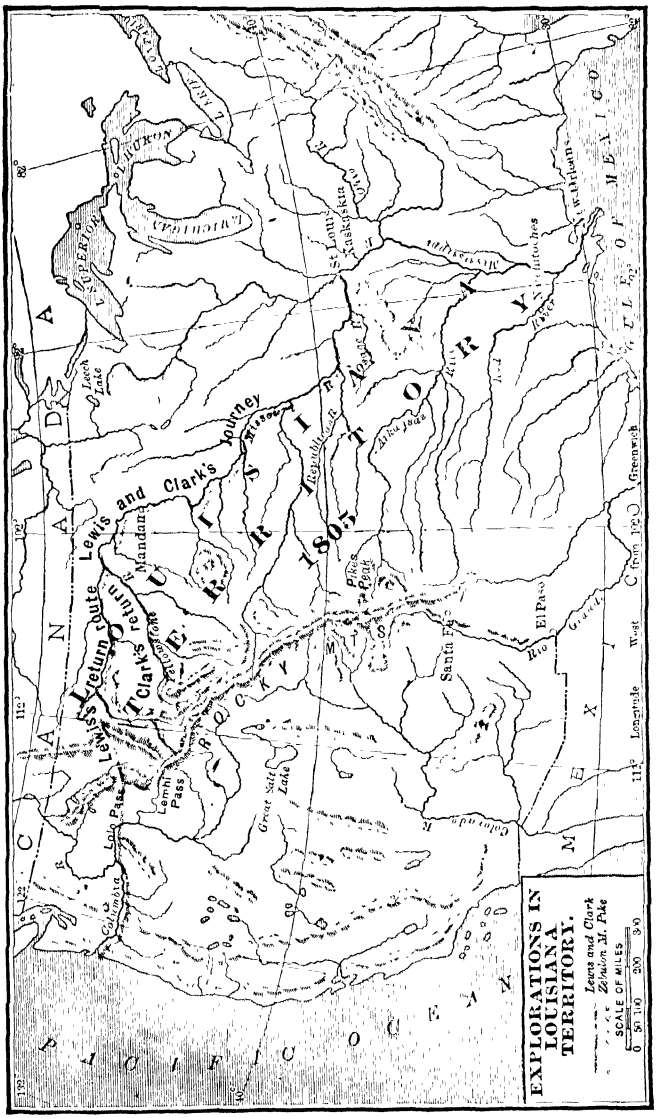
Semple, Ch. XI.

Thwaites, Lewis and Clark Journals.

Cones, Pike's Expedition.

Already in 1804 another exploring party, commanded by Lieutenant Z. M. Pike, had ascended the Mississippi to Leach Lake and unfurled the Stars and Stripes over the British trading posts in that neighborhood. In the next year Pike undertook to find the source of the Red River, the boundary between New Spain and Louisiana. Ascending the Missouri and the Osage rivers and thence crossing the plains to the Arkansas, he reached the Rockies at the foot of Pike's Peak. Pushing southward in search of the Red River, the indomitable lieutenant led his party over the Front Range to the sources of the Rio Grande. But this was Spanish ground, and the exhausted explorers were soon arrested as spies and conducted to Santa Fé and thence to Chihuahua for examination. No treasonable intent being discovered, Pike and his men were taken back through Texas to Natchitoches on Red River. Thus were the confines of the newly acquired territory determined.

Both Pike and Lewis and Clark were instructed to make careful observations of the regions traversed. Their journals contain interesting notes on the fauna and flora


EXPLORATIONS IN LOUISIANA TERRITORY.
Lewis and Clark
Pike
SCALE OF MILES
0 50 100 200 300
1805
Lewis's Return Route
Lewis and Clark's Journey
Clark's return
Mandans
Lewis and Clark's Route
Lemhi Pass
Great Salt Lake
Santa Fe
El Paso
Rio Grande
Red River
Arkansas
Missouri
St. Louis
Natchitoches
Natchez
Greenwich
Longitude West
PACIFIC OCEAN
MEXICO
CANADA
LOUISIANA
TERRITORY
Columbia
Yellowstone
Platte
Pike's Peak

seen *en route*, and they endeavored to ascertain something of the industrial resources of the country. But their contemporaries were fully absorbed in the exploitation of the lands east of the Mississippi and gave little heed to the new acquisition. Jefferson thought it might be utilized as a reservation for the Indian tribes who barred the way of the settlers in the Illinois country. The vast wealth, mineral and agricultural, of Louisiana territory, and the commercial possibilities of the Pacific Coast, remained to be developed by a later generation. The only riches immediately available were furs and the profits of the Indian trade. John Jacob Astor, a New York merchant who had amassed a fortune in the China trade, exchanging furs for tea, divined the advantages of the overland route to the Pacific. He projected a series of trading posts along the Great Lakes and the Missouri and Columbia rivers and proposed to send the furs taken in these unexploited regions directly across the Pacific to Canton. A party of traders and trappers was sent out over the Lewis and Clark route, but the supplies were forwarded by sea. After many and costly vicissitudes, the two parties met at the mouth of the Columbia (1811), and there a trading post, Astoria, was built. Unfortunately for Astor's project, the British fur traders, the Northwest Company, contested the right of the Americans to operate in this region, and Astor's agents were induced to abandon the enterprise. A man-of-war flying the Union Jack came to the aid of the Northwesters, and Astoria became Fort George (1812).

Irving, Astoria.

Turner, New West, Ch. VIII.



A Pioneer Pilgrimage

CHAPTER VI

INDUSTRIAL CONSEQUENCES OF THE WAR OF 1812

Vindication of the Rights of Neutral Trade

American Grievances. — Jay's treaty had settled none of the weighty commercial questions at issue between England and the United States. Another treaty, negotiated in 1807, President Jefferson declined even to refer to the Senate, since it did not provide for the inviolability of neutral trade nor guarantee American sailors against being impressed into British service. English statesmen maintained that the rights and obligations of a British subject were inalienable and that a man born in the British Isles was liable to impressment though he might have naturalized as an American citizen. In pursuance of this policy, British men-of-war were accustomed to cruise outside our harbors, there to overhaul merchantmen as they set sail, inspect the crew, and claim the sailors who could not prove American birth. In the case of the Chesapeake, a cruiser of the United States was forcibly searched, and four men — three Americans and one Briton — were carried off in irons. Not less than sixteen hundred remonstrating sailors were thus impressed into the royal navy, and England, hard bestead to make good the losses of war, was loath to abandon the practice. Three times the right of impressment had been formally protested by the United States government, but without avail. The Foreign Office retorted that thousands of British sailors had deserted from his Majesty's ships and taken service on American vessels, where higher wages and more humane treatment might be expected.

McMaster, III, 240–335.
Hildreth, VI, 31–57, 84–136, 187–206, 300–310.
Annals of Congress, *1814–1815*, 1417–1452.

Callender, 239–260.

Not our seamen only, but our mercantile interests were in jeopardy. England was mistress of the seas, for the French fleet had been destroyed at Trafalgar, and European nations, whether friends or foes of Napoleon, dared not risk a vessel out of port. Few flags appeared upon the high seas but the Union Jack and the Stars and Stripes. The war had thrown the European carrying trade largely into the hands of American shipmasters, because the United States was the only neutral nation possessed of a considerable merchant marine. Jealous of the commercial gains accruing to this formidable rival, English merchants and shipowners sent in vigorous protests, and the government set about devising a remedy. An order in Council of 1793 declared "all vessels loaded with goods, the produce of any colony of France, or carrying provisions or supplies, for the use of any such colony," liable to seizure. Under this order British men-of-war were authorized to waylay merchantmen bound to or from the French West Indies and to confiscate the forbidden goods. This policy had important advantages for Great Britain; France was deprived of supplies from her colonies, the English treasury was enriched, and losses were inflicted on American trade by one and the same seizure. In 1806 the coast of Europe from Brest to the Elbe was declared under blockade, and a neutral vessel attempting to make any intervening port was lawful prize. Many an American ship, falling foul of a British man-of-war, was captured and conveyed to a British port, there to be sold for the benefit of her captors, and her owners and the merchants who had shipped the cargo were wholly without remedy.

The object of the order of 1806 was to punish Prussia for her forced alliance with the enemy, but Napoleon, fully master of the Continent since the peace of Tilsit, met this attack by a counter stroke. The Berlin Decree closed all European ports to British vessels and British merchandise. England immediately retorted by an order in Council announcing that no netural ship might trade with France or her allies until she had first touched at a British port

and paid reëxportation duties there. Napoleon thereupon issued the Milan Decree, declaring every vessel complying with the British order "denationalized" and subject to seizure. Neither Great Britain nor Napoleon made any serious attempt to enforce these blockades by an adequate naval force, but the decrees served to justify the seizures of neutral vessels made occasionally by men-of-war, more often by privateers licensed by the warring powers.

The losses inflicted on American commerce were too heavy to be patiently borne, and Congress was besieged by petitions from the merchants of the seaports — Salem, Boston, New York, Philadelphia, and Baltimore — setting forth the "great injuries suffered by the aggressions of the belligerent powers" and demanding protection. The authorities were perplexed. President Jefferson, a Virginian and a planter, had no adequate conception of the importance of the interests involved. He desired above all things to avoid war, and he hoped to bring both powers to terms by depriving them of the benefits of American trade; therefore he recommended to Congress in a special message (December 16, 1807) "the inhibition of the departure of our vessels from the ports of the United States." Within the week the suggestion of the President became the law of the land. The Embargo Act prohibited American vessels already in harbor sailing for a foreign cruise, every vessel returning to port was to be detained, merchantmen owned by foreigners were excluded from American waters, while the United States navy and the revenue cutters were placed at the disposition of the executive for the enforcement of the order. Thus, not only transatlantic trade, but the profitable commerce with the French, Dutch, and Spanish West Indies that had developed during the European war was brought to a standstill, and only the coastwise trade remained open to our merchant marine. Lest this afford chance to venture out to sea, no vessel, not even the smallest fishing smack, was allowed to sail without giving bonds, six times the value of her cargo, to reland the same in the United States. In case of violation both

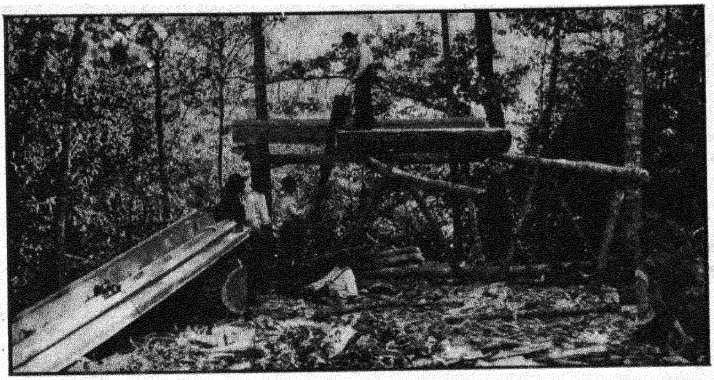
McMaster, III, 412–417.

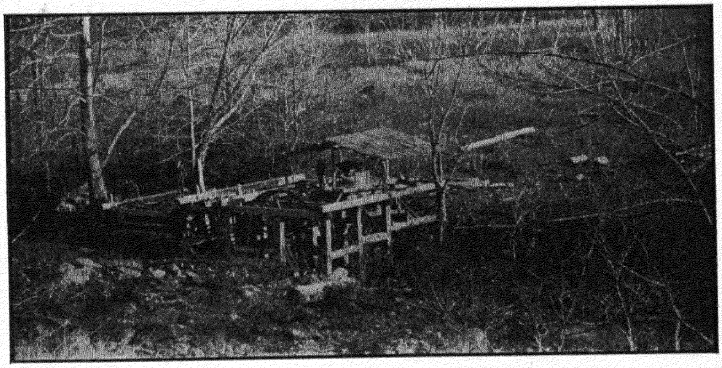
Marvin, Ch. VII.

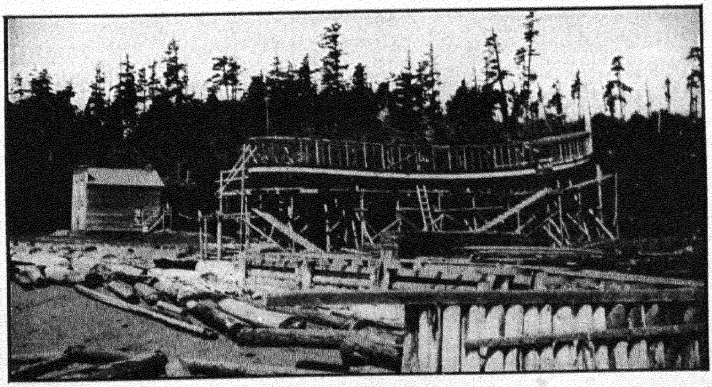
cargo and vessel were forfeited, while owner and captain were subject to heavy fines.

The effects of the Embargo were soon evident in diminished trade. The value of the imports of 1808 was not half that of 1807, and the exportations of the Embargo year shrank to one fifth those of the previous twelve months. Nevertheless, the decline in tonnage registered under the United States flag for the foreign trade was slight. Some ships were sold to English firms or registered under the British flag, but most shipowners let their vessels lie idle at the wharfs, hoping for a reversal of the administration's disastrous policy. The $50,000,000 of capital invested in shipping brought in no revenue, and thirty thousand out of forty thousand American sailors were suddenly thrown out of employment. Some defiant sea captains avoided the home ports altogether and made voyage after voyage between foreign lands, preferring to run the risk of capture rather than incur the sure losses of detention in an American harbor. Prices of foreign commodities doubled, while prices of domestic goods fell below the cost of production. Lumbermen and fishermen were reduced to beggary, and farmers, unable to dispose of their produce, offered their lands for sale. The mercantile classes suffered no less. In New York the Embargo caused one hundred and twenty bankruptcies and threw twelve hundred unfortunates into the debtors' prison. An English traveler thus describes the first commercial city in the United States after five months of this ruinous régime: "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 wharves. Many of the counting houses were shut up, or advertised to be let; and the few solitary merchants, clerks, porters, and laborers 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

Lambert, Travels through Can. and U.S., II, 62–65, 294–295.







PRIMITIVE LUMBERING

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 streets near the waterside were almost deserted, the grass had begun to grow upon the wharves, and the minds of the people were tortured by the vague and idle rumors that were set afloat upon the arrival of every letter from England or from the seat of government."

When the Embargo gave way to nonintercourse with Great Britain (1809) Americans speedily availed themselves of the golden opportunities of neutral commerce. By 1810 our tonnage registered for foreign trade had reached 981,019, the highest point in the first sixty years of our national history, while the proportion of foreign trade carried on in United States vessels, which had fallen from 92 per cent to 86 per cent under the influence of the Embargo, recovered to 91.5 per cent.

The War. — Jefferson's abstention policy served neither to vindicate the rights of neutral trade nor to avert war. Napoleon made a pretense of repealing the Berlin and Milan decrees, but imposed restrictions on American commerce no less burdensome. England abolished the reëxportation duties, but prohibited the carrying of American products, notably cotton, to Continental ports, and the impressment of seamen continued unchecked. In 1811 a congressman asserted that ten thousand American seamen had been kidnaped for the English service. War was declared in June, 1812. Our coasts were quickly infested by a British fleet, and thereafter commerce with Europe was carried on at great risk. The war tariff of July 1, 1812, doubled and trebled the duties on imported commodities. Imports and exports rapidly declined, until their combined value (1814) was but $20,000,000, one seventh of the foreign trade of 1810. Our shipowners faced ruin, and the temptation to revenge the seizures and confiscations of the ten years preceding by direct retaliation on British commerce was too strong to be resisted. Spite of scruples as to the

Maclay, 225–226, 503–506.

Abbot, Ch. V.

rightfulness of privateering, many shipowners took out letters of marque and reprisal and armed their vessels for war. Every species of craft — merchantmen, coasting schooner, pilot boat, and fishing smack — was fitted up with guns and ammunition and sent out to prey upon the enemy. From Salem, Gloucester, Marblehead, and Newport, from New York, Philadelphia, and Baltimore, scores of privateers put out to sea, and even the Southern ports — Norfolk, Wilmington, Charleston, Savannah, and New Orleans — sent a considerable contingent. Sixty-five vessels were commissioned as privateers in the first three weeks of the war, one hundred and fifty in the first two months. During the summer of 1812 one hundred prizes were taken, and but fifty vessels were lost to the enemy, only thirteen of these being privateers. During the three years of war the five hundred and fifteen privateers commissioned by the United States government captured over thirteen hundred British vessels, most of them merchantmen carrying valuable cargoes. Congress allowed a rebate of one third the import duty on captured goods and offered $25 for each prisoner taken.

The War of 1812 was a naval war. The exploits of our little navy, coupled with the devastations wrought by our privateers, forced Great Britain to recognize that a rival maritime power had arisen. A score of signal victories won in the English Channel, in mid-Pacific, on the Great Lakes, and in the Caribbean Sea, finally convinced the English government that the United States must henceforth be treated with respect; but the immediate result was not commensurate with our successes. The Peace of Ghent adjudicated certain open questions as to boundaries and the status of hostile Indian tribes, but settled none of the prime matters in dispute. The American contentions that free ships should make free goods and that the flag should protect the crew were not incorporated in the treaty, nor would the British commissioners consent to define a legitimate blockade. Nevertheless, England quietly dropped her much-prized right of impressing

Annals of Congress, *1814–1815*, 1285–1298, 1383–1398.

Americans into her service, and having proved their ability to defend themselves, our seamen were thereafter free from molestation. The added prestige won by the United States in the War of 1812 was voiced by the London *Times*. "Their first war with England made them independent; their second made them formidable."

The Reciprocity Treaties. — In the first two years following on the Peace, our shipping interests experienced a remarkable revival of prosperity. The total volume of exports and imports in 1816 amounted to ten times that of 1814, while the tonnage registered for foreign trade rose from 674,633 to 860,760. But this welcome prosperity was short-lived. By 1821 the foreign commerce of the United States had shrunk to half the proportions of 1816, and our ocean tonnage was less than in 1797. A variety of causes contributed to this lamentable decline. The protective tariff of 1816 which discouraged importation, the business crisis of 1819 which curtailed investments, the development of manufactures and domestic trade that tended to make us independent of foreign trade, doubtless injured the shipping interest; but the heaviest blow was struck when Congress substituted reciprocity for the discriminating duties that had hitherto protected American vessels against English competition. With the intention of freeing our ships from the restrictions imposed in British and European ports, we offered our rivals reciprocal free trade. Discriminating tonnage duties and excess duties on goods imported in foreign vessels were to be repealed in so far as they affected the countries that should abolish all discrimination against the shipping of the United States. Great Britain was the first nation to avail herself of this generous offer. On July 3, 1815, a convention was concluded providing that "there should be between the territories of the United States and all the territories of His Britannic Majesty in Europe reciprocal liberty of commerce." Our discriminating tonnage and customs duties were relinquished in exchange for the privilege of entering ports of the British Isles without let or hindrance; American

Bates, 98–129.

Marvin, Ch. IX.

Pitkin, Statistical View, Ch. VIII.

Annals of Congress, 1814–1815, 263–267.

Annals of Congress, 1815–1816, 1478–1506.

vessels were to be "admitted and hospitably received at the principal settlements of the British dominions in East India"; but the ports of the British West Indies remained closed for fifteen years longer, and maritime trade with Canada was under the ban until 1850.

It is an open question whether we got more than we gave in this, and the reciprocity treaties subsequently negotiated with Sweden, the Netherlands, Prussia, Spain, the Hanseatic cities, — Hamburg, Bremen, and Lubeck, — Oldenburg, Sardinia, and Russia. During the following decade there was some increase in American tonnage engaged in foreign trade, but not in proportion to the increase in population and wealth; indeed, tonnage per capita steadily declined. The volume of foreign commerce gained but slowly, and the figures of 1806 and 1807 were not again reached until 1835. Notwithstanding British competition, our shipmasters managed to increase their proportion of transatlantic commerce for the first ten years of reciprocity. A line of fast-sailing packets was established between New York and Liverpool in 1816–1817, and another in 1821–1822, a third line plied to London and Havre after 1822, and a direct line to Havre after 1832. Our paramount advantages for the building of sailing ships enabled us to offer the most favorable terms, and thus for a time to monopolize foreign commerce under a régime of a free field and no favors. This advantage was largely done away by the tariff of 1828, which imposed heavy duties on bolt iron, copper, canvas, hemp rope, etc., while offering no compensating protection to shipping interests. The British tonnage entering our ports was 78,947 in 1830, the year following it rose to 143,806, and the average for the decade 1830–1840 was 212,661. Under this keen competition freight rates fell disastrously, and the proportion of foreign trade carried in American vessels dropped from 92.5 per cent in 1826 to 82.9 per cent in 1840.

Pitkin, Statistical View U.S., Ch. IV.

The real gainers from the reciprocity policy were not the shipowners, but the farmers and planters, whose surplus products were sent to foreign markets at declining

freight rates. The value of our cotton exports rose from $24,106,000 in 1816 to $36,846,000 in 1825, and $64,661,000 in 1835. During the same time the exports of wheat, flour, rice, and tobacco barely held their own, not because of any check in the foreign demand, but because all available soils were converted to cotton culture. The rice and indigo plantations of Georgia and South Carolina were turned to the growing of Sea Island cotton; the wheat fields of the "back country" were planted to the "green seed," or short staple variety. Production increased from 156,000 bales in 1800 to 340,000 in 1810, and 458,000 in 1816, and 606,000 in 1820, and from one half to two thirds of the crop was exported. It was estimated that $40,000,000 was invested in cotton plantations, and that the planters cleared 50 per cent on their investment during the early years when high prices prevailed.

Michaux, 290, 303.

Hammond, 31–33, and Appendix.

The Fisheries. — Another New England industry that felt the ill effects of the war was the cod fishery. Freedom to fish off the Grand Banks and in other Canadian waters had been fully conceded in the treaty of 1783, and our commissioners were instructed to secure an equivalent concession in the Peace of Ghent, but they failed to do so. The English government declared that this was a privilege, not a right, and that it had been abrogated by the war. The vexed question was adjudicated in 1818, when American fishermen secured the "liberty" to fish within certain limited areas and to use such adjacent coasts as might be unsettled for curing their fish. Populated bays and harbors could be entered by our fishing smacks only when in need of shelter, repairs, wood, and water. The Canadians demanded that in return for these favors their fish should be allowed full entry into the United States; but the fishing interest protested against throwing open our markets, and the war duties of $1 a quintal on dried and eighty-five cents on pickled fish were retained. On the other hand, the Americans were not allowed to send fish into the British West Indies. The dispute engendered much bitter feeling, and even led to violent contests between the rival parties.

McMaster, IV, 457–469.

Schuyler, Am. Diplomacy, Ch. VIII.

Henderson, Am. Dipl. Questions, 471–500.

Abbot, Ch. IX.

Marvin, Ch. XIII.

Development of Manufactures

Bishop, II, 146–168, 188–214.

Stanwood, American Tariff Controversies, I, 111–137.

At the beginning of the nineteenth century, in spite of the encouragement, legislative and otherwise, that had been given to manufactures, the United States was still in the main an agricultural nation. We were producing more both of food products and raw materials than were consumed in the country, and we could not provide manufactured commodities sufficient to supply the home market. In the natural course of trade our exports of raw materials and foodstuffs would pay for the imports of manufactured goods. This was satisfactory to the shipping interest since it insured profitable cargoes, — to the farmer since it opened foreign markets for his produce, and to the consumer since he secured goods of the best quality at low prices; but it placed manufacturers at a disadvantage.

Bagnall, I, Ch. X.

Cotton Manufactures. — The Embargo, the Nonintercourse Act, and the War of 1812 gave domestic manufacturers a virtual monopoly of the home market for a period of seven years. The exclusion of English goods, now as during the Revolutionary War, threw the country upon its own resources, while commerce being rendered unprofitable, business enterprise turned to manufactures as the most promising available venture. Much of the capital withdrawn from shipping was invested in cotton mills. Slater's success at Pawtucket had demonstrated the possibilities of this new textile industry, and men trained under his eye went out to set up rival establishments. The mills at Slatersville, Rhode Island, Pomfret, Connecticut, and Union Village, New York, were direct offshoots from the "Old Mill." For the first ten years development was slow; and only four mills were in successful operation in 1804. When, however, English competition was excluded, an epoch of extraordinary progress opened. In 1807 there were fifteen cotton mills running 8000 spindles and producing 300,000 pounds of cotton yarn annually; in 1811 there were eighty-seven mills operating 80,000 spindles, producing 2,880,000 pounds of yarn per year

and employing 4000 men, women, and children; in 1815, 500,000 spindles gave employment to 76,000 persons, with a pay roll of $15,000,000 per year. Rhode Island was the center of this flourishing industry. Within thirty miles of Providence were one hundred and thirty mills running 130,000 spindles and employing 26,000 operatives; but other states were not far behind. Massachusetts chartered fifty textile companies between 1806 and 1814; New York chartered fifteen such corporations in the year 1813; there were then five spinning mills in Paterson, New Jersey, and eleven in Baltimore. The mills of New England were generally run by water power, those of the West and South more often by horse power. Steam was first successfully used as a motor for spinning machinery at Ballston, New York, in 1810.

The yarn spun in the mill was as yet woven on hand looms in the homes of the neighboring countryside. Many efforts had been made to imitate the power looms recently introduced into the cotton factories of England. Machines had been patented in 1803 and 1804, but they proved impracticable. In 1814 Francis C. Lowell returned from a European sojourn bent on establishing in Massachusetts a cotton factory better than those of Manchester. He devised and constructed the first successful power loom set up in this country, and built, in Waltham, Massachusetts, the first cotton mill in which all the processes of spinning, weaving, and printing were carried on under one roof. The venture was a brilliant success. Other looms were rapidly constructed and other factories equipped with this labor-saving device. The machine was soon adapted to the weaving of sheetings, ginghams, and sail duck. Improvements were made in the processes of carding, spinning, and calendering, and in the central motor power. The work was so simplified that the looms could be tended by women and the spinning frames by children, so that the more expensive labor of men was required only for the heavier tasks. From five to six sevenths of the operatives were women and children, a result that

Appleton, Introduction of the Power Loom.

Census, 1860, Manufactures, XV–XX.

Montgomery, Cotton Manufacture.

Am. State Papers, Finance, II, 666–689.

Hamilton would have heartily approved. Tench Coxe, writing in 1813, waxed eloquent over the industrial miracle achieved. "These wonderful machines, working as if they were animated beings, endowed with all the talents of their inventors, laboring with organs that never tire, and subject to no expense of food or bed or raiment or dwelling, may be justly considered as equivalent to an immense body of manufacturing recruits, enlisted in the service of the country."

The value of our cotton manufactures in 1810 was $4,000,000; in 1815 it was $19,000,000, and nearly adequate to the needs of the country. In 1800 the spinning mills consumed 500 bales of cotton, in 1805, 1000 bales; ten years later 90,000 bales were required to feed the half million spindles. But the cotton crops outran the domestic demand, and, notwithstanding the increased consumption, the price of cotton wool fell from twenty-four cents a pound in 1800 to sixteen cents in 1810 because the English market was closed.

Woolen Manufactures. — Cotton was "our only redundant raw material." The development of woolen manufactures, on the contrary, was retarded by the scarcity of wool. The effort to promote the raising of sheep, set on foot during the Revolutionary War, had not been very successful. The climate of New England, where the agitation was most earnest, proved too severe, and most of the wool made up in the United States was still imported, the finer grades from Spain, Portugal, and Saxony, the coarse from Russia, Syria, and South America. The epoch of nonintercourse brought the necessity for a domestic supply forcibly before the public, and just at this juncture the Peninsular War threw the Spanish flocks upon the market. Enterprising farmers began importing merino sheep, and by 1809 there were five thousand in the country. In 1811 was organized the Merino Society of the Middle States. Prizes were offered for essays on sheep husbandry and for the best specimens of the Spanish breed, and the farmers of New York and New Jersey vied with each other

Census, 1860, Manufactures, XXVI, XXVII, XXXI, XXXII.

in the quantity and quality of their wool clips. Prices justified heavy expenditure; merino wool sold at seventy-five cents a pound in 1811 and ranged from two to three dollars in 1813.

The textile machinery, so successful in cotton manufacture, was soon adapted to the spinning and weaving of woolen cloth. The manufacture of broadcloth was first attempted by two young Englishmen, the Scholfield brothers, who set up a carding machine, a spinning jenny, and a hand loom at Newburyport in 1794. The business was soon transferred to Pittsfield, where the Housatonic River furnished reliable water power; and here during the nonimportation period a successful industry was established. The Scholfield factory wove the material for the suit of domestic broadcloth in which President Madison was inaugurated. The power loom was introduced into woolen manufacture by Rowland Hazard at South Kingston, Rhode Island. Hazard had made a fortune in the West India trade, but having lost heavily by confiscations under the orders in Council, he purchased the water power on Rocky Brook and devoted his energies to cloth manufacture. The machine he introduced was intended to weave boot, suspender, and girth webbing, but it was found that the work could be better done on the hand loom. The enterprise was pursued, however, with courage and persistence, until, by 1828, a complete woolen factory, equipped with carding, spinning, and weaving machinery, and all run by water power, was in full operation.

Bagnall, I, Ch. VIII, X, XI.

Census, 1860, Manufactures, XXIX–XXX.

Iron Manufactures were furthered by the discovery of a new fuel, — anthracite coal. When the first ark load of "stone coal" was brought down the Lehigh and Delaware rivers to Philadelphia in 1803, it was thought good for nothing but to "gravel footwalks." The difficulty of igniting the lumps seemed an insuperable obstacle to its use as fuel, until one Joseph Smith, the inventor and manufacturer of the iron plowshare, conceived the idea (1812) of building his fire over a grating so as to secure

Nichols, Story of Am. Coals Ch. IV.

a stronger draft. The plan was successful, and heat sufficient to fuse iron was readily developed. The War of 1812 cut off the cargoes of bituminous coal from England, and since, with the clearing of the forests, the supply of wood was growing scant, the iron masters of eastern Pennsylvania were forced to utilize the despised anthracite.

Swank, Ch. XIX, XX.

The most important development in the iron industry was west of the Alleghanies. Ore was discovered in the valley of the Youghiogheny and a furnace set up in 1790. In 1805 there were five furnaces and six forges in Fayette County, and three rolling and slitting mills and a steel furnace were successfully established by 1811. The iron deposits of the river valleys to the north were being developed in the same period. Because of her unexcelled advantages in the way of water transportation, Pittsburg was the natural center for this rising industry. Ore and pig iron were floated down the Allegheny River and the Monongahela to the foundries, rolling mills, and nail factories of the Smoky City. In 1810 two hundred tons of cut and wrought nails were made here. The output of the iron works of western Pennsylvania — nails, hinges, locks, and builders' tools, axes, spades, plows, and harrows for field work, knives, pots, skillets, and spinning-wheel irons for household use — were shipped down the Ohio to the settlements, and on by way of the Mississippi to New Orleans. Sugar kettles were supplied to the cane plantations of Louisiana in 1804. The Pittsburg ironmongers had the advantage of abundant supplies of ore and charcoal in the immediate vicinity, and could easily undersell the wares sent overland from Philadelphia. Iron was fast becoming the dominant industry of Pennsylvania east and west, and by 1810 her enterprising manufacturers furnished half of the cast-iron produced in the United States. The state then boasted forty-four blast furnaces, seventy-eight forges, eighteen rolling and slitting mills, and one hundred and seventy nail factories where nails and brads were cut by machinery.

Michaux, 126–127, 200, 171.

According to Gallatin's Report on Manufactures, the

total manufacturing output of the country in 1810 was valued at $121,000,000. In manufactures of wood, paper, leather, tallow, spermaceti, whale oil, and molasses, we were producing enough to supply the domestic market, the output of the iron works was sufficient within three thousand tons, while the tobacco and hat manufacturers were exporting their surplus stocks. According to Tench Coxe's more careful estimate, the annual value of our manufactures, factory and domestic, was $198,000,000, of which four fifths was produced in Pennsylvania, New York, Massachusetts, Virginia, and Maryland.

Am. State Papers, Finance, II, 425–431.

The Effects of Peace. — British statesmen began to realize that their orders in Council, coupled with the consequent war, had rid them of American rivalry on the sea, only to develop domestic manufactures to the point where the United States would soon be independent of Great Britain. Cobbett, the economist, declared, "We have before us the seeds of a great event, -- nothing less than the complete and absolute independence of America upon English manufactures." A Parliamentary commission reported: "It clearly appears that those manufactures have been greatly promoted by the interruption of intercourse with this country, and that unless that intercourse be speedily restored, the United States will be able to manufacture for their own consumption."

Bishop, II, 146–160, 212, 213.

Bolles, II, Bk. II, Ch. IV.

Nile's Register, I, 164.

Nile's Register, IV, 105.

The conclusion of peace threw open our ports once more to foreign trade, and English manufacturers, eager to regain control of the lost markets, sent in shiploads of cottons and woolens and iron manufactures, which they offered on the most liberal terms to their agents in this country. The goods were taken on credit and disposed of at auction. Lord Brougham justified the speculative character of this trade on the ground that "it was well worth while to incur a loss upon the first exportation, in order by the glut, to stifle in the cradle those rising manufactures in the United States which the war had forced into existence contrary to the natural course of things." The importations of 1815 from Great Britain alone

Taussig, Tariff Hist. U.S., Ch. II.

Bolles, II, 387–391.

Hansard's Debates, First Series, XXXIII, 1099.

Pitkin, Statistical View, 261.
Stanwood, I, 131–136.

amounted to $83,000,000, and those of 1816 came to $155,000,000. American woolen mills closed down, and entrepreneurs like Scholfield were ruined. The price of wool fell in the domestic market, the surplus wool clip was sent to England, and many of the costly merino sheep were killed for mutton and tallow. The iron manufacturers of the seaboard put out their fires. All but five of the forty plants of Morris County, New Jersey, were prostrated, the works were sold at auction, and the employees scattered. Some furnaces and forges were kept running by isolated farmers, but the eastern industry as a whole was ruined. The iron foundries of Pittsburg were adequately protected by the expense of transporting these bulky goods across the mountains, where fifty miles of land carriage cost as much as the ocean freight from Sweden; but the bagging industry of Lexington, Kentucky, was unable to cope with English competition, for imported cotton bagging flooded the country at prices far below the normal cost of production.

Michaux, 199–206.

Am. State Papers, Finance, II, 367, 465; III, 32, 52, 56, 452, 454, 460.

The men who had invested their capital in the new industries raised an outcry against this destructive competition. Forty memorials from as many infant industries and manufacturing centers were sent up to Congress in the session of 1816–1817. The cotton manufacturers of Massachusetts, Connecticut, and Pennsylvania petitioned for protection against the low-priced goods from England and India; the paper manufacturers and printers protested against the competition of Holland and France; the sugar planters of Louisiana, the cordage manufacturers of Massachusetts, the hat makers of New York, the gunsmiths of Lancaster, Pennsylvania, and the proprietors of the hemp factories of Lexington, Kentucky, were no less insistent on protection. The merchants of New York City denounced the auctioneers and asked that a 10 per cent tax be levied on such sales. The Pittsburg memorialists complained "that the manufacture of cottons, woolens, flint glass, and the finer articles of iron has lately suffered the most alarming depression. Some branches which have been several years in operation have been

Am. State Papers, Finance, III, 168, 440–444.

destroyed or partially suspended; and others, of a more recent growth, annihilated before they were completely in operation. The tide of importation has inundated our country with foreign goods. Some of the most valuable and enterprising citizens have been subject to enormous losses, and others overwhelmed with bankruptcy and ruin. . . . In the United States we have the knowledge of the labor-saving machinery, the raw material, and provisions cheaper than in Britain; but the overgrown capital of the British manufacturer, and the dexterity acquired by long experience, make a considerable time and heavy duties necessary for our protection. We have beaten England out of our markets in hats, boots, and all manufactures of leather; we are very much her superior in shipbuilding; these are all the work of the hands, where labor-saving machinery gives no aid; so that her superiority over us, in manufactures, consists more in the excellence and nicety of the labor-saving machinery, than in the wages of labor."

White, Memoir of Slater, 210, 211.

The diverse interests of shipowners and purchasers were likewise represented. The merchants of Salem, Philadelphia, Baltimore, and Charleston urged the reduction of the war duties in the interests of trade. Virginia, voicing the interests of consumers, sent up five petitions against a protective tariff, urging that war prices, double and treble normal rates, might bring high profits to the manufacturer and to the producer of raw materials, but they imposed a heavy tax on the outside public.

Am. State Papers, Finance, III, 463, 484, 518.

Am. State Papers, Finance, III, 447, 458.

The Tariff Act of 1816. — Dallas, then Secretary of the Treasury, submitted to Congress (February 12, 1816) a report on the revision of the war tariff, in which he advocated unreservedly the protection of domestic manufactures. Domestic industries he classified under three heads. First, those firmly established whose products were adequate to the needs of the country, such as carriages, cabinet wares, cordage, hats, firearms, window glass, boots, shoes, and paper; on these, the Secretary recommended duties practically prohibitory, on the ground that

Am. State Papers, Finance, III, 85–95.

Bolles, II, Bk. III, Ch. III.

McMaster, IV, Ch. XXXI.

Rabbeno, 146–183. Stanwood, I, 137–157.

competition among domestic producers would soon lower prices. Second, the infant industries not yet sufficiently developed to supply the demand, but in a fair way to do so, such as cotton and woolen manufactures of the coarser grades, iron, tin, and brass manufactures, spirits, ale, and beer; on these, protective duties were proposed in the belief that the ultimate advantages would more than compensate the consumer for the temporary advance in price. Third, industries in which this country was still heavily handicapped by lack of machinery or skilled laborers, such as high-grade cottons and woolens, silks, linens, muslins, carpets, hosiery, hardware, cutlery, porcelain, flint glass, etc.; on these, duties should be high or low as the interests of the revenue might determine. Duties, he believed, should not be imposed on the raw materials of the manufacturers, especially in the case of the shipbuilders, "which latter interest must be respected at a time when the equalization of duties on tonnage and merchandise will probably give rise to an interesting competition between our own vessels and those of foreign nations." In the bill introduced by Lowndes of South Carolina, 30 per cent ad valorem was proposed on commodities of the first class, 25 per cent on those of the second, while duties on the revenue list ranged from 7.5 per cent to 15 and 30 per cent. At the suggestion of Francis C. Lowell, coarse cottons were given a special form of protection in that a minimum valuation of twenty-five cents a yard was set upon all imported goods. The effect was to exclude the cheaper grades hitherto imported from India and, as the Salem memorial pointed out, to reduce the East India trade by half. The ironmasters secured specific duties of forty-five cents per hundredweight on hammered and $1.50 per hundredweight on rolled iron, and from three cents to five cents a pound on tacks and nails, while an ad valorem duty of 20 per cent was levied on other iron manufactures and on pig iron, the output of the farm furnaces. The measure of protection secured by rolling mills and nail factories was at first conceded to be ample, but the

Taussig, Tariff Hist. U.S., 27–36.

Taussig, Tariff Hist. U.S., 46–59.

tariff proved insufficient to shut out Swedish and English imports, and an increase was granted in 1818. The duty on hammered iron was then raised to seventy-five cents per hundredweight, and that on pig iron to fifty cents per hundredweight. The war duty on salt (twenty cents per bushel) was continued, although the domestic product, 600,000 bushels per year, was far short of the demand, and the annual importation amounted to 3,000,000 bushels. It was urged that the saline springs of New York, Kentucky, and Indiana could soon supply the seaboard market if an adequate measure of protection were accorded. Specific duties of ten cents and fifteen cents per gallon were laid on ale and beer in the interest of the breweries, but more especially to increase the demand for rye, barley, and hops as a solace to the producers of those cereals. The high duties levied on distilled spirits during the war were but little reduced, and the excess of from four cents to seven cents levied on spirits distilled from grain was maintained in the interest of corn growers. The rum interest, so prominent in the tariff debates of the first decade of Congressional history, was less influential now. The war duty on molasses was cut in half; but five cents per gallon was double the rate imposed in 1789, and this tax on their raw material was protested in a petition sent up by the rum distillers of Boston in 1820. Speaking for a "very old manufacture," whose plants represented an investment of $1,000,000, and in the interest of the flagging West India trade, they deprecated any increase of the duty. But a new and diverse interest had arisen. The cane growers of Louisiana asked not only for a protective duty on molasses but on sugar as well. The planters had built ninety-one refineries at an expense of $3,500,000, and were producing $1,000,000 worth of sugar annually, and they secured consideration. The war duties on the various grades of sugar were reduced only one third. The tax on refined sugar held at twelve cents a pound until 1842.

Flint, Recollections, 24.

Am. State Papers, Finance, III, 522.

Bishop, II, 161.

Clash of Sectional Interests. — The stronghold of the campaign for protection was in the Middle and Western

Bolles, II, 363, 367, 394.

states. The manufacturers of New York, New Jersey, and Pennsylvania were supported by the farmers of Ohio, Kentucky, and Tennessee, whose wool, hemp, and flax brought better prices in a protected market, and by the planters of Louisiana, who, handicapped by disadvantages of soil and climate, could not compete with the sugar growers of Cuba and Jamaica unless protected by a tariff wall. In New England there was a conflict of interests. Conservative men were attached to the accustomed channels of commerce, and these were menaced by the protective policy. The effect of high duties was to diminish the volume of trade, increase the cost of shipbuilding, and raise the price of raw materials for rum, cordage, and other established manufactures. The textile interests, on the other hand, favored high duties, and by 1820 Rhode Island and Connecticut had come over to the protectionist camp. Meantime, Southern statesmen had announced themselves squarely against protection. It had become evident that, spite of great natural advantages, cotton manufactures could not be prosecuted in the Southern states because of the inefficiency of slave labor. Import duties tended to enhance the price of all they bought and lower the price of everything they had to sell. The price of raw cotton had risen to twenty-nine and a half cents immediately after the Peace, but was soon to fall because of the discriminating duties levied by Parliament on American cotton. The British duty of 6 per cent ad valorem imposed in 1820 was raised to $7.25 per bale in 1831. Since our normal crop was more than sufficient to supply the domestic demand, the surplus must be exported to an unfriendly market. The price dropped from thirty-two cents per pound in 1818 to seventeen and a half cents in 1820 and nine and a half cents in 1827. Our import duty of three cents a pound levied in 1791 was continued until 1846, but it had ceased to have any effect.

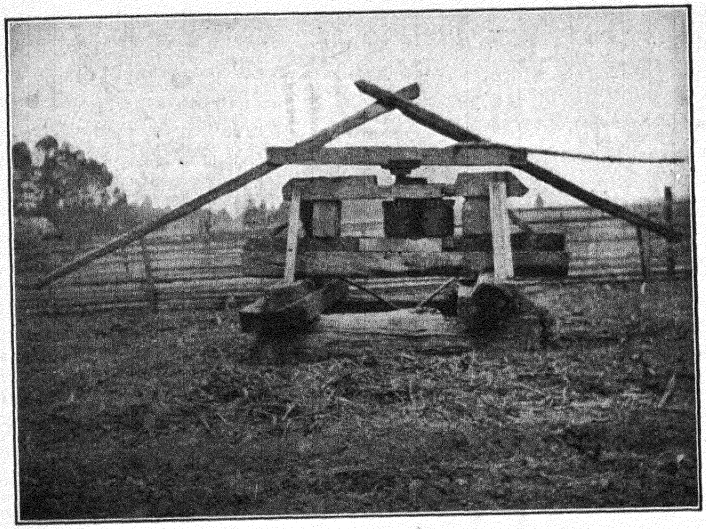
Dewey, Ch. VIII.

Stanwood, I, Ch. VI.

Phillips, II, 330–343.

The Tariff Act of 1824 was carried by the votes of the Middle and Western states. The special advocate of protection was Henry Clay of Kentucky, " the father of

Bolles, II, Bk. III, Ch. IV



HORSE-POWER CRUSHER—EARLY SUGAR MILL



OPEN-AIR BOILER

the American system." The argument of Randolph in behalf of the consumer and that of Webster in behalf of the shipping interest could not avail against the influence brought to bear by the Eastern manufacturers and the Western farmers. Increased duties were imposed on wool and woolens, hemp and cotton bagging, pig iron and iron manufactures. It was intended that the duties on raw materials should in each case be offset by a compensating duty on the corresponding manufacture. The 25 per cent rate on imported cottons was not increased, but the minimum valuation was raised from twenty-five cents to thirty-five cents, thus excluding higher grades of cloth. Coarse cottons were now manufactured in New England as cheaply as in the old country, and under the combined influence of cheap raw material and improved machinery, the cost of production had diminished until our cotton manufacturers were able to sell at English prices. The goods from the Waltham mill that had been sold for thirty cents a yard in 1816 brought but twenty-one cents in 1819, thirteen cents in 1826, eight and a half in 1829, and six and a half cents in 1843. Domestic competition served to reduce prices within the protected area exactly as Hamilton and Dallas had foreseen.

Taussig, State Papers, and Speeches on the Tariff, 252–385.
Clay, Life and Speeches, II, 1–55.
Stanwood, I, Ch. VII.
Wages and Prices, 1752–1860.

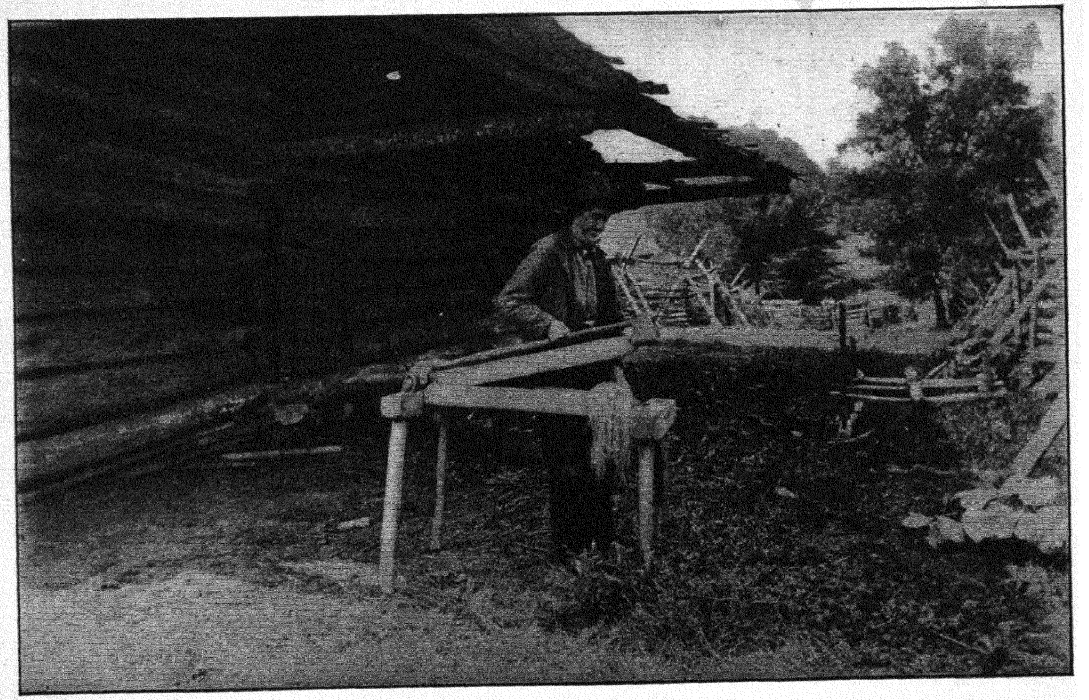
The Tariff Act of 1828. — In 1824 Parliament repealed the import duties on wool, and the price of this important raw material in the British market dropped from 1*s.* to 1*d.* a pound. The English cost of production was correspondingly reduced, and American woolen manufacturers petitioned for more effective protection. Massachusetts, convinced at last that protection of manufactures was the settled policy of the country, led in this agitation. A meeting of manufacturers held in Boston voiced the demands of the woolen interest; their raw materials, not only wool but castile soap and olive oil, were 50 per cent dearer than English prices, and compensating protection must be given their finished product. The General Court passed favorable resolutions, while Webster and all but one of the Bay State congressmen advocated a minimum

Taussig, Tariff Hist. U.S., 37–45, 68–108.
Bischoff, Woolen Manufactures, II, Ch, I, II.
Bolles, II, 393–409.
Stanwood, I, Ch. VIII.

valuation clause in the woolen schedule. A national convention was assembled at Harrisburg, Pennsylvania, which urged the protection of other industries, while the congressional committee on manufactures summoned business men representing the different manufacturing interests to testify as to the nature and degree of protection required.

Politics played so large a part in the tariff legislation of 1828 that the result was satisfactory to no section of the country except the Middle West. Duties on pig iron, wool, and hemp were raised to prohibitory rates, and flax was, for the first time, placed on the protected list. The compensating duties on iron manufactures, woolens, and cordage were not high enough to offset the increased cost of production. The rum distillers were outraged by the raising of the import duty on molasses to ten cents a gallon and the withholding of the drawback previously allowed. The shipbuilders were jeopardized by heavy duties on chains and anchors, sail duck, and cordage, and the drawback on sail duck purchased for the use of American vessels was disallowed. These duties involved the addition of $6.25 per ton to the cost of every ship built in the United States. Serious as were the burdens imposed on New England industries by this "tariff of abominations," it bore even more heavily upon the South. The prohibitory duties on the coarse cottons and woolens with which the slaves were clothed, on sugar, salt, and iron manufactures, gave the planters no choice but to buy of domestic producers at prices averaging 40 per cent higher than in foreign markets. The cotton crop of 1831 was nearly treble that of 1815, but the price in the American market was one half, in the English market one fourth, of that prevailing in the year after the war. The tariff was formally protested as sectional legislation and therefore unconstitutional by Georgia, South Carolina, Alabama, Virginia, and North Carolina in 1829, and an anti-protection convention was held at Augusta, Georgia. In the same year a free-trade convention was held at Philadel-

Taussig, State Papers, and Speeches on the Tariff, 108–213.



BREAKING FLAX

phia and a memorial addressed to Congress, in which the views of the anti-tariff men were ably rehearsed by Albert Gallatin.

In the Tariff Act of 1832 New England's interests were reconciled by reduction of the rates on low-grade wools, hemp, pig and bar iron, and molasses, and by a slight increase in duty on woolen cloth. Flax was restored to the free list, and the accustomed drawbacks on rum and sailcloth were again allowed. Some attempt was made to propitiate the South by a duty of 15 per cent on leaf tobacco and by revival of the war duty of fifty cents a pound on indigo; but protective duties failed to raise the price of either product for the same reason that the price of cotton had not been advanced by the three cents per pound tax. The duty on salt was lowered from twenty cents to fifteen cents a bushel, but since the selling price, fifty cents a bushel, was still four times the cost of production, consumers were not reconciled. A states rights and free-trade convention, held at Charleston in July, declared that the protective policy meant "a steady discrimination of 50 per cent on southern and a bounty of 50 per cent on northern industry." In November following, the recently enacted tariff was declared null and void within the state of South Carolina, and steps were taken to prevent the collection of duties at the ports. The convention stated the tariff policy of South Carolina in unmistakable terms: "The whole list of protected articles should be admitted free of all duty, the revenue being derived from imposts on non-competing articles only."

Bolles, II, Bk. III, Ch. V.

Stanwood, I, Ch. X.

Armed conflict was averted by concessions on both sides. The **Compromise Tariff of 1833** gave "a lease of nine years to protection"; the obnoxious duties were to be gradually scaled down by one tenth of the excess each year, until, in 1842, a horizontal rate of 20 per cent ad valorem should be attained. In order that the redundant revenues might be decreased, coffee, tea, spices, and linens were placed on the free list, but none of the raw materials produced by the Western farmers were so listed.

Financial Difficulties

Bolles, II, Bk. III, Ch. II.

Dewey, 144–168.

Sumner, Hist. Am. Currency, 61–154.

Holmes, U S.A., 211–215.

Bullock, 74–78.

Hildreth, III, 466, 535; IV, 25; V, 415.

McMaster, IV, Ch. XXX, XXXVI.

The failure of Congress to recharter the national bank had greatly embarrassed the government in the financing of the war and deprived the country of its most reliable currency. Five million dollars in national bank notes were withdrawn from circulation. The $7,000,000 in specie that had been contributed by foreign stockholders was sent back to Europe, and the coin remaining in the country was thereafter withheld from circulation. This was the opportunity for which the private banks had contended. Hundreds of joint stock companies immediately secured charters from the state governments and proceeded to issue notes with no adequate provision for redemption. The older and wealthier sections of the country had learned the lessons of depreciation and undertook to avert the disasters consequent on excessive issue of credit money. The banks of Massachusetts and of New York were restricted as to the proportion between issues and assets, and were managed on sound business principles. In the South and West, however, where land was abundant but capital with which to develop its resources scarce, men still hankered for cheap money and plenty of it, and the state authorities and the bankers sympathized with this predilection. Between 1811 and 1816 the number of banks of issue was trebled, and the circulation increased from $45,000,000 to $100,000,000. But the purchasing power of the notes declined with increased issues. The notes of the Washington and Baltimore banks were 22 per cent below par, those of Philadelphia 18 per cent, those of New York 10 per cent. Finally, in 1814, all the banks outside of Massachusetts suspended specie payment. From Maine to New Orleans, and from Philadelphia to Missouri, these "wild-cat" banks declined to redeem their notes, and the government itself could not require specie in payment of taxes. Business men began to petition for a national bank of issue.

The Second National Bank. — The Secretary of the

Treasury urged upon Congress the necessity of recourse to a national bank as the only means of enabling the government to meet its obligations, provide the country with a stable currency, and force the state banks to resume specie payment. Dallas' measure was deferred until 1816, when a bank was chartered upon substantially Hamilton's plan, but on a scale befitting the expansion of business in the twenty-five years' interval. The capital stock was $35,000,000, of which $7,000,000 was to be subscribed by the government and $28,000,000 by private parties. Three fourths of the private subscription was to be in government bonds and one fourth in specie. The bank was authorized to issue convertible notes to the full amount of its capital, and national bank currency, though not legal tender, was receivable at par in all payments to the United States Treasury. Five of the twenty-five directors were appointed by the President of the United States, and Congress was empowered to order an inspection of the bank management whenever it fell under suspicion. The central bank was opened at Philadelphia in January, 1817, and twenty-five branches were established in other business centers.

Am. State Papers, Finance, II, 872; III, 57–61.

The successes of the first national bank were repeated only in part. The extraordinary demand for government bonds brought this paper up to par and relieved the Treasury of serious embarrassment. The national bank notes proved a welcome addition to the currency, especially in the South, where there was no specie and where the local issues were thoroughly discredited; but the task of forcing the state banks back to a specie basis proved too great for an institution organized with undue haste and financed with criminal tolerance. The business was mismanaged from the start. Of the $7,000,000 specie required in the charter, but $2,000,000 was actually contributed, and of the $21,000,000 bond subscriptions, but $9,000,000 was made good in government bonds, the personal notes of subscribers being accepted in lieu of the stipulated payment. Undeterred by the fact that a considerable

Conant, Banks of Issue, 340–357.

portion of its capital stock was but dubious assets, the management awarded dividends to subscribers whose stock was not paid in, loaned freely and with inadequate security to the struggling state banks, discounted heavily the business paper presented by stockholders, and issued currency in excess of the normal financial needs of the country.

Am. State Papers, Finance, III, 306–391.

Unwarranted accommodations and speculation brought the institution to the verge of bankruptcy in 1818, when the Baltimore branch failed for $3,000,000. An investigation of its affairs was ordered by Congress and a vigorous reform prescribed. The original management was obliged to resign, Langdon Cheves of Charleston was elected president, and under his conservative administration the National Bank retrieved its financial standing. But a reform administration could not avert the business crisis which years of speculation and wild-cat banking had engendered. The sudden contraction of credit, following upon a period of reckless financiering, jeopardized banks and business enterprises everywhere outside of New England.

Carey, The Crisis.

Turner, New West, Ch. IX.

The Crisis of 1819. — Not the banks only, but business men of all classes had been mortgaging the future beyond warrant. Manufacturers, encouraged by the prospect of adequate protection, enlarged their plants and doubled their output. Land companies invested borrowed money in property that could not be sold at a profit, and farmers mortgaged their lands for the wherewithal to make improvements. Large sums were sunk in canals and post roads that could not pay dividends on the investment, much less make good the obligations incurred. Confidence in the resources of the country and its ultimate prosperity led men to anticipate industrial development by a generation and to risk too much upon the immediate future.

Flint, Recollections, 212–213.

Dwight, I, 218–222.

Conant, Banks of Issue, 617–618.

The contraction of the currency from $110,000,000 in 1816 to $65,000,000 in 1819, and the refusal of the National Bank to discount any but well-secured paper, called a

sudden halt in this mad career of speculation. Hundreds of business enterprises were prostrated, and thousands of apparently prosperous men were ruined. The closing of factories threw workmen out of employment, and the streets of Philadelphia, Baltimore, New York, Pittsburg, and many lesser manufacturing and commercial centers were thronged with destitute men and women seeking work. Prices fell, and the value of real estate shrank to one third the level of the speculative period.

Wages and Prices, 243–247.

In the Mississippi Valley the speculative demand for money had been even greater than in the East. Virgin soil and limitless possibilities in the way of development created a reckless system of financiering that brooked no restraint. Silver sufficient to serve as the medium of exchange came into the country through the New Orleans trade with the West Indies and Mexico, but the demand for capital with which to develop the country could only be met by credit agencies. In 1817–1818 forty banks of issue had been chartered in Kentucky, and Tennessee and Ohio hastened to adopt the same alluring expedient. The banks issued money without stint and loaned to speculators on easy terms. Prices rose, and though the silver went over the mountains to New York and Philadelphia, the Mississippi Valley seemed to be in the heyday of prosperity. Then suddenly, in 1819, the National Bank presented an accumulation of notes for redemption; the state banks, unable to meet their obligations, were forced to suspend specie payment, and the boom collapsed. To mitigate the general distress the state legislatures passed relief laws, staying proceedings against debtors. Kentucky undertook to meet the situation by establishing the Bank of the Commonwealth, authorized to issue notes on the basis of the state revenues and to loan the same to needy persons on land security, but the remedy was worse than the disease. In 1822 the notes of the bank were worth fifty cents on a dollar, and its beneficiaries were owned. The farmers lost their land and left the state by hundreds and thousands, and business men were put to every

Holmes, 211–215.

Flint, Letters from America, 132–136, 238, 274, 294.

Flint, Letters from America, 130–131.

expedient to provide money for cash payments. A Scotch traveler described the situation as follows: "In this western country there is a great diversity of paper money. Small bills are in circulation of a half, a fourth, an eighth, and even the sixteenth of a dollar. These small rags are not current at a great distance from the places of their nativity. A considerable portion of the little specie to be seen is of what is called cut money, — dollars cut into two, four, eight or sixteen pieces. This practice prevents much money from being received in banks, or sent out of the country in the character of coin, and would be highly commendable were it not for the frauds committed by those who clip the pieces in reserving a part of the metal for themselves. . . ." Again, writing of Cincinnati: —

Flint, Letters from America, 133.

"There is here much trouble with paper money. The notes current in one part, are either refused, or taken at a large discount, in another. Banks that were creditable a few days ago, have refused to redeem their paper in specie, or in notes of the United States' Bank. . . . The creation of this vast host of fabricators, and venders of base money, must form a memorable epoch in the history of the country. These craftsmen have greatly increased the money capital of the nation; and have, in a corresponding degree, enhanced the *nominal* value of property and labor. By lending, and otherwise emitting, their engravings, they have contrived to mortgage and buy much of the property of their neighbors, and to appropriate to themselves the labor of less moneyed citizens. Proceeding in this manner, they cannot retain specie enough to redeem their bills, admitting the gratuitous assumption that they were once possessed of it. They seem to have calculated that the whole of their paper would not return on them in one day. Small quantities, however, of it have, on various occasions, been sufficient to cause them to suspend specie payments.

Flint, Letters from America, 225.

"The money in circulation is puzzling to traders, and more particularly to strangers; for besides the multiplicity of banks, and the diversity in supposed value, fluctuations are so frequent, and so great, that no man who holds it

in his possession can be safe for a day. The merchant, when asked the price of an article, instead of making a direct answer, usually puts the question, 'What sort of money have you got?' Supposing that a number of bills are shown, and one or more are accepted of, it is not till then, that the price of the goods is declared; and an additional price is uniformly laid on, to compensate for the supposed defect in the quality of the money."

Land Speculation

Contemporary Americans, both east and west of the Alleghanies, were possessed with a mania for the unexploited soils of the Mississippi Valley. Large tracts were to be had of the land offices at wholesale prices, and these were bought up by men of means or influence and retailed to would-be farmers at sufficient advance to realize a considerable profit. The sales were made on credit, but the land was usually mortgaged to the full amount of the deferred obligation so that ultimate returns were guaranteed, provided the tract was so situated as to be readily salable.

Clay, Rept. on Public Lands, 1832 Life and Speeches, II, 70–76.

The Emigrants. — No less speculative were the ventures of the men and women who had nothing to risk but their lives. Forbes's Road was the usual route across the Alleghanies, although the new Cumberland Road was shorter. People of means traveled in the stage coaches, paying a round price for transportation and luggage. Single men might ride horseback at less cost. Families found cheaper and more commodious accommodations in a Conestoga wagon, purchased at Philadelphia to be sold at half price in Pittsburg, or, if their destination lay not far beyond, to be driven on for farm use. Every variety of vehicle, and all types of people, were making their toilsome way along the rough military road. "The father may be seen driving the waggon, and the women and children bringing up two or three cows in the rear. They carry their provisions along with them, and wrap themselves in blankets, and sleep on the floors of taverns"

Flint, Letters from America, 64–82.

Flint, Letters from America, 97.



DISTRIBUTION OF POPULATION, 1830

at a charge of twenty-five cents per family. Other pioneers without the wherewithal to purchase a wagon walked the whole distance, dragging their effects in a one-horse cart or pushing them along in a wheelbarrow. Many of the keelboats that floated down the Ohio carried an entire family and all their earthly possessions, household goods, farm tools, cattle, and horses. They landed where chance or caprice might determine, on the Kentucky or Illinois bank, or if the current favored, pushed on to the Mississippi or to the Missouri. It was a veritable race migration, impelled by the love of adventure, by land hunger, by the gambling instinct of the frontier.

Michaux, 188–194.

To Old World peasants, the opportunity to purchase new land at a nominal price and to cultivate it on their own account, unvexed by rentals, tithes, or poor-rates, seemed the open door to fortune. They seldom reckoned on the costs and hazards of the journey — the inevitable hardships of frontier life, the heavy labor necessary to clear the forest, plow the untamed soil, build houses, barns, fences, and roads, the insidious poison of the omnipresent malaria. Many succeeded far beyond any possibility that the fatherland could offer them; but many who had set out with the highest hopes were soon overwhelmed by illness or debt, and perished miserably, or made their painful way back to the seaboard, bitterly lamenting the hardihood that had led them to trust their fortunes to the glowing misrepresentations of a land syndicate. The vikings of this migration were the Kentuckians, the sons of the Virginians and Carolinians who had followed Boone across Cumberland Gap. Inured to hardship, impatient of the restraints of civilization, they bartered their chances in the "settlements" for a stake in the wilderness, and pressed to the West, where land was still abundant and cheap. Inspired by the restless energy of their ancestors, the Kentuckians were always on the move. They pined for elbow-room and deemed neighbors less desirable than freedom to trap, to hunt, to pasture their cattle in the open. To a New England observer this migratory habit seemed

Birbeck, 60–62.

Flint, Letters from America, 287.

Flint, Recollections of Last Ten Years, 72–73.

Birbeck, 120–126, 154–155.

to jeopardize everything which the normal man held dear. "The present occupants sell, pack up, depart. Strangers replace them. Before they have gained the confidence of their [new] neighbors, they hear of a better place, pack up and follow their precursors." The deserted homes were purchased by men of more means and soberer habits, men who set about building substantial houses, planting orchards, organizing schools and churches, and promoting transportation facilities that should convey their produce to market. These were the farmers and planters who sent boatloads of wheat, bacon, whisky, and salt down to New Orleans and the Caribbean islands or dispatched droves of cattle and hogs "back east" along the Pennsylvania Road to be fattened for the Philadelphia abattoirs. Even more staid and prosperous were the little German communities located with careful foresight on the most fertile soil and within easy reach of a good waterway. Here industry and contentment, a predilection for the German tongue and for a specie currency, reproduced the conditions of the fatherland. Travelers such as Weld, Timothy Flint, Michaux, father and son, and Harriet Martineau all testify that the most promising of the pioneers were the Germans; next in capacity for transforming the forest into productive farmland came the Anglo-Americans, then the Scotch-Irish, and then the English, and that the least likely to succeed in the task of civilization were the men of French blood, whether the half Indian *habitants* of Vincennes and Cahokia or the newly imported Parisians of Gallipolis.

Flint, Recollections of Ten Years, 73.

Flint, Letters from America, 232–236.

Flint, Recollections of Ten Years, 9.

Birbeck, 34, 63.

Weld, 230–234.
Michaux, 69–71, 152, 183–185.
Flint, Recollections of Ten Years, 236–237.
Martineau, I, 297–299.

CHAPTER VII

INDUSTRIAL EXPANSION AND THE CRISIS OF 1837

Speculative Investment

OUR second war of independence at an end, the nation was blessed by thirty years of peace. Party strife, which had well-nigh brought about the secession of New England in 1816, died down into the "era of good feeling." The vexed problems, political and economic, that had agitated the administrations of Washington and Adams, Jefferson and Madison, were solved to the satisfaction of the new generation of statesmen: protection to manufactures, freedom of commerce, state regulation of slavery, banking, and internal improvements. Men were free at last to devote their energies to the material development of the country.

Manufactures. — The series of high tariffs enacted during and after the war gave American manufacturers two decades of protection, and they made good use of their monopoly of domestic markets. Under the stimulus of the patent law, mechanical improvements were being introduced into every branch of manufacture. With increasing capital, labor-saving machinery, and the skillful adaptation of water and steam power, the factory era was well under way, and cotton, woolen, and iron manufactures were established on an assured basis.

The massing of laborers in factories and workshops meant the rapid growth of an urban population. Wherever in New England, New York, or Pennsylvania, a river furnished waterpower or cheap transportation, the op-

portunity was utilized to the utmost, and factory towns sprang into existence overnight. In 1810 there were only sixteen towns that boasted more than three thousand inhabitants, and these were seaports such as Boston, New York, Philadelphia, and Baltimore; or, like Albany, Pittsburg, New Orleans, and Richmond, owed their prosperity to some navigable river. The census of 1840 reported forty-two towns having a population of more than three thousand, and fully half of these, such as Lowell and Lawrence, Massachusetts, Paterson and Newark, New Jersey, Syracuse, New York, and Reading, Pennsylvania, had their origin not in commerce but in manufactures. The towns grew at the expense of the rural districts, especially in the North Atlantic states, where all the good land had long since been taken up, and where cultivation was already yielding diminishing returns. The ambitious young men sought employment in the cities, and the farmers' daughters flocked to the mill towns to earn at the spinning frame or power loom the wherewithal for a dowry or an education.

Chevalier, United States, 128–133, 137–144.

PRODUCT OF MANUFACTURES

Census, 1900, IX, 11.

	1820	1830	1840
Cotton mf.	$4,834,157	$22,534,815	$46,350,453
Woolen mf.	4,413,068	14,528,166	20,696,999
Iron mf. in tons . .	20,000	165,000	286,903

Chickering, Foreign Immigration.

The population of Eastern cities was further augmented by immigration. A period of industrial depression following close on the Napoleonic wars threw thousands of European workmen out of employment, and the ships were crowded with destitute families, English, Irish, and German, who gladly abandoned the impoverished old world to seek a living in America. In the decade from

1820–1830, 150,000 aliens entered the ports of the United States, and in the decade following this number was quadrupled.

Agriculture. — Throughout the North Atlantic section, except where the river bottoms offered soils of exceptional fertility, agriculture was declining. The barren hill farms of Massachusetts, Vermont, and New York afforded but a meager reward to labor by comparison with the government lands still available in the Mississippi Valley, and by consequence the young men of energy and ambition were drawn to the West, "to the fertile prairies of Illinois and Indiana and the alluvions of Ohio." Harriet Martineau, who visited New England in 1835, "heard frequent lamentations over the spirit of speculation; the migration of young men to the back country; the fluctuating state of society from the incessant movement westward; the immigration of laborers from Europe; and the ignorance of the sparse [country] population."

Martineau, Society in America, I, 307.

Martineau, I, 291.

In the South Atlantic states, the westward movement was no less apparent. The soil of the Carolinas was exhausted by continuous cotton culture and the plantations no longer rendered a money surplus. The younger sons were fain to migrate with slaves and overseers into the unexploited wilderness of the Gulf states. The population of Alabama and Missouri was doubled and that of Mississippi trebled between the fifth and the sixth census, the access of negroes being even more rapid than that of the whites. The rich alluvial lands quickly repaid the labor spent upon them; the forests once cleared and the black sodden soil turned up to the sun, marvelous crops of cotton were produced. The price of this staple was again rising in response to the augmented demands of Old and New England. The nadir point was reached in 1830, when upland cotton sold for six cents per pound, but the price rose to eleven and three fourths cents in 1833, and twenty cents in 1835. A fever of speculation ran through the South, twenty million acres were planted to cotton before 1840, and the financial resources of the country were

Phillips, II, 55–75.

Ballagh, Tariff and Public Lands, 253–263.

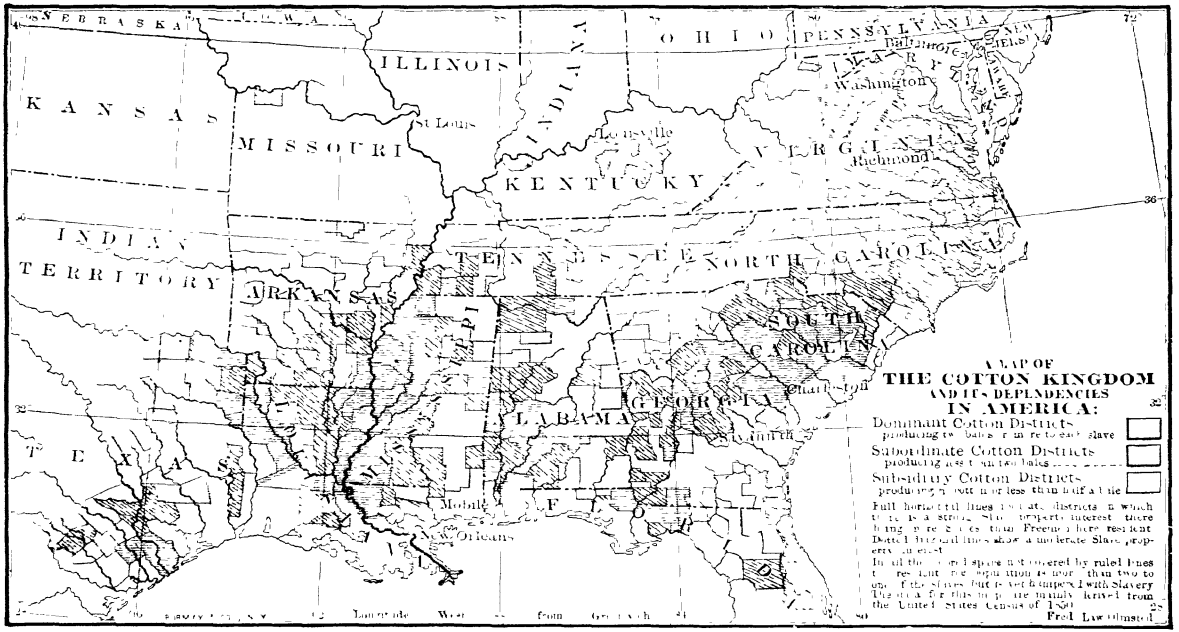
seriously taxed. The initial cost of the land was slight, seldom more than $5 an acre, and although stocking the plantation with slaves and implements involved heavy outlays, the venture was almost certain to be remunerative. The return from crop sales mounted into the tens of thousands annually, and good cotton lands brought $1500 per acre in the open market. A sugar plantation in Louisiana was a speculative investment, no less alluring and profitable.

Throughout the Gulf states all labor was relegated to slaves, and the social order was as aristocratic as on the seaboard. The typical planter of the Mississippi lowlands counted his slaves by hundreds and his acres by thousands. In the uplands six hundred acres and fifty slaves were a more economical unit, while in the western foothills of the Appalachians, where corn, wheat, and cattle were the staple products, a farmer was content with a hundred acres and a dozen slaves, or might be reduced to the necessity of laboring with his own hands.

The expansion of the South was determined by the spread of cotton culture. The denser population areas coincided with the "black belt" of rich calcareous loam that clothed the foothills of the Appalachians from Virginia south to the Gulf states and thence west across the bottom lands of the Mississippi into eastern Texas. As the plantations of the older states degenerated, new lands were claimed and cleared, and the region cultivated to cotton gradually extended westward to the confines of the Louisiana Purchase. The Mexican boundary and the Missouri compromise line imposed an arbitrary limit to the domain of King Cotton, but the great staple in its onward march showed small respect for political barriers. Cotton planters from the Gulf states began carrying their slaves across the border to the valley lands along the Sabine, Brazos, and Colorado rivers long before the annexation of Texas.

Hammond, Ch. II, III.

Cotton and Slavery. — The cotton plantations offered ideal conditions for slave labor. The hands could be massed under the eye of the overseer to a degree quite


NEBRASKA
IOWA
ILLINOIS
INDIANA
OHIO
PENNSYLVANIA
KANSAS
MISSOURI
St Louis
Louisville
KENTUCKY
VIRGINIA
Richmond
Washington
INDIAN TERRITORY
TENNESSEE
NORTH CAROLINA
ARKANSAS
MISSISSIPPI
SOUTH CAROLINA
Charleston
GEORGIA
ALABAMA
Mobile
New Orleans
TEXAS
A MAP OF
THE COTTON KINGDOM
AND ITS DEPENDENCIES
IN AMERICA:
Dominant Cotton Districts
producing 1 bale or more per acre of slave
Subordinate Cotton Districts
producing less than one bale
Subsidiary Cotton Districts
producing 1/2 bale or less than half a bale
Full horizontal lines indicate districts in which there is a strong Slave property interest there being more Slaves than Freemen here resident
Dotted horizontal lines show a moderate Slave property interest
In all the rest of the States not covered by ruled lines the Slave interest or population is more than two to one
The data for this map are mainly derived from the United States Census of 1850
Fred Law Olmsted

impracticable in the growing of corn or wheat or hay. Moreover, at several stages in the development of the plant, all the laborers on the place could be utilized. In hoeing, picking, and chopping seasons, women and children and white-haired "uncles" were as efficient as able-bodied men. The cost of maintenance was low, since the slave rations, corn and pork and sweet potatoes, might be grown on the place, and the slave quarters were usually built by slave carpenters out of lumber from the freshly cleared land. The actual money expenditure need not average more than $15 per year for each man, woman, or child on the plantation. On the "dead lands" of Virginia, Maryland, and Kentucky slave labor had ceased to be profitable, but the cotton belt furnished a ready market for the surplus negroes of the border states. Prices rose as the demand increased. In 1790 the best field hand brought but $200. In 1815 the price of an average hand was $250. The price rose to $500 in 1840, $1000 in 1850, and from $1400 to $2000 in 1860.

Kemble, Residence on a Georgia Plantation.

De Bow, Ind. Resources of Southern and Western States, I, 150.

Olmstead, The Cotton Kingdom, I, Ch IV.

De Bow, I, 175.

Hammond, 51.

When negroes brought such prices, the temptation to import in defiance of law was too great to be withstood. Slavers, fitted out in New York and New Orleans, Boston and Portland, were engaged in carrying kidnaped Africans to Brazil, Mexico, and Cuba, whence numbers were smuggled into the United States.

Du Bois, Suppression of the Slave Trade, Chs. X, XI.

Twentieth Rept. Am. Anti-Slavery Society, 13–30.

Because of its low-grade labor, the South was committed to agriculture. Manufacturing machinery could not be manipulated by ignorant slaves, and the capital requisite for factories and foundries was absorbed by the equipment of plantations. The incentives to city building were few and the urban population increased but slowly. In 1840 there were three times as many towns of over eight thousand inhabitants in the North as in the South. Of cities boasting more than twenty thousand there were eleven in the North and but five in the South. Of these five, Washington, Baltimore, and Louisville were hardly to be reckoned as Southern from the industrial point of view, and New Orleans owed its development to peculiar

commercial advantages. The prosperity of Southern cities was largely conditioned on the cotton trade. Charleston, Savannah, Hamburg, Natchez, New Orleans, were situated on harbors or navigable rivers that gave access to the plantations. Not factories and workshops, but cotton presses and warehouses filled the business quarters. The entrepreneurs were cotton factors who bought the cotton sent down river by the planters, and sold on commission to the brokers of New York and London.

Free Labor and Enterprise. — In the free territory north of the Ohio River, the quarter section farm tilled by the owner and his sons was the typical enterprise, but the prospects of the thrifty pioneer were no less brilliant. Miss Martineau was assured that "a settler cannot fail of success, if he takes good land, in a healthy situation, at the government price. If he bestows moderate pains on his lot, he may confidently reckon on its being worth at least double at the end of the year; much more if there are growing probabilities of a market." Cultivated land in Illinois was then selling at $30 or even $100 per acre.

Martineau, I, 336.

Birbeck, 51,52, 82–83.

The cotton and sugar plantations of the Gulf states furnished a steady and paying market for the food supplies and agricultural implements of which the farmers of the Ohio Valley and the iron masters of the Alleghanies were quick to take advantage. The Mississippi and Ohio rivers formed the great highway that connected North and South. Scows and flatboats laden with flour and salt meat, hogs and mules, plows and cotton gins, floated on the spring floods down the tributary streams, the Allegheny and Monongahela, the Muskingum, Scioto, and Wabash, the Cumberland and the Tennessee, manned by young countrymen eager for adventure. At St. Louis, at Natchez, and at New Orleans, where these farmer merchants hoped to dispose of their stock in trade, the anchored craft lined the waterfront. Many a cargo was sold perforce at less than cost, and many a boat was wrecked on

Flint, Recollections of Ten Years, 101–111.

Birbeck, 102–105, 150–153.

the snags and shoals of the treacherous rivers; but there was always the chance of a lucky sale, and the South held out golden hopes to the man of pluck and resource. Many a thrifty emigrant brought a wagon load of "Yankee notions" across the mountains and, arrived at Pittsburg or Wheeling, set up shop in his keel boat and traded from settlement to settlement as he floated down the river. But the resourceful pioneers soon began to manufacture for themselves. Wherever the Ohio River furnished power, mills were set up to furnish the goods that were too bulky or too breakable to be freighted across the mountains. At Beaver Creek (1821) were saw and gristmills, fulling and carding mills, besides an iron furnace, a forge and a flaxseed grinder; at Maysville there was a rope-walk and a glass factory; Paris boasted a cotton mill, while Cincinnati vied with Pittsburg in its output, having a foundry and a nailcutting machine, a steam gristmill, woolen and cotton mills, a tannery, a glass factory, white-lead works, and a shipyard where steamers were built.

Flint, Recollections, 13–37

Flint, Letters from America, 314.

Chevalier, 193–195, 200–204.

The *Clermont's* successful trip on the Hudson (1807) had revolutionized river navigation in the interior. Steam rapidly superseded oar and sail and greatly reduced the time and cost of water transportation. A line of steamboats had been established on the Hudson in 1808 and on the Ohio in 1811. The first steamer ran from Pittsburg to New Orleans in 1812. Timothy Flint, who went down the Ohio in 1818, estimated that the steamers had thrown ten thousand flatboats and keel boats out of employment.

Chevalier, 212–224.

Flint, Recollections, 16.

In the first fifty years of our national history the growth of population, both by natural increase and by immigration, had been phenomenal. The most rapid advances were made in the Mississippi Valley. The five thousand settlers north of the Ohio in 1790 increased to three million in the next fifty years, and the population of the states south of the Ohio had multiplied three hundred times in the same interval.

McMaster, III, 459–495; IV, Ch. XXIII.

PER CENT OF INCREASE OF TOTAL AND URBAN POPULATION BY DECADES

U. S. Census, 1900, I, XXIV-XXV.

DECADE	U.S.	N. ATL.	S. ATL.	N. CENT.	S. CENT.	URBAN
1790–1800	35.1	33.9	23.5		206.7	60.5
1800–1810	36.4	32.3	17.0	474.8	134.1	69.3
1810–1820	33.1	25.0	14.4	193.1	73.0	33.1
1820–1830	33.5	27.1	19.1	87.4	51.8	82.0
1830–1840	32.7	22.0	7.7	108.1	46.7	68.2

The figures indicate a general westward movement of the population from the overcrowded districts of the Atlantic coast to the new lands of the North and South Central divisions. The westward movement still followed the river courses. The valleys of the Ohio, the Cumberland, and the Tennessee were first taken up, and by the fourth decade of the nineteenth century, Tennessee, Kentucky, and Ohio were fully occupied by a farming population. With occasional intervals, the lands along both banks of the Mississippi River from Prairie du Chien to New Orleans had been made over to settlers, while population had crept up the Missouri River to its junction with Kansas, up the Arkansas River to Fort Smith, and up the Red River to the Mexican boundary. The navigable streams flowing to the Gulf of Mexico — the Pearl, Tombigbee, Alabama, and Chattahoochee — furnished the sole means of getting cotton to market, and so determined the course of settlement. Lakes Erie and Ontario were a no less important transportation medium to the wheat farmers of northern New York and Ohio.

Kettell, Southern Wealth and Northern Profits, Ch. II, III, IV.

Internal Commerce. — The period of isolation and enforced self-sufficiency was at an end. Southern planters could ship their cotton and sugar from their river wharves to New Orleans or Mobile where the season's crop was bought up by a factor and loaded on to a sea-going vessel for delivery at New York or Liverpool. The staple crops were so profitable that no land or labor could be spared

for the growing of wheat and corn. Plantation supplies, flour and pork and whisky, were produced by the farmers of the Ohio Valley and the Lake region and dispatched down the Mississippi to the river towns for the use of the prodigal planters. Cotton, the "money crop" of the South, brought in $1,000,000,000 in twenty years, but this vast revenue was not expended at home. It was distributed to the cotton factors and shipmasters of the North and Great Britain, to the farmers of the "Western Country," to the ironmongers of Pittsburg, to the manufacturers of New England. The cotton crop enriched every section of the country except the cotton belt. It set in motion a system of internal commerce which promoted the prosperity of the United States more than any other single cause.

Callender, Ch. VII.

De Bow, I, 445–446.

In the twenty years from 1815 to 1835, there was developed a territorial division of labor that seemed to be extraordinarily profitable to all the participants. The planters of the Gulf states from Georgia to Texas, with the exception of southern Louisiana, were absorbed in the growing of the staple export. The farmers of the Middle West, from Tennessee to the Lakes, were engaged in growing the grain, wool, and tobacco required by their neighbors to the south and east. New England, New York, and Pennsylvania were content to manufacture the cottons, woolens, and iron utensils for which their water power and transportation facilities gave them distinct advantage, relying on the markets of the West and South. The south Atlantic states, unable to raise tobacco or cotton or cereals on their exhausted lands, found ample compensation in the growing demand for slaves in the new South beyond the Appalachians. Slaves were driven over land to New Orleans from Virginia and Maryland by the tens of thousands every year.

Lambert, II, 146–151, 346–348.

Collins, Domestic Slave Trade, Ch. II, III.

Means of transportation were at hand in the vast system of lakes and rivers that brought the remotest sections of the great interior valley into communication with the sea. The Great Lakes were inland seas, while

Chevalier, Letter XXI.

De Bow, II, 445–446.

the Mississippi River and its tributaries furnished 16,674 miles of steamboat navigation. The tonnage capacity of the Lake steamers was estimated at 100,000, and the population served at 3,000,000 (1846). The tonnage of the river steamers was reckoned to be 250,000 and that of the scows and flatboats 300,000, and the population served as 6,576,000. The net money revenues from the commerce of the interior, freight, and passengers amounted to $246,774,635 (1846), and the number of sailors and boatmen employed was at least 32,000.

Direct communication between the Atlantic states and the interior was far more difficult. Except by way of the divides cut by the Mohawk and Potomac rivers, post roads were costly and freight charges prohibitive. The project of artificial waterways had been broached early in the century. In 1810 Peter Buell Porter, a Congressman from western New York, advocated the appropriation of some portion of the proceeds of the state land sales to the building of a canal along the Mohawk to Buffalo and by way of the Allegheny River to Pittsburg in order that the salt manufactured at Syracuse might have a cheaper outlet. He urged that the price of this necessity would be reduced to consumers by fifty per cent. Salt was then selling at the works for twenty and thirty-five cents per bushel, while at Pittsburg it brought $2 per bushel because of the cost of carriage. Porter further urged the extension of water communication from Syracuse to Lake Ontario via Oswego River, and canal connection between Lake Erie and the Ohio via the Muskingum River. Wheat from the interior, then selling at fifty cents a bushel, would rise to $1 if the cost of transportation to New York and New Orleans was thus reduced.

Holmes, Ch. IX.

Internal Improvements.

Canals. — The post roads built at so much cost across the mountains and through the wilderness had greatly

facilitated emigration, but could not serve the purposes of traffic. Most Western rivers furnished but uncertain and hazardous avenues of trade, and it was of prime importance that the feasible waterways should be connected by canals if the products of Western agriculture were to reach Eastern markets. The first great enterprise of this character was the Erie Canal, undertaken and brought to successful completion by certain public-spirited citizens of New York City (1817–1825). This costly transportation system was carried from Albany to Buffalo through the break in the Alleghany Range made by the Mohawk River. It followed the Mohawk to Rome, and thence, utilizing the water of numerous small lakes and streams, entered Lake Erie by the Tonawanda and Niagara rivers. The shorter route, via the Oswego to Lake Ontario, was urged, but this plan would have diverted traffic to the St. Lawrence and Montreal. The project of a canal around Niagara Falls failed to secure support for the same reason. The Erie Canal was three hundred and sixty-two miles in length and the cost of building averaged $20,000 per mile, but the tolls of the first nine years' use amounted to $8,500,000, and more than covered the initial expenditure. The enterprise paid running expenses from the start, and the projectors were abundantly justified in their venture, but the secondary advantages to the state were far greater. Branch canals connected the main trunk with Ontario, Champlain, and Seneca lakes. The freightage on a ton of goods by wagon road was $32 for a hundred miles; by canal the same distance cost $1 per ton. The produce of the lake region poured down this channel to the sea, and wealth and population grew by leaps and bounds. The villages of Syracuse, Rochester, and Buffalo waxed thriving towns, and New York City became the leading port of the United States. From Chicago to the sea via the Mississippi and New Orleans was sixteen hundred miles, from Chicago to Montreal by way of the lakes and the St. Lawrence measured the same distance, while the route to New York by the Erie Canal was but twelve hundred

Hulbert, Great Am. Canals, II.

Census, 1880, IV, Rept. on Canals, 1–34.

Wages and Prices, 376–378.

miles. The problem proposed by Washington was solved. The industrial and political allegiance of the upper Mississippi Valley to the Atlantic seaboard was determined by the opening of this commercial highway between the two sections.

Hulbert, Great Am. Canals, I, Ch. IV.

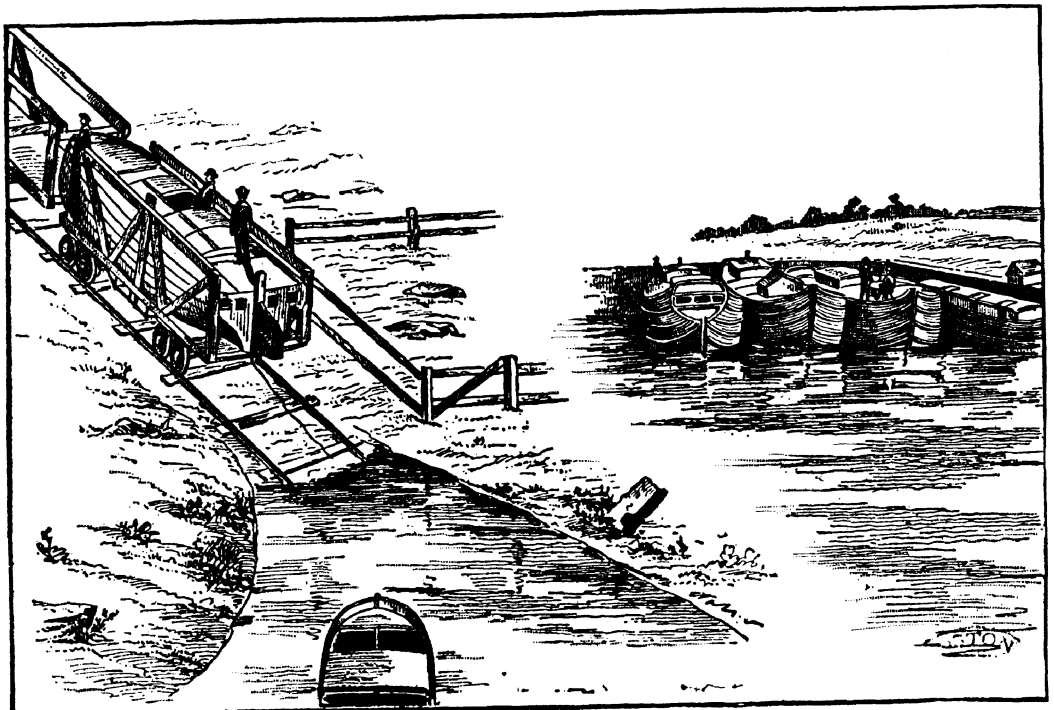
The Erie Canal threatened to deprive Philadelphia of the major part of her Western trade. To keep her hold on Pittsburg and the Ohio Valley, Pennsylvania undertook (1826) to construct a system of canals and portages from Philadelphia to Pittsburg, following the Susquehanna, Juniata, Conemaugh, Kiskiminetis, and Allegheny rivers. Connection between the Delaware and the Susquehanna was made by a horse railroad, while the summit of the mountain range between Hollidaysburg and Johnstown was crossed by the Alleghany Portage Railway, a series of inclined planes over which the boats, placed on wheeled cars, were drawn by stationary engines. This transportation system was complete by 1834. In October of that year the keel boat, *Hit and Miss*, made the trip from the Lackawanna down the Susquehanna to Columbia, and up the canal to Hollidaysburg. There the owner expected to sell his boat and transport his goods by wagon road; but boat and cargo were transferred to the incline railway and successfully freighted to the western division of the canal, thence the astonished navigator pursued the water route to Pittsburg and St. Louis. A rush of business poured along the new highway to the West, and the Portage Railway was overwhelmed with traffic so that the wagon road was in constant requisition. Notwithstanding this disadvantage, the Pennsylvania Canal was a successful rival of the Erie, and Philadelphia was able to hold a considerable portion of commerce with the interior. The total cost of this transportation system, $10,038,133, was met by the state of Pennsylvania.

U. S. Census, 1880, IV, Rept. on Canals, 6–8.

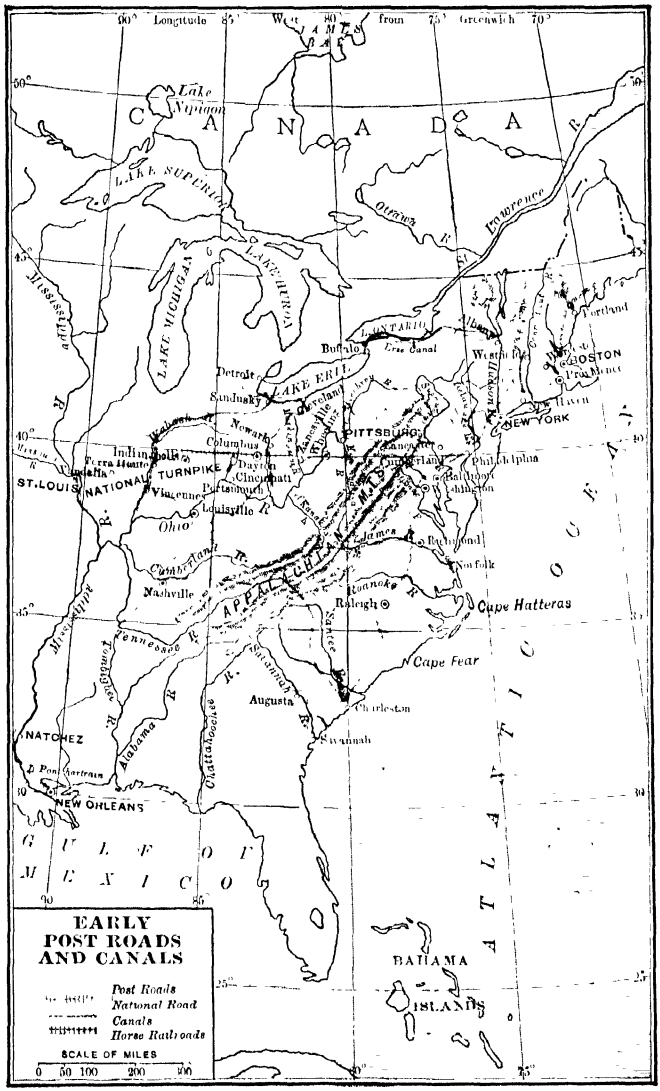
Chevalier, Letter XXI.

Roberts, Anthracite Coal Industry, Ch. IV.

A promising venture for private transportation companies was offered in eastern Pennsylvania. The anthracite coal district lay in the mountain valleys where rise the Susquehanna and Lackawanna, the Schuylkill,



ALLEGHANY PORTAGE RAILWAY
Canal boat ascending an inclined plane


Longitude West from Greenwich
CANADA
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
Ottawa R.
St. Lawrence R.
Mississippi R.
Buffalo
Erie Canal
Detroit
Sandusky
Cleveland
Newark
Columbus
Dayton
Cincinnati
Portsmouth
Louisville
Ohio R.
Wabash R.
Indianapolis
Terre Haute
Vincennes
Illinois R.
Cumberland R.
Nashville
Tennessee R.
Alabama R.
Natchez
New Orleans
Mississippi R.
Pittsburg
Allegheny R.
Monongahela R.
Kanawha R.
Kentucky R.
Wheeling
Philadelphia
Baltimore
Washington
Richmond
Norfolk
Roanoke R.
Raleigh
Cape Hatteras
Cape Fear
Augusta
Savannah R.
Charleston
Savannah
Portland
Boston
Providence
New York
New Haven
Western R.
Hudson R.
Connecticut R.
Delaware R.
Susquehanna R.
Potomac R.
James R.
Appalachian Mts.
Alleghany Mts.
Blue Ridge
Cumberland Mts.
Turnpike
National Road
St. Louis
Pont Chartrain
Gulf of Mexico
Atlantic Ocean
Bahama Islands
EARLY POST ROADS AND CANALS
Post Roads
National Road
Canals
Horse Railroads
SCALE OF MILES
0 50 100 200 300

the Lehigh, and the Lackawaxen. So bulky a commodity as coal could be transported only by water. None of the rivers, not even the Susquehanna, furnished sufficient current, except during floods, to float coal barges to the ports. Within five years of the day when "stone coal" was successfully used in the Philadelphia iron works, a canal was built (1828) connecting the Wyoming district with the Delaware by way of the Lackawaxen, and canals along the Lehigh, Schuylkill, and Susquehanna were built about the same time. New Jersey put through the Delaware and Raritan Canal (1834–1838) at a cost of $4,735,353. The ship canal between Chesapeake and Delaware bays was a more difficult enterprise, because it must be cut through solid rock, and neither Delaware nor Maryland would assume the task. It was begun under private auspices, but in 1806–1807 the directors appealed to Congress for aid, arguing that such a waterway would have national importance. The appropriation recommended by Secretary Gallatin was not made until 1825, when the United States subscribed to $300,000 stock in the company. The total cost was $3,730,230.

A transportation system built through a populous section, or along a well-defined trade route, is assured from the start; but when a canal is carried through a thinly settled country, dividends must wait till business develops, and bondholders are likely to lose both interest and principal. Private capital was therefore shy of such investments in the new West, but the state legislatures did not hesitate to appropriate considerable sums of public money in aid of canal projects. Thus the Miami Canal was built (1820) from Cincinnati to Dayton, and the Ohio Canal provided water communication between Lake Erie and the Ohio River along the route first suggested by Washington, up the Cuyahoga and down the Tuscarawas to the Muskingum and the Scioto. Such enterprises proved too heavy a tax on the resources of a pioneer community, and the states appealed for national aid. Congress had already provided for the building of the National Road through the Western

Morris, Internal Improvements in Ohio.

territory out of proceeds from the sale of public lands, and this inexpensive method of meeting the cost of construction was now applied to canals. A percentage of land sales, or the lands themselves, were made over to the state authorities and by them applied to transportation projects. Under this plan the Western states undertook a vast network of internal improvements; the post roads from Columbus to Sandusky, and from Lake Michigan to the Ohio River, were built from the proceeds of land grants, and, so aided, Ohio, in coöperation with Indiana, constructed the Wabash and Erie Canal. The surplus revenue distributed by the Federal government in 1837 was applied by the Western states to transportation facilities. Anticipating great commercial gains, municipalities made extravagant contributions to canal stock, speculators subscribed far beyond their means, and bank credits were strained to the danger point in the zeal for industrial development. By 1837 $100,000,000 had been sunk in canals. The investors found that they had buried their money in locks and waterworks, and that no adequate return could be expected until the country had grown up to the transportation system.

Benton, Wabash Trade Route.

The Southern states undertook far less in the way of internal improvements. Virginia in 1828 completed the Dismal Swamp Canal, an enterprise set on foot in Washington's day, and began a waterway along the James River through the Gap of the Blue Ridge into the Great Valley. South Carolina opened communication from the Santee River to Charleston Harbor by a canal twenty-one miles in length, and New Orleans cut a ship channel between Lake Pontchartrain and the Mississippi, while the enterprising citizens of Kentucky undertook a canal around the Falls of the Ohio. This last was only three miles in length, but wide and deep enough to admit boats of one hundred tons burthen.

Writings of Washington X, 381–384.

Washington's contention that Virginia should maintain direct communication with the West by way of the Potomac and the Monongahela had borne fruit in the Potomac

Hulbert, Great Am. Canals, I, Chs. II, III.

Company, which spent $729,380 in forty years on improving the river bed, but accomplished nothing of permanent utility. The success of the Erie Canal determined the state to charter (1825) the Chesapeake and Ohio Company, authorized to raise a capital of $6,000,000 for the building of a canal from Georgetown to Cumberland and thence by tunnel across the range to the Youghiogheny. The canal was not carried more than half this distance, but its ultimate cost was $11,000,000, of which $7,000,000 was contributed by the state of Maryland, $1,500,000 by the terminal cities, and $1,000,000 by the United States government. The route beyond Harpers Ferry was very difficult, raising the average cost of construction to $59,618 per mile, and the promoters became discouraged. The progress of this enterprise was delayed by the appearance of a dangerous rival, the steam railway. Baltimore gave her support to the new transportation agency, and her citizens subscribed liberally to the stock of the Baltimore and Ohio Railroad. Railway and canal were built contemporaneously along the same general route as far as Cumberland, and there the canal stopped; but the railroad easily mounted the divide and made it possible to carry freight and passengers directly to the Ohio and beyond.

Ward, Chesapeake and Ohio Canal.

Railroads. — Canal traffic was safe and cheap, but slow and liable to be interrupted by slack water, floods, or frost. The Erie Canal, for example, freezes over in winter, and navigation is stopped for from four to five months in the year. A railroad can be built through mountainous country at one third the cost of a canal, and over heights to which water cannot be conducted. A car run on wheels fitted to the iron track encounters less friction than a wagon on a turnpike, less resistance than a boat in water.

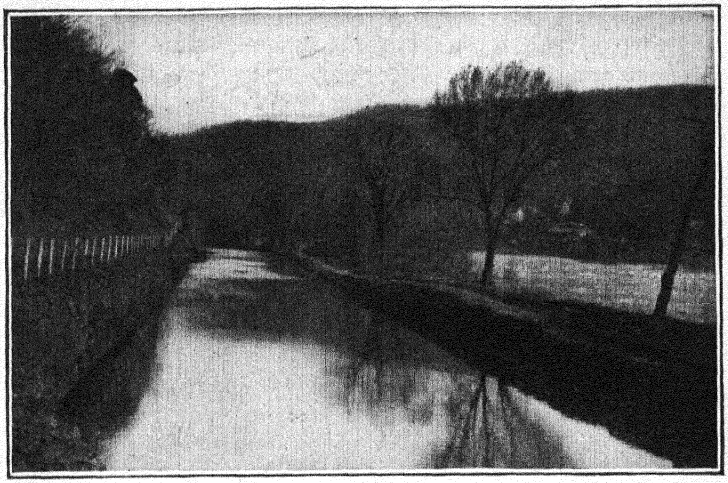
Lardner, Ch. I.

Hadley, Railroad Transportation, Ch. II.

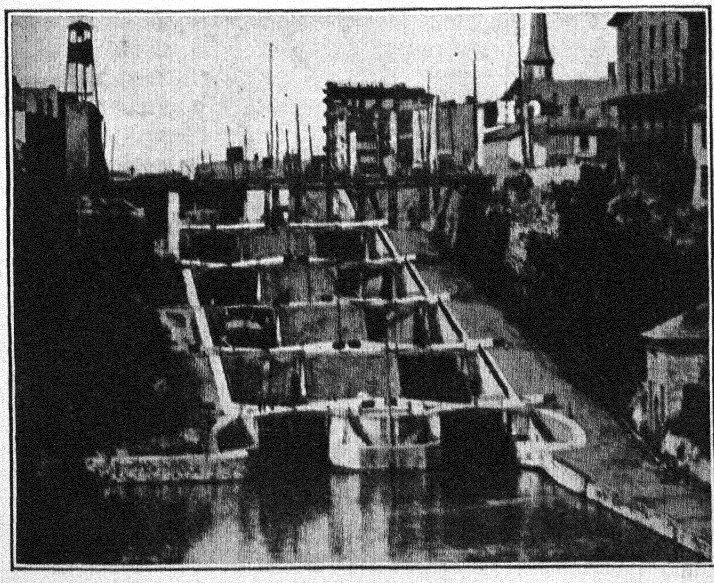
The first railroads were built to supplement the canal system, as the ship railway from Hollidaysburg to Johnstown, the Mauch Chunk extension of the Lehigh Canal, the Delaware and Hudson Canal Company's tramway from Carbondale to Honesdale. Cars loaded with coal and stone were drawn over these iron tracks by stationary

Adams, Railroads, 1–79.

Hulbert, Great Am. Canals, I, 179–181.



CHESAPEAKE AND OHIO CANAL AT HARPERS FERRY



LOCKS OF ERIE CANAL AT LOCKPORT

engines, horse power, and even sails. The first locomotive was imported from England by the Delaware and Hudson Company in 1829, but it proved impracticable because the track had not been built for so heavy a weight.

After diverse experiments, the Baltimore and Ohio management chose steam as the most practicable motor (1831). Peter Cooper's engine, the "Tom Thumb," made the trial trip over the thirteen miles of track between Baltimore and Ellicott's Mills in one hour. In the same autumn, several trips were made over the South Carolina Railroad from Charleston to Hamburg. The "Best Friend" ran from sixteen to twenty-one miles an hour with five loaded cars attached; without the cars, the speed attained was from thirty to thirty-five miles an hour. The following year the "De Witt Clinton" made a trial trip on the railroad then building up the Mohawk Valley, and covered the seventeen miles from Albany to Schenectady in one hour. On the occasion of the formal opening of this line, the legislators then assembled at Albany were conveyed to Schenectady and there dined in state. One of the toasts voiced a daring prophecy. "The Buffalo Railroad, — May we soon breakfast in Utica, dine in Rochester, and sup with our friends on Lake Erie!" The journey from Albany to Buffalo by swiftest packet boat required at that time three or four days.

Reizenstein, Baltimore and Ohio Railroad.

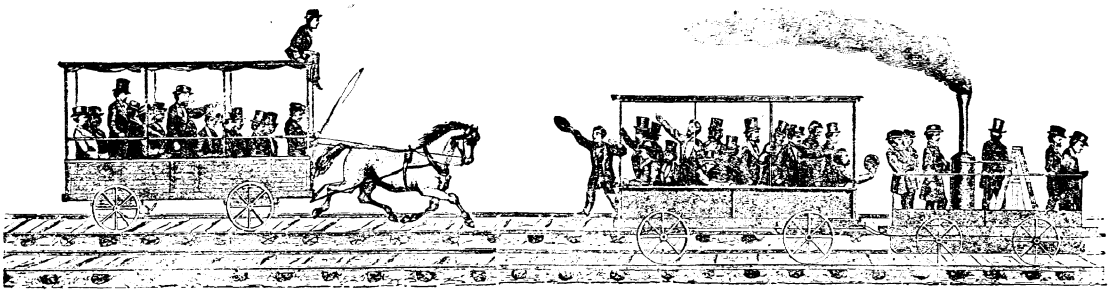
Lardner, Steam Engine.

Brown, First Locomotives in Am., Ch. XV, XVII, XX–XXIII, XXVII–XXIX.

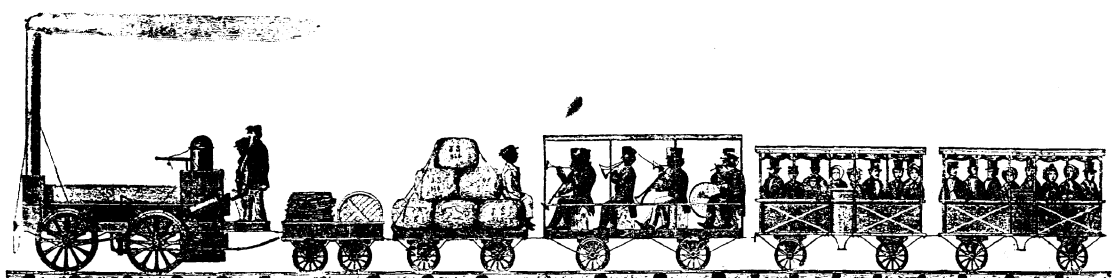
Speed is an all-important consideration in the transportation of passengers and perishable freight. Therefore public-spirited citizens and enterprising communities made haste to introduce railroad connections and so to reap the first fruits of the new transportation system. The Baltimore and Ohio line was rapidly pushed up the Potomac Valley and was completed to Cumberland in 1835, but the crossing of the Alleghany Range and connection with the Ohio was not attained till 1853.

Railroads were intended originally to further water transportation. The aim was to freight the products of the interior to the ports, as is evident in the three lines radiating from Boston to Lowell, Worcester, and Providence, and

Lardner, 327–348. De Bow, II, 461–463.



PETER COOPER'S LOCOMOTIVE, "TOM THUMB," RACING WITH A HORSE CAR



TRIAL TRIP OF THE "WEST POINT" ON THE SOUTH CAROLINA RAILROAD


RAILROAD
CONSTRUCTION
From 1830 to 1860
1830 - 1840
1840 - 1850
1850 - 1860
SCALE OF MILES
0 100 200 300 400
CANADA
ATLANTIC OCEAN
GULF OF MEXICO
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
St Lawrence R.
Mississippi R.
Ohio R.
Bangor
Burlington
Montpelier
Portland
Portsmouth
Boston
Lowell
Providence
New Bedford
Hartford
New Haven
Albany
Syracuse
Rochester
Buffalo
Oswego
Utica
Dunkirk
Cleveland
Tiffin
Sandusky
Pittsburg
Reading
Philadelphia
Baltimore
Washington
Harrisburg
Johnstown
Columbus
Dayton
Marietta
Cumberland
Frankfort
Lexington
Louisville
Cincinnati
Indianapolis
Springfield
Bloomington
Peoria
Quincy
Keokuk
Iowa City
Cedar Rapids
Dubuque
Prairie du Chien
La Crosse
Oshkosh
Milwaukee
Chicago
Detroit
Port Huron
Grand Haven
Ann Arbor
Toledo
Madison
Syracuse
St Louis
Pilot Knob
Cairo
Memphis
Nashville
Knoxville
Chattanooga
Greenville
Columbia
Hamburg
Atlanta
Talladega
Okolona
Vicksburg
Selma
Montgomery
Macon
Union Point
Tenville
Charleston
Savannah
Mobile
Naylor
Fernandina
Bronson
Harrisburg
Eagle Lake
New Orleans
Norfolk
Raleigh
Morehead City
Camden
Wilmington
Fredericksburg
Richmond

in the short lines running up country from New Haven, Bridgeport, and New York. Other roads were intended to make connection between water routes: witness the line from Boston to Providence (whence passengers took steamer to New York), the two rival lines across New Jersey, the Philadelphia, Wilmington and Baltimore, and the Great Southern Railway. Before the close of the first decade of railroad building, a series of connecting lines covered the thousand miles between Portland, Maine, and Wilmington, North Carolina, following the direction of the Hartford Trail, the King's Path, and the early post roads, so that passengers and shippers might choose between railway transportation and the slower but cheaper steamers. Traffic on Lake Erie was supplemented by short lines built inland from Sandusky, Toledo, and Detroit before 1840. In the next decade connection between Lake Erie and the Ohio River was made by the Cincinnati and Sandusky, and the Detroit and Ann Arbor Railway was carried through to Lake Michigan to avoid a long and circuitous voyage.

Chevalier, Letter XXI

Commercial Development

The Coastwise Trade. — With the development of the interior, domestic commerce increased in volume until it had become a far more important factor in the nation's prosperity than the transatlantic. The vessels engaged in the coastwise trade multiplied year by year. The tonnage so enrolled was 516,086 in 1831, by 1840 the million mark was reached, and this figure was doubled and trebled in the next twenty years. Steamships were introduced in the coasting service in 1823, when a steamer plied regularly between Boston and the Kennebec River, and a line was soon after established between New York and the Southern ports. Sharp competition between steam and sail ensued. The average speed of the coast steamers, ten miles an hour, might easily be surpassed by a schooner with a favorable wind, and fast-sailing barkentines and

Marvin, 363–375.

brigantines of enlarged hold capacity were devised to meet the rival motor power. Having no coal bills to pay, the sailing vessels could offer lower rates and so manage to hold their own in the bulky freight traffic. They continued to carry the major part of the coal, wood, and iron manufactures shipped from Northern ports in exchange for the cotton, sugar, and hard timber of the South; but passenger traffic was rapidly transferred to the safer and more regular steamship lines.

Marvin, 395–402.

Commerce on the Great Lakes was marvelously increased since the days when the open boat of the fur trader made its perilous way from Buffalo to Detroit and Michilimackinac. No sooner had the Erie Canal been finnished than a brisk trade developed along the American shores. Scores of brigs and schooners were built at Buffalo and Erie to transport the wheat and lumber products of the pioneer settlements to Eastern markets. Nine tenths of this traffic was between United States ports and thus was reserved to our own vessels. A little steamer of three hundred and thirty tons, *Walk-in-the-Water*, was launched at Buffalo in 1819. The venturesome pioneer was wrecked two years later, but her place was soon filled by regular lines of lake steamers. They were built stanch and broad to breast the winds and waves of these inland seas. The side wheel, customary as yet in ocean steamers, was found impracticable where canals and narrow channels were to be traversed, and Ericsson's screw propeller gradually superseded the original model.

Lardner, Railway Economy, 311–325.

Our wonderful waterway to the heart of the continent was extended and improved by numerous canals. The Canadian government built the Welland Canal in 1833, and the state of Michigan built the locks at Sault Ste. Marie in 1855, while the dangerous passage through Porte des Morts was avoided by a canal from Lake Michigan to Sturgeon Bay. Connection between Chicago and the Mississippi was opened via the Des Plaines and the Illinois rivers in 1848, and the old trader's route between Green Bay and Prairie du Chien was made practicable for lake

De Bow, II, 458.

vessels by a canal across the portage between the Fox and Wisconsin rivers. By this means, a boat loaded at Buffalo might reach the Falls of St. Anthony, the Yellowstone, or New Orleans without shifting her cargo. A steamer of moderate bulk and draught might, indeed, make the trip from Baltimore to New Orleans by inland waters, never feeling the ocean swell except for a few hours in New York harbor. The advantages for domestic commerce of safe and cheap transportation throughout this enormus circuit can. hardly be overestimated.

Lardner, 325.

James, The Canal and the Railway.

Speculation and the Crisis

In every branch of industry the craze for investment had gone far beyond safe limits. Men did not hesitate to borrow at extravagant rates of interest and to mortgage future earning power in proportion to their most ardent anticipations. The capital sunk in wheat farms and cotton plantations, in gristmills and cotton mills, in canals and railroads and steamship lines, could not yield immediate profit, and many a promising enterprise was swamped in irredeemable obligations. Impelled by buoyant confidence in its apparently inexhaustible resources, the men of the new frontier scoffed at financial limitations; and the bitter experience of inflation and collapse through which the Eastern states had passed twenty years before was ignored. Western financiers chafed at the restraints imposed by the National Bank and proposed the overthrow of this Eastern institution, in order that a free field might be opened to the state banks of issue.

Failure to Recharter. — When the petition for rechartering the National Bank came before Congress in 1832, the proposition was vigorously opposed. The bill secured a majority in both Houses, but it was vetoed by President Jackson on the ground that the bank had "failed in the great end of establishing a sound and uniform currency." Jackson came from Tennessee, where wildcat banking had gone to unprecedented extremes, and where

Sumner, Andrew Jackson, Ch VI, XI.

the ruin wrought by the restrictive measures enforced by the Eastern financiers was keenly felt. He had derived from this experience a profound distrust of the National Bank as a dangerous monopoly, a conviction that the issue of paper currency should be left to state control, and the hope that all bank money might soon be superseded by specie. He believed that suppression of bank notes below the twenty-dollar denomination would necessitate the use of gold and silver and place the currency on a sound basis.

Cong. Globe, 1st Session, *1835–1836*, 8.

Laughlin, Bimetallism, Ch. IV.

Sumner, Hist. Am. Currency, 103–113.

The Debasement of the Coinage. — Unfortunately the bimetallic system was altered for the worse just at this juncture. The discovery of workable gold in the mountains of North Carolina and Georgia gave some reason to believe that the domestic production of this metal might supply the money needs of the country. The ratio of fifteen to one fixed upon in 1792 was an overvaluation of silver, and gold coins had been withdrawn from circulation. In 1834 the ratio was altered to sixteen (15.98) to one. The amount of pure gold in the eagle was reduced from 247.5 grains to 232 grains with the effect of debasing the coinage by 6.26 per cent. Benton and the other supporters of the administration policy flattered themselves that they were restoring to circulation the "dollar of the fathers," the silver dollar of 371.25 grains proposed by Hamilton; but under the new ratio silver was undervalued and disappeared from circulation. Gold began to be coined at the rate of three and four million dollars a year, but not in sufficient quantities to meet the money demand. Some form of paper currency was inevitable.

Dewey, 224–231.

The Crisis of 1837. — The war against the National Bank was carried on with unflagging zeal. The President's policy was supported not only by the champions of the state banks, but by the whole debtor class. When the proposition for renewal came up again in 1834, it was defeated by a large majority. The withdrawal of the National Bank notes left a vacuum which the state banks were not long in making good. In the West and South banks were chartered without let or hindrance. The

Chevalier, Letters III, IV, V, XIII.

number increased from three hundred and twenty-nine in 1829 to seven hundred and eighty-eight in 1837, with a proportionate increase of capital. During the same interval the volume of the currency was trebled, and bank loans were extended at an even more rapid rate.

Speculation was outstripping the available capital of the country. Land jobbers borrowed freely of the banks in the expectation of speedy returns. Transportation companies were chartered by the score and undertook schemes far beyond the needs of traffic. Imports exceeded exports for the speculative period (1830–1837) by $140,000,000. Importers ran up bills with their foreign agents or induced their creditors to take stock in American enterprises by way of payment. Under the stimulus of advancing prices, the cotton planters of the Gulf states extended their acreage, mortgaging the growing crop for the money with which to buy slaves and put up cotton gins. The Mississippi Valley, north and south, was heavily mortgaged to the Eastern bankers; the seaboard states were under heavy obligations to English capitalists; but the largest creditor of all was the United States government. The so-called cash payment for public lands had been receivable in National Bank notes, or in the notes of such state banks as could assure specie redemption. The distinction was not one easily sustained. Many of the "coon box" banks, organized since 1830, were loaning irredeemable currency to land speculators, who presented it at the government land offices in defiance of the law, and the United States Treasury was soon glutted with this depreciated currency. In 1836 a resolution was brought forward in the Senate requiring that such payments be made in gold and silver, but it failed to pass. Under direction of President Jackson, the Secretary of the Treasury issued the famous specie circular, directing that land sales must be effected in legal tender except in case of actual settlers and bona fide residents in the state where the lands lay. From such purchasers bank bills would still be received. The effect of the specie circular was to dis-

Hammond, 71, 72.

credit the state bank notes, and private creditors began to demand payment in coin.

Conant, Banks of Issue, 624–628.

When, in October, 1836, financial depression overwhelmed the English business world, American obligations were called in, and the banking houses of New York and Philadelphia became seriously embarrassed. Then the English cotton factories curtailed production, and the price of cotton fell. The New Orleans banks, accustomed to loan freely on cotton securities, were the first to break down. Most of the cotton factors failed, and the Cotton Exchange was prostrated. The crisis was extended to the Northern banks by a general failure of cereal crops in 1835 and again in 1837. The farmers of the Middle and Western states had nothing to sell, and were as little able as the cotton planters to meet their obligations. Unable to realize upon their loans, the credit agencies collapsed like so many balloons. On May 10, 1837, the banks of New York City suspended, dragging down in their failure many business houses, and two hundred and fifty bankruptcies occurred within two months. Real estate depreciated in value $40,000,000, while twenty thousand men were thrown out of employment. The outraged public grew dangerous, and the militia was called in to protect the terrified financiers. The Philadelphia banks went next. The officers declared that deposits were sufficient for the needs of their own constituents, but that they could not be expected to provide currency for the length of the Atlantic seaboard. The panic spread like an epidemic, and six hundred and eighteen banks failed in this fatal year. Everywhere outside of New England the collapse was complete. A contemporary thus describes the crisis in Kentucky: "Specie disappeared from circulation entirely, and the smaller coin was replaced by paper tickets, issued by cities, towns, and individuals, having a local currency, but worthless beyond the range of their immediate neighborhood. . . . Bankruptcies multiplied in every direction. All public improvements were suspended; many states were unable to pay the interest of their respective debts, and Ken-

Diary of Philip Hone, I, 251–259.

Collins, Hist. Sketches of Kentucky, 95–97.

tucky was compelled to add 50 per cent to her direct tax or forfeit her integrity. In the latter part of 1841, and in the year 1842, the tempest so long suspended burst in all force over Kentucky. The dockets of her courts groaned under the enormous load of lawsuits, and the most frightful sacrifices of property were incurred by forced sales under execution."

Thus another period of reckless speculation was brought to a sudden close. The discredited bank notes depreciated in value, and prices shrank to a hard money level. Factories and workshops, organized on a boom basis, closed in anticipation of a falling market. Thousands of operatives were discharged, and the cities were crowded with the unemployed. All classes curtailed expenditure, and the demand for goods was thus further reduced. Seeing the market overstocked, entrepreneurs were slow to take risks, and capitalists declined to loan money on any terms.

Wages and Prices, 269–275.

The country underwent five years of financial depression. Specie payment was generally resumed in 1838, but the relief was short-lived. Seven hundred and fifty-nine banks closed their doors the following year, and the business world was not again in working order until 1842. In the interval the circulating medium had been contracted from $149,000,000 to $83,000,000. Imports fell off, and hence the customs revenue declined. Sales of public lands shrank from $24,877,000 in 1836 to $898,000 in 1843. The sharp reduction in revenue placed the United States government, which had distributed a surplus of $37,000,000 in 1837, under necessity of declaring a deficit of $42,900,000 for the seven years of the depression. Some of the newer state governments were on the verge of bankruptcy. Mississippi and Florida repudiated their bonded indebtedness.

CHAPTER VIII

TERRITORIAL EXPANSION AND REVENUE TARIFFS

Growth in Wealth and Population

THE twenty years' interval between the crisis of 1837 and that of 1857 witnessed the most remarkable industrial development yet achieved in the United States. The wealth of the country was quadrupled in this "golden age." Riches multiplied more rapidly than population. Our per capita wealth in 1860 was more than double that of 1840, more than three times that of 1790. At the beginning of the epoch, the accumulation of property was greatest in the older and more industrial sections of the Atlantic seaboard, but the agricultural communities of the Mississippi Valley made rapid gains and in the second decade doubled the amount of wealth per inhabitant.

PER CAPITA WEALTH IN THE SEVERAL SECTIONS OF THE UNITED STATES

U. S. Census, *1890*, Wealth, Debt, etc., Pt. II, 14.

YEAR	N. ATL.	S. ATL.	N. Cent.	S. CENT.	WESTERN
1850	$363	$333	$208	$299	$187
1860	528	537	436	598	434

The growth of population, while not so phenomenal as during the colonial and pioneer periods of our history, was still more rapid than in any Old World country.

PERCENTAGE INCREASE OF TOTAL AND URBAN POPULATION

DECADE	U S.	N. ATL.	S. ATL.	N. CENT.	S. CENT.	URBAN
1840–1850 .	35.9	27.6	19.2	61.2	42.2	99.3
1850–1860 .	35.6	22.8	14.7	68.3	34.0	75.1

The drift of population cityward became marked after 1840. The number of towns with a population of more than 8000, only 44 in 1840, was 141 in 1860. New York City grew in this twenty years from 313,000 to 806,000. The chief reasons for this increasing concentration must be sought in the growth of manufactures and commerce. Cities played an increasing part in our industrial development because the introduction of machinery and steam transportation called for the massing of labor and capital.

U. S. Census, *1900*, Pop., I, lxxx–lxxxiii.

DENSITY OF POPULATION

YEAR	N. ATL.	S. ATL.	N CENT.	S CENT.	WESTERN
1840 . . .	41.7	14.6	4.4	8.7	
1850 . . .	53.2	17.4	7.2	7.1	.2
1860 . . .	65.4	20.0	12.1	10.7	.5

U. S. Census, *1900*, Pop., I, xxx.

The figures indicate a general westward movement of the population from the overcrowded districts of the Atlantic coast to the new lands of the North and South Central divisions. The relatively rapid increase in the Northern as compared with the Southern sections is due to immigration. In 1860 there were 4,138,000 foreign born in the United States, the greater part of whom had come into the country since 1840. Famine had driven 781,000 Irish peasants to our shores in the first decade and 914,000 in the second. Political disturbances combined with industrial depressions induced 1,386,000 Germans to migrate

Holmes, Ch. VII.

U. S. Census, *1900*, I, ciii.

Smith, Emigration and Immigration, Ch. II, III.

Chickering, Foreign Immigration.

to America during this same twenty years. By far the greater part of the European immigrants came to the Northern states. The chance to earn good wages in the factory towns of New England, in the mines and foundries of Pennsylvania, attracted hundreds of thousands of English, Welsh, and Irish thither, and the native American operatives were being superseded by foreigners whose standard of living did not require so high a wage. The German immigrants usually pushed on into the new West in search of government land. The Preëmption Act of 1841 finally assured to the squatter the privilege of buying the land he had brought under cultivation at the government price of $1.25, no matter what the competitive value might be at the time the tract was offered for sale. Cash payment might thus be postponed until the settler had earned the sum required.

Sato, 422–428.

Few foreigners found their way to the Southern states. Here the opportunity for wage-earning employment was forestalled by slavery, and there was little free land except in the pine barrens. Moreover, the small farmer had no chance in competition with the large-scale producer, and hence the average size of holdings was two and three times greater in the Southern states than in the Northern.

AVERAGE NUMBER OF ACRES PER FARM

U. S. Census, *1900*, V, xxi.

YEAR	U.S.	N. ATL.	N. CENT.	S. ATL.	S. CENT.	WESTERN
1850 . .	202.6	112.6	143.3	376.4	291.0	694.9
1860 . .	199.2	108.1	139.7	352.8	321.3	366.9

Twentieth Rept. Am. Anti-Slavery Society, 13–30.

The foreign element of the Southern states was derived from Africa, and the presence of these alien laborers debarred European immigration. In the last decade before the Civil War the clandestine slave traders grew very bold. Shiploads were landed in the secluded bayous of the Gulf coast and Florida, even at the port of Mobile. It is esti-

mated that between 1808 and 1860 270,000 slaves were smuggled into the United States. These fresh importations of African blood added to the numbers but degraded the quality of the slave population of the South during the very period in which the North was receiving large accessions of laborers from the most civilized races of Europe.

Dubois, Slave Trade, Ch. X, XI.

PROPORTION OF SLAVES TO WHITE POPULATION

STATE	1850	1860
	Per cent	Per cent
Delaware	3	2
Missouri	15	11
Maryland	21	17
Kentucky	28	24
Tennessee	32	33
Arkansas	37	34
Texas	40	43
North Carolina	52	52
Virginia	53	47
Georgia	71	78
Alabama	80	83
Florida	83	79
Louisiana	91	93
Mississippi	103	123
South Carolina	140	138

De Bow, III, 419.

U. S. Census, *1860*, Population, vii–xvi.

Ingle estimates that in 1850 there were 2,500,000 slaves on the plantations of the South, of whom the number 350,000 were employed in growing tobacco, rice 125,000, sugar 150,000, hemp 60,000. The remainder, 1,815,000 men, women, and children, were at work in the cotton fields of the "black belt." This vast army of cotton growers represents well-nigh the total increase in the slave population in the sixty years from 1790 to 1850. There were in the Southern states on the eve of the Civil War 3,954,000 slaves and 262,000 free negroes, making together fully one third of the total population. The foreign born were then 542,000, but one twenty-fourth of the total. The propor-

Ingle, Southern Sidelights, Ch. VIII.

Brown, Lower South in Am. Hist., 24–49.

tion of slaves was declining in the border states, but increasing farther south where climate and staple crops combined to render this a highly profitable form of labor. Some three hundred and fifty thousand planters made up the slave-holding class. They represented not more than 5 or 6 per cent of the white population, but they exercised a dominating influence in the politics of the South and of the nation. The non-slaveholders of the slave states were the small farmers of the hill country and the poor whites, crackers, and sand lappers of the plains. For these there was no place in the industrial order. To work for hire was to lose caste, and the opportunities for self-employed labor were few and precarious. The poor whites managed to live off the produce of their inferior lands, or earned a comfortable salary as slave-overseers.

Olmsted, Seaboard Slave States, 504–522, 536–546.

Industrial Backwardness of the South

The census tables indicate higher per capita wealth in the South Central than in the North Central section, but the comparison is misleading, for the slaves were reckoned as property. The estimate under this category for 1860 was $4,000,000,000, reducing the property of the South Central, invested in land and improvements thereon, to less than the Northern total. The wealth of the North Central section represented farms, factories, shipping and railroads, and was more evenly divided among a more numerous population. In matter of fact, the planters of the new South, in spite of their immense output and magnificent revenues, were being steadily impoverished. The money received for each season's crops was immediately dispatched to the upper Mississippi Valley for plantation supplies, to the old South for new relays of slaves, to New England and abroad for manufactures and luxuries of various sorts. Many of the estates were heavily mortgaged, and few were self-sustaining. There was little opportunity and less desire for the accumulation of capital, and without capital manufactures and transportation

Callender, Ch. VII.

Kettell, Southern Wealth and Northern Profits.

facilities cannot be undertaken, and agriculture will be carried on in hand-to-mouth fashion.

PER CENT OF FARM LAND IMPROVED

YEAR	U.S.	N. ATL.	S. ATL.	N. CENT	S CENT.
1850 . . .	38.5	61.6	32.1	42.6	28.4
1860 . . .	40.1	63.8	32.8	48.5	27.9

Agriculture. — The planters south of Mason and Dixon's line had no share in the agricultural improvements of the ante-bellum period. Tillage by slave labor was necessarily crude, and the methods extensive rather than intensive. Machinery could not be used to advantage because the laborers were careless and unintelligent. A cheap wooden plow drawn by mule or ox, a hoe, and a broadax were the only implements with which the field hands could be trusted. The contrast in the equipment of Northern and Southern agriculture is evident in the census statistics. The money value of agricultural implements and machinery averaged in 1850 thirty-seven cents per acre in the Southern states, and seventy-seven in the Northern. In 1860 the difference was still greater, the average value per acre being forty-two cents in the Southern and ninety-four cents in the Northern states. Conservation of the soil by the application of manures and fertilizers, rotation of crops, and the introduction of new seeds seemed so difficult that few planters undertook to improve on antiquated processes. The simpler method was to abandon the cultivation of exhausted soils and clear new land. So usual was this practice, that a field entirely free from stumps was thought less fertile and actually brought a lower price in the market than land cluttered with the débris of the forest. The proportion of improved land was steadily increasing in the Northern sections of the country, while in the Southern it was slightly declining.

Ingle, Ch. II.

Goodloe, Resources of the Southern States.

Hildreth, Despotism in America, Ch. III.

U. S. Census, *1900*, V, xxxx.

Martineau, I, 299–306.

Weston, Progress of Slavery, Ch. XV.

Diversification of crops was being continually urged by the friends of Southern agriculture, but it was well-nigh impossible to act on such advice. The cultivation of fruits, vegetables, and grain required more skill and intelligence than the average plantation could furnish. The planters of Louisiana were unable to raise even the slave rations, and were fain to purchase corn meal, pork, and salt beef from the thrifty farmers north of the Ohio River. In the production of live stock, spite of climatic advantages, the South did not keep pace with the country as a whole. Swine and mules flourished in the open and managed to fatten on acorns and standing fodder, but cattle and horses deteriorated for lack of care.

Ingle, 56, 57, 59.

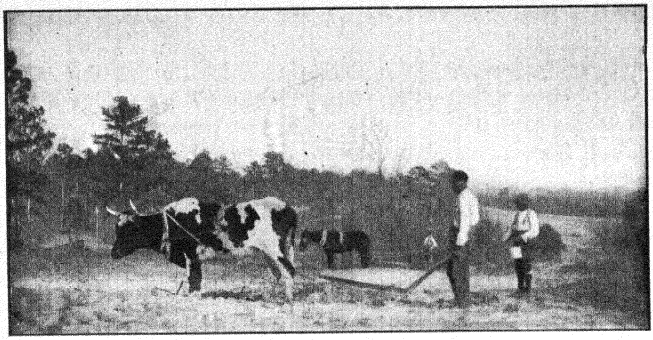
Census, *1909*, V, xxxiv.

CROP STATISTICS

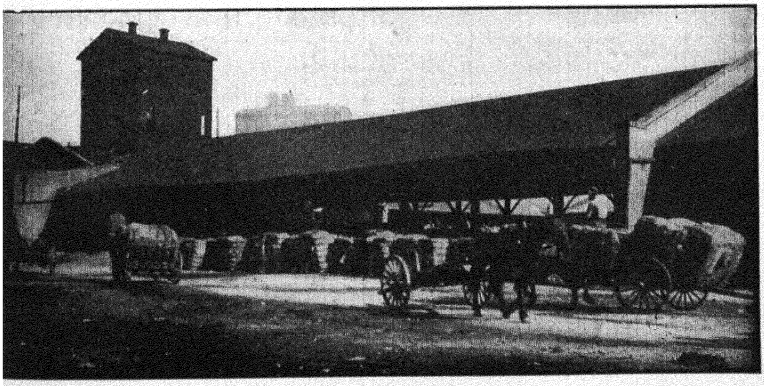
YEAR	RICE	TOBACCO	SUGAR	COTTON
	lb.	lb.	hhd.	bales
1840 . . .	89,000,000	219,000,000		
1850 . . .	215,000,000	199,000,000	247,000	2,469,093
1860 . . .	187,000,000	434,000,000	240,000	5,387,052

De Bow, II, 397–399; III, 195–207, 266–269, 285–299.

Southern landowners found most money gain in growing the great staples which could be planted and harvested by gangs of slaves and by wholesale methods. Tobacco was the principal crop of the northern tier of Southern states — Maryland, Virginia, North Carolina, Tennessee, Kentucky, and Missouri. Rice was still cultivated in the swamp lands of the South Carolina and Georgia coast, cotton on the uplands of the interior. The southern half of Louisiana was given over to sugar culture. The cultivation of cotton was being pushed westward on to the black soils of northern and central Texas, for the exhausted soils of the Atlantic states bore diminishing harvests. Even the fertile alluvial plains bordering on the Gulf were wearing out. The production of rice and sugar, crops confined to







COTTON PRODUCTION

own accord. They were devoting all available capital and labor to producing the raw material of English manufactures. Their great staple supplied the cotton factories of Old England with 1,247,000 bales in 1840, and 2,669,000 bales in 1860. In spite of many efforts to foster cotton culture in India, Egypt, and Brazil, England was still dependent on the American supply, but she found a compensating advantage in the increasing market for cheap cotton goods on the plantations of the Southern states. The cotton manufacturers of New England were no less convenienced by the predilection of the South for agriculture and her neglect of manufactures.

De Bow, I, 123, 177, 191, 198.

In the first decade of the nineteenth century the ratio of manufactures to population was higher in the Southern states than in New England. For cotton manufacture the South had great natural advantages in that the raw material might be had direct from the gin without the cost of transportation and the factor's commission paid by English and by Northern mills. Water power was abundant along the "fall line," and extensive deposits of coal offered fuel for steam power at low cost. Labor, too, was plentiful and cheap. Free white operatives might be had at less than one half the wage paid in the Northern factories. Slaves could be hired at still lower rates, and they proved to have sufficient skill to operate the spinning mules and even the looms. The advantages of converting slaves to this use were thus stated by a Southern writer: "otton growers, who have owned slaves long, know they are capable of making efficient operatives; and when once learned, they are fixed, permanent, and valuable. This branch of the business furnishes profitable employment on cotton to a portion of the field force, which relieves the soil to that extent which is now wasting away from overfatigue. It gives scope to all the mechanical talent among the slaves, both males and females — men in the machine shops, and women among the mules, throstles, and looms." In spite of these evident advantages, there were but few cotton mills in the "black belt." Of the million and a

De Bow, I, 211–223, 229–242.

De Bow, III, 33–36.

Ingle, 75–76.

De Bow, I, 231–232.

quarter spindles operated in the United States in 1840, but 181,000 belonged to the South. In 1850 the South could boast but 242,000 spindles out of three and a half million; in 1860, but 290,359 out of five and a quarter million. The few successful mills were spinning yarn for Northern looms or weaving the coarse cloth that was to be printed in the calico works of New England. Southern entrepreneurs were no less sluggish respecting their opportunity for leather manufactures. Massachusetts was sending into the South each year $5,000,000 worth of shoes, a good part of which were made of hides tanned outside of New England.

U. S. Census, *1860*, Manufactures, xi–xiv.

U. S. Census, *1860*, Manufactures, lxvii–lxviii.

The iron works of Virginia and Maryland had been maintained without interruption from colonial days far into the nineteenth century, but the mountaineers who worked the iron ore of the Appalachian Range held to the rude and wasteful methods of the pioneers. They could not compete with modern furnaces, and produced only domestic utensils and agricultural implements for local trade. An enterprising Yankee, Daniel Pratt, went to Alabama in the forties, and undertook the construction of cotton gins, saw, grist, and flour mills for the Southern market. In the manufacture of machinery too bulky to bear the cost of transportation he made a great success; but, in general, the iron manufactures of the North were far cheaper. The South developed no first-rate iron or steel works before the Civil War. Vast deposits of high-grade bituminous coal were treasured in the southern Appalachians, but the amount mined was inconsiderable when compared with the output of the Northern states.

Swank, Ch. XXX.

U. S. Census, *1860*, Manufactures, ccxiv–ccxvi.

COAL PRODUCTION

YEAR	SOUTH	NORTH
	bush.	bush.
1840	11,711,073	15,892,152
1860	34,103,727	110,273,200

De Bow, II, 435–454, 473.

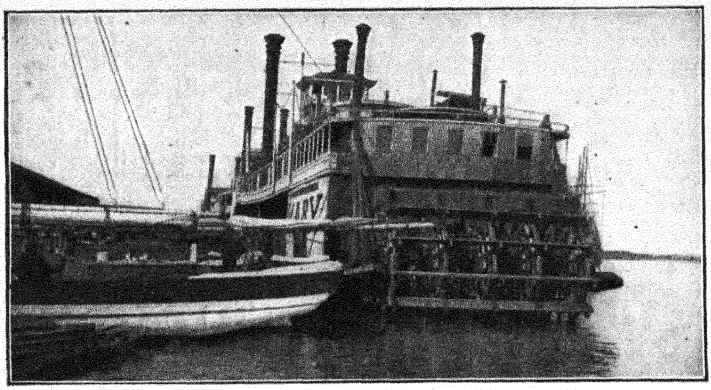
Railroads could be built through the seaboard and Gulf states at half the cost of construction in the North Atlantic section. The plains and foothills of the South offered slight physical difficulties, timber and iron for laying the track might be had along the line of route, while slave labor cost only twenty cents a day. Nevertheless, Southern railroads were built but slowly. The cherished project of connecting Charleston with the Mississippi River was not accomplished until 1858. Moreover, the transportation facilities on the Southern roads were inferior and charges higher than on the Northern lines.

Commerce. — The first American steamer to cross the Atlantic had sailed from Savannah, but no packet lines ran from Southern ports. The enormous export trade in cotton was carried on in Northern or English vessels. Between 1840 and 1860 Southern shipyards built but ten per cent of the total output of the United States, and their vessels were small side or stern wheelers intended for the coastwise and river trade. "The South, while producing a majority of the exports, owned less than a fifth of the shipping of the Union, and brought to the country only one ninth of the imports." There was no lack of raw materials for shipbuilding. The South possessed inexhaustible forests of pine, oak, and locust, so that masts and spars, turpentine and pitch, might be had for from one half to one tenth the price at New York, Newport, or Boston. Hemp for cordage was abundant, and iron ore suitable for anchors and cables existed in vast quantities. Southerners were, however, slow to develop new enterprises, and the benefits of government action in behalf of shipping, commerce, etc., accrued chiefly to the North. The bonus of from one to two dollars per ton on fishing vessels went to the fishermen of Massachusetts and Maine, the former securing $7,926,000 and the latter $4,175,000 out of the $13,000,000 dispensed between 1789 and 1860. For the same reasons, the subsidized steamship lines belonged to the Northern ports. Charleston subscribed stock for an Atlantic Steam Navigation Company, and Virginia pro-

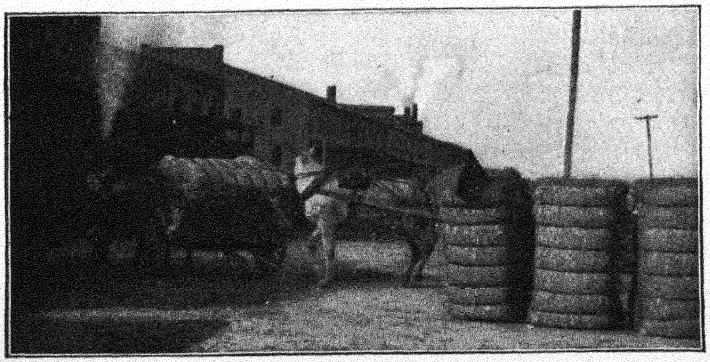
Goodloe, 117.

De Bow, II, 187.

Ingle, Ch. IV.







COTTON TRAFFIC

posed a subsidy for the Franco-American line, but these and other projects came to naught. Despite their cotton trade, the tonnage of the principal ports, Charleston and New Orleans, was declining. New York, Philadelphia, and Baltimore, by building railroads and canals, had arrogated to themselves the commerce of the Mississippi Valley. With the decline of trade, customs revenues fell off, and government expenditure in the way of collection was reduced. Appropriations for internal improvements, the dredging of rivers and harbors, the building of breakwaters, etc., were usually made at the instance of the more enterprising communities to the north of Mason and Dixon's line.

Before the end of this era of expansion the economic divergence between North and South had become so marked as to give rise to considerable jealousy. Something quite analogous to a nonimportation association was projected by the business men of Mobile. A circular issued in the last decade before the war urged upon patriotic citizens that they patronize Southern industry and discriminate against the products of the rival section. English goods and commercial houses were to be preferred to those of the North. De Bow, III, 122–123.

Territorial Expansion

Exploitation of the soil such as was practiced in the slave-holding states could not long maintain a growing population. The younger and more enterprising of the Southern planters had been carrying their slaves into **Texas**, where land might be obtained in vast tracts and where a soil of astonishing fertility enabled them to recoup their declining fortunes. By 1830 the Americans outnumbered the Spanish population, and the Mexican government became seriously concerned lest this rich province pass from its control. A series of restrictive measures, *e.g.* the abolition of slavery, the prohibition of the importation of slaves, and the denial of the right of settlement to free persons

from the United States, were disregarded by the invaders who had slight respect for the Spanish authorities. Matters were brought to a crisis in 1835, when the invaders declared the independence of Texas and set up an autonomous republic. Southern congressmen gladly utilized this opportunity to annex the revolted province, and although the measure was vigorously opposed by Northern statesmen, who deplored any extension of slave territory, the slave interest triumphed. During the ensuing war two American armies marched through the heart of the enemy's country, capturing Chihuahua, Vera Cruz, and the City of Mexico, and a third, the Army of the West, struck through the Northern provinces, taking possession of Santa Fé and San Diego. Nowhere was there any effective resistance, and in the treaty of Guadaloupe Hidalgo (1848), Mexico was forced to yield all the territory north of the Rio Grande and Gila rivers upon the payment of $15,000,000 indemnity. The Wilmot Proviso, stipulating that slavery should be prohibited in all territory that might be acquired from Mexico, failed, and a vast area was opened up to the enterprise of slave owners.

Hittell, History of California, II 375–469.

Upper California had long been coveted by certain Western senators who knew something of the rich resources of the country and the weakness of the Mexican rule. For twenty years a flourishing trade had been carried on between Boston and the Californian ports, San Diego, San Pedro, Santa Barbara, and Monterey, dry goods and groceries being exchanged for hides and tallow from the cattle ranches. A few American merchants and sailors had become domiciled at one or another of the coast towns, and they sent back to their friends glowing accounts of soil and climate and of the fortunes to be made in the unexploited commercial and agricultural resources of the country. Moreover, trappers and Indian traders, and, latterly, a few emigrants, had found their way across the Sierras. There were some five thousand Americans settled in the province when war with Mexico was declared, and they lent active aid to the cause of the United States.

Hardly had the annexation of California been ratified, when the discovery of nuggets and scales of virgin gold in the river drift near Sutter's Fort precipitated a westward movement very different in character from any that had taken place since the sixteenth century. A horde of adventurers, young men for the most part, rushed to the El Dorado on the Pacific Coast. Gold to the amount of $5,000,000 was taken from the placers of the Sacramento Valley in 1848 by the five thousand men who were first on the ground. During the next year fifty thousand people made their way to California. They came from all parts of the world: Sonorians and Chilians from the Spanish republics, Chinese and Malays from the Orient, Kanakas from the Sandwich Islands, "colony men" from Australia; but the strength and sinew of the migration was from England, Germany, and the Eastern states. Some of the "forty-niners" braved the four months' voyage round the Horn, others took advantage of the newly established steamship lines to Colon and San Francisco; but the penurious and foolhardy Westerners made their hazardous way along the Oregon Trail to Fort Bridger, and thence across the Great American Desert and over the Sierra Range to the gold diggings. Once arrived in the land of gold, the treasure seekers scattered over the foothills from the Merced River to the Trinity, searching the river wash for the golden gravel that made men mad. Some "struck it rich" and returned home to invest their easily gotten wealth, but the average "take" did not exceed $1000 a year, and barely sufficed to meet living and traveling expenses. By official estimate $40,000,000 worth of gold was exported in 1849 and $50,000,000 in 1850, and it is probable that one fourth the findings were not reported to the government. The maximum production was reached in 1853, when the value of the gold output was $65,000,000. Then it became apparent that the surface diggings were nearly exhausted and that deep mining and more costly methods must be resorted to if California was to remain the golden state.

Hittell, II 682–698, 722–819.

Hittell, III 414.

Linn, Story of the Mormons, 378–409.

Utah. — At Salt Lake, on the edge of the Great Basin, the "forty-niners" came upon a Mormon settlement. The first Saints had migrated from Council Bluffs in the summer of 1847, treking up the north bank of the Platte River (by what came to be known as the Mormon Trail) to Fort Bridger, and thence across the Wasatch Range to the desert interior. The region had been thought hopeless by all previous explorers, but the sage brush plains proved highly fertile under irrigation. The settlers put up sawmills and gristmills, woolen factories and iron works, and were soon able to supply themselves with all the necessities of life. Few Mormons joined in the rush to California. They found a surer means of making money in providing food and transportation to the desperate gold seekers. In the winter of 1848–1849 there were five thousand people in Utah, and the leaders of the church had organized a system of emigration by which thousands of converts were brought every year from Great Britain, Germany, and Scandinavia to the new Zion beyond the Rockies.

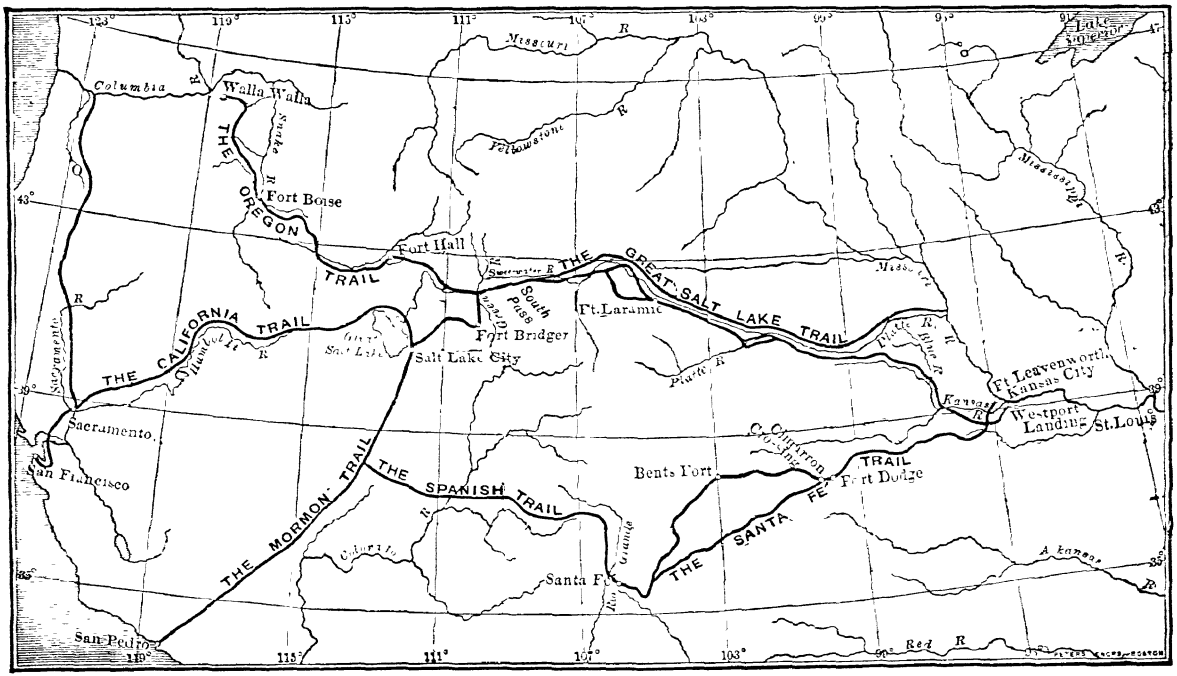
Brough, Irrigation in Utah, Ch. I, II.

Greenhow, History of Oregon.

Oregon. — From the day when Astor's trading post was abandoned to the Hudson's Bay Company, the Columbia River region had been coveted by Americans. Jedidiah Smith, Sublette, and other bold spirits trapped and traded in the disputed territory and brought their spoils to St. Louis; but not till 1832 was there any attempt to establish trading posts. In that year Nathaniel J. Wyeth with a party of Massachusetts men followed the fur traders' route to Fort Vancouver on the Columbia. Convinced of the rich possibilities of the country, Wyeth built Fort Hall on the Snake River and began a farm colony on an island at the junction of the Willamette and the Columbia. Four years later Dr. Marcus Whitman conducted a missionary expedition over the same route to the Walla Walla and proved the Oregon Trail practicable for women and wagons. Reports of the beauty and fertility of the lower Columbia and Willamette valleys were sent back to the "states," and thousands of emigrants turned their faces

Wyeth, Journal.

Bancroft, Oregon.



TRAILS INTO THE FAR WEST

to this region. In June, 1843, a caravan of two hundred wagons left Westport for the long overland journey. It was the beginning of a great migration. The characteristic vehicle was a heavy four-wheeled cart with canvas cover, very like the conistogas of an earlier day. The women and children with provisions and camping kit were carried in the wagons, while the men rode horseback or walked alongside. The night encampment was strictly guarded lest a foraging band of Indians capture the horses and oxen. Dr. Whitman had represented to the Secretary of War the necessity of establishing military stations at convenient points for the purpose of providing supplies and protection to the emigrants, and in this same year Colonel Frémont was sent out to reconnoiter the route. He found a well-beaten trail and roadside camps the whole distance from Westport to Fort Hall. "The edge of the wood, for several miles along the [Bear] River, was dotted with the white covers of emigrant wagons, collected in groups at different camps, where the smokes were rising lazily from the fires, around which the women were occupied in preparing the evening meal; and the children playing in the grass, and herds of cattle grazing about in the bottom, had an air of quiet security and civilized comfort, that made a rare sight for the traveler in such a remote wildernesss."

Frémont, Rept. of Exploring Expedition to Oregon, 134.

Before the autumn of 1845 three thousand emigrants had followed this road to Oregon. Houses and cattle and plowed fields drove the beaver from their haunts and threatened the extinction of the fur trade. Dr. McLoughlin, chief factor of the Hudson's Bay Company at Fort Vancouver, was most hospitable to the settlers, hoping that they would develop the fertile region south of the Columbia and furnish grain and other supplies for the Alaskan posts. But the Americans were not content to be governed by a trade monopoly, however benevolent, and they demanded a republican government under the protection of the United States. The emigrant trains came steadily on, and Great Britain was finally forced

to surrender the land to the actual occupants. The Ashburton Treaty (1846) secured the coast from the California boundary to the 49th parallel to the United States.

The population of the Cordilleran and Pacific Coast settlements amounted in 1860 to more than five hundred thousand, but the slave owners were few. The character of the settlers as well as the nature of climate and economic resources, rendered the region unsuited to slavery. There was no use for slaves in the mines, on the sheep and cattle ranches, or in diversified agriculture. The Far West offered, on the contrary, many promising opportunities for free labor and self-employment. Irrigation required a degree of intelligence and a capacity for forethought that could only be found in the free landed proprietor.

Through Routes to the West

The westward movement of population necessitated improved transportation facilities. The three trans-Alleghany canals had brought passengers and goods to the Ohio River and Lake Erie, but by slow and uncertain stages. The Baltimore and Ohio Railroad reached westward-flowing water at Wheeling in 1853. New York had a roundabout connection with Buffalo by 1842, via the Hudson River (which was frozen over during the winter months) and a series of seven independent lines requiring several transfers. The New York and Erie, the first continuous line built across the state, reached Dunkirk on Lake Erie in 1851, and there passengers and freight for points farther west were transferred to steamers. Philadelphia had a much more difficult transportation problem than New York, since the height of the range in Pennsylvania is four times as great as through the Mohawk Pass. The state undertook to improve on the canal connection already established by building railways along the more practicable portions of the route, thus reducing the time required. The building of an all-rail route was undertaken by a private company in 1846, and the first train was run through

Wilson, Hist. Pennsylvania Railway, Vol. I.

to Pittsburg in 1852. Boston alone of the great Northern ports failed to establish a through line to the West. Massachusetts had built the first post road, the first canal, and the first iron tramway (the three-mile line connecting the granite quarries of Quincy with tidewater), but her citizens were slow to invest capital in the locomotive. When the Boston and Worcester road was finally opened, it amounted to little more than "a forty mile extension of Boston wharf." New England's railway system was purely local, centering in "the Hub." The Great Western Railway was only with difficulty and by state aid carried through to Albany (1841), and was operated, not in connection with the Boston and Worcester, but under an independent and antagonistic management. Even when the two lines were finally consolidated into the Boston and Albany Railroad (1866), the all-important through route to the West was not achieved. The Buffalo and Albany was financed from New York, and its management was not concerned to promote the interests of the rival port.

Adams, Railroads, Their Origin and Problems.

Railroad construction in the West began with the building of a line from Detroit to Ann Arbor in 1838. The legislature of Michigan undertook to carry three railroads across the state from Port Huron, Detroit, and Munroe to Lake Michigan; but the routes lay through virgin forest, and traffic could not pay running expenses. The state management was inefficient, and the enterprise was finally (1850) made over to private companies. The Northwest was wholly agricultural, towns were few and far between, and traffic was light. In 1850 there was but one mile of track for each 19,000 of population in the states of Illinois, Michigan, Wisconsin, Iowa, and Missouri, while New England boasted one mile of railroad to 4000 people. In the next decade a mania for railroads seized the new West. Roads were built in advance of traffic, and the mileage was rapidly increased. By 1860 there was a mile of railroad for every 912 of the population in the upper Mississippi Valley.

Lardner, Railway Economy, Ch. XXII

Con. Globe, *1847–18.48*, Appendix, 534–537, 1137–1139.

The Financing of the Roads. — This result could hardly have been achieved without national assistance. Several of the Eastern roads had been built with state aid. Maryland had subscribed $3,000,000 to the stock of the Baltimore and Ohio; Massachusetts had loaned $4,000,000 to the Great Western; Pennsylvania, South Carolina, and Georgia had undertaken to finance their initial roads. The new Western states were hardly adequate to these costly enterprises, and they appealed to Congress for aid. Following the precedent of land grants to canal projects, Congress made over (1850) a tract of two million seven hundred thousand acres of public land to the state of Illinois to be used for the benefit of her Central Railway from Chicago to Cairo. Similar grants were made to Florida and Alabama and Mississippi. The Mobile and Ohio, the first through route from North to South, was likewise built with the proceeds of land grants. This line, together with the Mississippi Central, was carried through to the Gulf in 1858–1859, the years immediately preceding the Civil War.

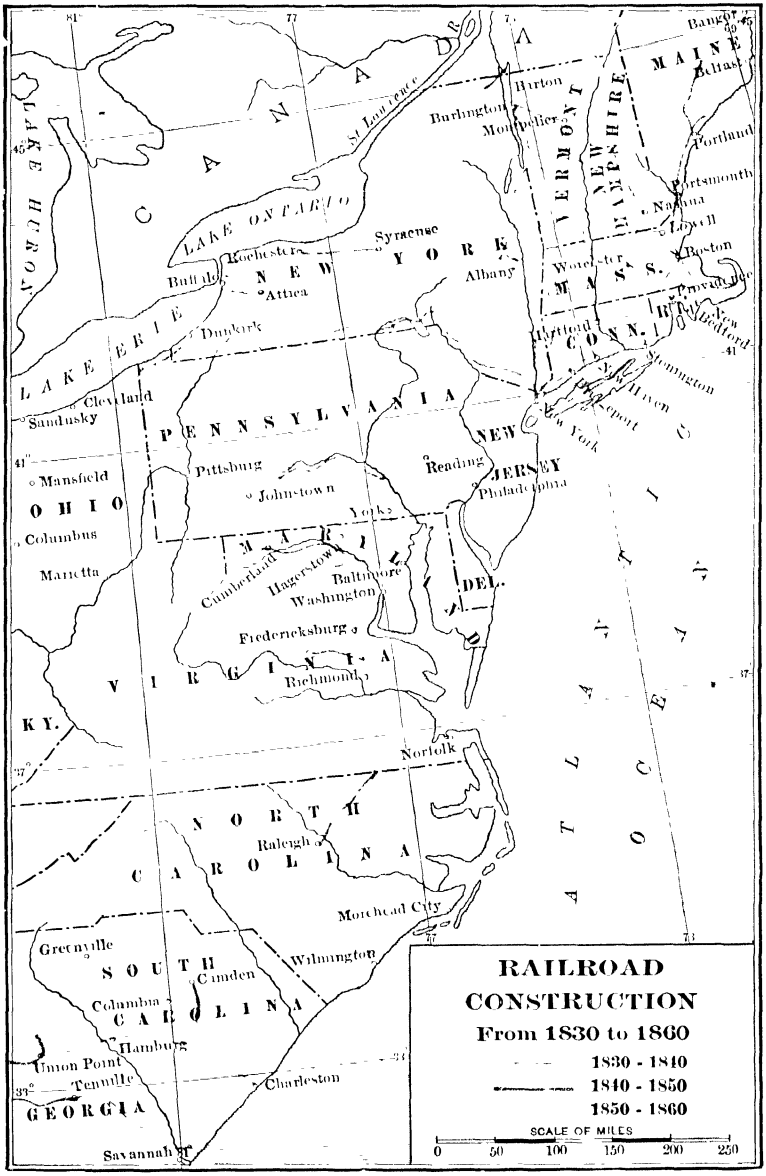
Sanborn, Cong. Grants of Land in Aid of Rys., Ch. I, II.

Meyer, Railway Legislation, Pt. II, Ch. I, Appendix I.

Lardner, Railway Economy, 346–347.

These early railways were, with few exceptions, built by joint stock companies chartered by the state legislatures. The charter was essential to the incorporation of the stockholders and to the securing of the right of way. Land for the laying of the track was usually given, both public and private owners regarding the advantage accruing from improved transportation as full compensation for such concessions. The older states imposed certain stipulations intended to guard the interests of the communities to be served. The rate of dividend was limited (to ten per cent in New England, to twelve per cent in Pennsylvania) by the provision that excess profits must be divided with the state or charges reduced. Freight and passenger rates were to be held within a fixed maximum — six, five, four, and three cents a mile for passengers, five, three, and two cents per ton mile on freight. The term of the charter was limited, and in some cases, *e.g.* the Pennsylvania Central, the state reserved the right to pur-

U. S. Census, *1880*, IV, Rept. on Roads, 12, 289, 290.


CANADA
LAKE HURON
LAKE ONTARIO
LAKE ERIE
St Lawrence
Burlington
Montpelier
Barton
VERMONT
NEW HAMPSHIRE
MAINE
Bangor
Portland
Portsmouth
Lowell
Boston
Worcester
Albany
Syracuse
Rochester
Buffalo
Attica
NEW YORK
MASS.
Providence
Hartford
CONN.
Bedford
Dunkirk
Cleveland
Sandusky
PENNSYLVANIA
Pittsburg
Johnstown
Reading
NEW JERSEY
Philadelphia
New York
Mansfield
OHIO
Columbus
Marietta
MARYLAND
Cumberland
Hagerstown
Baltimore
Washington
DEL.
Fredericksburg
VIRGINIA
Richmond
KY.
Norfolk
NORTH CAROLINA
Raleigh
Morehead City
Wilmington
Greenville
SOUTH CAROLINA
Camden
Columbia
Hamburg
Union Point
Tenville
Charleston
GEORGIA
Savannah
ATLANTIC
81°
77°
73°
45°
41°
37°
33°
RAILROAD CONSTRUCTION
From 1830 to 1860
1830 - 1840
1840 - 1850
1850 - 1860
SCALE OF MILES
0 50 100 150 200 250

chase and operate the road after the lapse of from fifteen to twenty-five years. In the first decade of railway construction, there were built and equipped 2264 miles at a cost of $100,000,000; in the second decade, 5045 miles at a cost of $250,000,000; in the third decade, 20,109 miles at a cost of $1,000,000,000. De Bow, II, 494.

Little of this enormous expenditure could be expected to bring in an immediate return. In the densely populated and highly productive sections of the country, a railroad investment might net a handsome revenue, and here the average rate of dividend was eight and one half per cent. But in the sparsely settled districts of the West and South, investors must wait a score of years for their returns and run the risk of finding their stock valueless in the end. Lardner, Railway Economy, 339–342.

To the community at large the railroad was, in this initial period, an unmixed benefit. Construction created a demand for rails and structural iron that proved a boon to the forges and foundries, while track-laying, machine and car shops, gave employment to an army of laborers, skilled and unskilled. The new transportation system meant enhanced prices for crops and lands all along the line of the road. It halved the cost and quartered the time of journeying by stage, and brought opportunity for travel within reach of people of moderate means. The building of railroads meant, too, the extension of the postal service and the cheapening of postage. The government was able to reduce the charge of sending letters from ten, twenty-five, and fifty cents per letter to a uniform rate of three cents.

The Electric Telegraph. — Hand in hand with the extension of railroads went the system of communication by telegraph. The sending of verbal messages along an electric wire had been rendered practicable by S. F. B. Morse, in 1835, but it was long before business men were convinced that this was a promising venture. In 1844 Congress appropriated $30,000 for the building of a line from Washington to Baltimore. The following year a line was run Byrn, Ch. III. Jones, Sketch of the Electric Telegraph, Ch. VIII.

Lardner, Electric Telegraph, Ch. XII.

from New York to Philadelphia by a private company, and the system was soon after extended to Wilmington and Baltimore. Connections between New York and Boston, New York and Albany, Albany and Buffalo, were made in 1846–1847. In 1848 Ezra Cornell built a telegraph line from New York to Cleveland, Toledo, Detroit, Chicago, and Milwaukee. In the same year a line was run from Washington to New Orleans, connecting the seaboard cities.

Lardner, Railway Economy, Ch. XV.

The installation of a telegraph line is a far simpler and cheaper enterprise than the building of a railroad, and the electric wires overspread the eastern half of the United States with marvelous rapidity. Communication with the Pacific Coast was a much more difficult proposition. From 1852 to 1860 the overland mails were carried by the famous Pony Express — a relay system of rapid riders — via the Salt Lake Trail. Encouraged by the prospect of a subsidy of $40,000 per year from the United States government, the Western Union Company carried a telegraph line across the Cordilleran Range in 1861.

Inman, Great Salt Lake Trail, Ch. VIII.

Stimson, Express Business.

Express Companies. — It was a Massachusetts man, William F. Harnsden, who inaugurated the business of transporting valuable freight under private guard. He began carrying packages between New York and Boston (1839) in his own valise, delivering the goods in person to the consignees. The trip was made three times a week, by rail to Providence and thence by steamer to New York; but the business developed rapidly and he soon arranged for an express car and a special cabin on the Stonington Steamship Line. An office was opened in New York and another in Philadelphia, and a Hudson River service was organized with a branch office at Albany (1841). Henry Wells, the agent at Albany, proposed to extend the service to Buffalo, but to Harnsden this seemed too hazardous a venture, and the western business was organized by an independent company. The Albany and Buffalo Express covered the distance by railroad and stage in four nights and three days, the packages being packed in one trunk and intrusted to

Wells' personal supervision. In 1845 Wells and Fargo started the Western Express to Cincinnati, Chicago, and St. Louis, Fargo acting as messenger. The company's stages ran far in advance of railroads and carried thousands of emigrants and their outfits into the frontier settlements. The charge from New York to Buffalo was $4 per hundredweight, to Detroit $6, and to St. Louis $8, an excess of $10 being added for winter service. Letters were carried for five cents while the United States post-office was still charging twenty-five, and the government would have been driven out of the letter carrying business throughout the express company's territory but for the timely reduction in the price of stamps. Money also was transported so securely that the rate of exchange between New York and Chicago fell from 3 per cent to the mere cost of transportation.

Meantime Harnsden, ambitious to extend his special delivery system to Europe, had made arrangements with the Enoch Train Line of packet ships to accommodate his messengers and their charge and established offices in Liverpool, Havre, and Paris. Not goods only, but passengers, were intrusted to the care of the company. Advertisements of cheap and safe transportation from Liverpool to New York, Buffalo, and Chicago were posted in all the principal towns of Great Britain, and passenger agents were sent through Europe to solicit patronage. It was Harnsden's ambition that every immigrant arriving in New York or Boston should be consigned to his express company, and he secured control of the bulk of the steerage accommodations. Fully one hundred thousand people were brought over to America by this agency in the first five years of its existence. After Harnsden's death (1845) the company purchased a line of steamships to run across the Atlantic, and another for the coast service, touching at Savannah, Mobile, New Orleans, and Galveston; but these investments proved ill-advised. The management got into financial difficulties and was forced to merge its interests with the newly organized Adams Express Company (1854).

Hittell, Hist. California, IV, 380–400.

In 1852 Wells and Fargo sold out to the American Express Company and transferred their enterprise to California. Goods consigned to them were carried from New York to San Francisco via Panama at a charge of forty cents per pound. A messenger service was maintained with every mining camp in the Sierras, and gold dust collected from the diggings was transported direct to New York and London. The Wells Fargo Express Company received $56,000,000 in gold in 1857, of which sum only $9,000,000 was billed to the Atlantic states. Letters and camp supplies were dispatched to the miners by the same trusty messengers, who often furnished the only regular means of communication with the civilized world. When the Nevada silver deposits were opened up, Wells Fargo built a stage road over the mountains to Virginia City, on which six to eight coaches a day were kept busy conveying passengers up to the mines and bullion down. An overland stage route via Santa Fé was started in 1858, making a run of twenty-five days between St. Louis and San Diego. The Overland Stage line via Salt Lake was taken over in 1865, and thenceforward Wells Fargo dominated the express traffic of the Cordilleran region.

Influence of Revenue Tariffs

Bolles, II, Bk. III, Ch. VI, VII.

Bishop, II, 419–474.

Taussig, Tariff Hist. of the U.S., 109–154.

Dewey, 237–239, 299–252, 257–259, 262–265.

Rabbeno, 184–199.

This period of industrial expansion was coincident with a period of low import duties. The gradual reduction of the tariff provided for in the compromise of 1833 had been consistently carried out, and the horizontal scale of 20 per cent was reached in 1842. This minimum tariff was in operation but two months (July and August), and then the advocates of protection secured a brief lease of power. With a view to making political capital out of benefits conferred, the Whig majority in Congress enacted a law imposing heavy duties on salt, glass, iron, cotton, woolen, and silk manufactures, industries represented in New England and the Middle states. The West was indifferent to the measure, the South was distinctly hostile,

and the unqualified Democratic victory of 1844 gave the opponents of protection their opportunity. In his annual report of December, 1845, R. J. Walker, Secretary of the Treasury, demonstrated that the prevailing customs duties imposed a tax of $81,000,000 upon consumers in the way of enhanced prices, while they brought to the government a revenue of only $27,000,000. He proposed that tariff legislation should be determined by financial considerations solely, and that the import duties should be laid in accordance with sound principles of taxation. Rates should be fixed at the point that would insure the maximum return over and above the cost of collection, protection being a minor consideration. High duties might suitably be imposed on luxuries, but the raw materials of manufacture and the necessities of life should be admitted under low duties or placed on the free list. The argument that protection to manufactures insured high wages to labor, Walker declared to be delusive. Wages had not risen under the Whig tariff, but the cost of living had certainly been advanced. The "American system" taxed twenty million people for the benefit of four hundred thousand operatives, whose opportunity for employment was dearly bought, and of ten thousand manufacturers, who were reaping a higher rate of profit than any other class in the community.

Thompson, Hist. of Protective Tariff Laws, Ch. XXXIX, XL.

Executive Documents, 29th Cong., 1st Session, II, No. 6.

Stanwood, II, Ch. XI.

Taussig, State Papers and Speeches on the Tariff, 214–251.

Wages and Prices, 424–427.

Walker believed that the reduction of our import duties on manufactures would lead to the repeal of the English Corn Laws and the opening of British ports to our agricultural products. The reciprocal trade thus engendered would greatly benefit our farmers and planters, whose crops of wheat and cotton had outgrown the capacity of the home market, and our merchants, who must profit from the augmentation of commerce. In the debate upon the Democratic tariff bill, the antagonism between the manufacturing and agricultural sections of the country became evident. Reduction of the protective duties was opposed by New England and the Middle states, but favored by the farmers and planters of the West and South.

Stanwood, II, Ch XII.

In the **Walker Tariff** (July, 1846) imports were classed under four principal categories. In Schedule A were listed injurious luxuries, such as absinthe, brandy, and all other liquors and spirits. On these a revenue duty of 100 per cent was levied. Schedule B comprised other less obnoxious luxuries, such as nuts, spices, sweetmeats, cigars, snuff, and manufactured tobacco. Such imports paid a high revenue duty of 40 per cent. Schedule C covered with a 30 per cent import duty the industries that might reasonably demand protection, such as pig iron and iron manufactures, wool and manufactures of wool, ready-made clothing of all descriptions, manufactures of leather, paper, wood, glass, molasses, and sugar. In Schedule D were classed the industries now fully established, such as low-grade cottons, woolens, and silks. In general the raw materials of manufacture paid but 15 per cent, and the three cents per pound duty on raw cotton was finally abandoned as "inoperative and delusive." There was a long free list. Salt for the first time in our national history was admitted duty free; tea and coffee, the luxuries of the poor, were left untaxed; the interests of the farmers were looked after in a tax of 30 per cent on hemp and leaf tobacco, on cheese, vegetables, etc.; the interests of the cotton planters, more than half of whose product was then being exported to England, were furthered by a drawback of half the duty on cotton bagging when used for wrapping bales sent to the foreign market.

Levi, Hist. of Brit. Commerce, Pt. IV, Ch. IV.

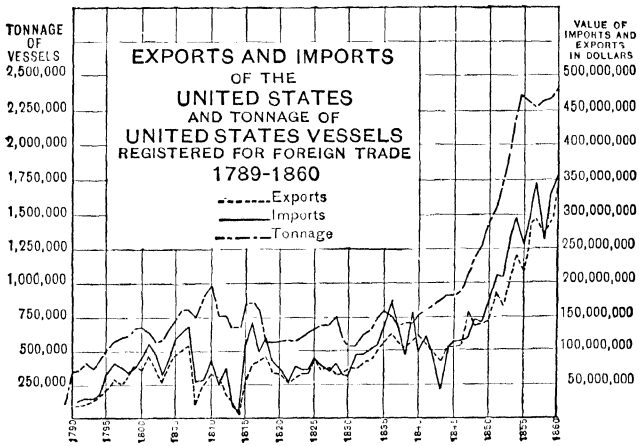
9 and 10 Victoria, c. 22.

The repeal of British duties on foodstuffs, anticipated in Walker's report, was already being debated by Parliament. An act of June 26, 1846, reduced the tax on wheat, barley, oats, rye, beans, and Indian corn to a mere nominal rate. The year following the duties were suspended, and they were soon abrogated altogether. The free list was rapidly extended, until by 1849 all our agricultural products, except tobacco, were admitted to England free of duty, even when carried in American bottoms. Our exports of wheat rose immediately from 840,000 bushels in 1845 to 17,273,000 in 1847; our exports of wheat flour

De Bow, I, 96.

from 1,195,000 barrels in 1845 to 4,383,000 in 1847. Prices rose with the famine demand, and the American farmer reaped a rich harvest from the necessities of the Irish peasant. England's population had outgrown the normal capacity of her fields, so that American farmers were assured a permanent market. The total value of the cereals exported in 1849 amounted to $22,531,465, and this phenomenal showing was maintained in later years. The balance of trade turned in our favor, since Great Britain was obliged to pay for these extraordinary receipts in gold and silver.

U. S. Census, *1860*, Agriculture, cxl.



In his report of December, 1846, the Secretary of the Treasury commented thus on the effect of six months' operation of the Democratic Tariff. "We are beginning to realize the benefits of the new tariff. . . . By free interchange of commodities the foreign market is opened to our agricultural products, our tonnage and commerce are rapidly augmenting, our exports enlarged, and the price enhanced; exchanges are in our favor, and specie is flowing within our limits. The country was never more prosperous and we have never enjoyed such large and

Cong. Globe *1846–1847*, Appendix, 12.

profitable markets for all our products. This is not the result of an inflated currency, but is an actual increase of wealth and business. While agriculture, commerce, and navigation, released from onerous taxes and restrictions, are thus improved and invigorated, manufactures are not depressed. The large profits of manufacturers may be in some cases somewhat diminished, but that branch of industry, now reposing more on its own skill and resources, is still prosperous and progressive. New manufactories are being erected throughout the country, and still yield a greater profit in most cases than capital invested in other pursuits."

Stanwood, II, 109–126.

The Tariff of 1857. — The low tariff held for ten years, and, financially at least, it was a marked success. In 1854–1856 the revenues from customs exceeded the normal expenditure of the government. Secretary Walker advised a general reduction of import duties in order to "reduce the surplus revenue and the constant influx of specie into the vaults of the treasury." The Tariff Act passed in 1857 cut down the rates on Schedules A and B to 30 per cent, while duties on the protected products represented in Schedule C were reduced to 24 per cent. The 25 per cent rate of Schedule D was reduced to 19 per cent, but manufacturers received adequate compensation in the reduction of the tax on their imported raw materials. For example, the duties on pig and bar iron and hemp were reduced from 30 to 24 per cent, that on wool from 30 to 8 per cent; flax and dyestuffs were admitted free. This abatement of protection to their special interests called out strong opposition in the Middle and Western states, but the Southern vote was given for the reduced rates.

The Infant Industries come of Age. — Government support once withdrawn, the protected industries proved vigorous enough to stand alone. The growth of population meant an increased demand sufficient to absorb both the domestic product and the imported goods. Ocean freights were in most cases a sufficient handicap on the foreign manufacturer.

The iron industry flourished, for, though importations of English rolled iron increased, American ironmasters held their full share of the market. Competition forced them to abandon the old method of hammering out bar iron in a forge fired by charcoal, and to adopt the cheaper fuel, coal, and the less expensive process of puddling and rolling. The juxtaposition of iron and bituminous coal in the western Alleghanies, coupled with improved transportation facilities, gave the Pennsylvania iron manufacturers advantages fully equivalent to those of their English rivals. As the domestic price fell (from $85 per ton in 1844 to $58 in 1860), freights became an increasingly effective deterrent on importations.

Taussig, Tariff Hist. of the U.S., 128–135.

Swank, Ch. XLI, XLII.

Bishop, II, 489–492.

Census, *1860*, Manufactures, clxv–clxvi.

Cotton manufactures were also developing during this period of low duties. Inventions multiplied until American machinery was fully equal to the English, and American labor proved more economical because, though better paid, it was more efficient; moreover, raw cotton was cheaper in the United States market by the difference in cost of transportation, amounting to two cents a pound. The market for cheap cotton goods was developing, not only in North and South America, but in the Orient. Our exports of cotton goods rose from $3,000,000 per year in 1838 to $11,000,000 in 1860. The number of spindles operated in the United States doubled, and our consumption of raw cotton trebled in the same twenty years. New England was still the center of this important industry, his advantages in the way of water power and skilled labor enabling the Yankee entrepreneur to produce the goods at low cost.

Taussig, Tariff Hist. of the U.S., 135–142.

Bishop, II, 494–496.

Census, *1860*, Manufactures, x–xx.

GROWTH OF COTTON MANUFACTURE IN THE UNITED STATES

YEAR	NUMBER OF SPINDLES	BALES OF COTTON CONSUMED	EMPLOYEES
1840	2,284,631	295,000	72,119
1860	5,235,727	978,000	122,028

Taussig, Tariff Hist. of the U.S., 143–152.

Bishop, II, 496–497.

Census, *1860*, Manufactures, xxv–xxxiv, li–lix.

The woolen manufacturers labored under a special disadvantage in that domestic wool was inadequate both in quantity and quality. The retention of the duty on the finer grades of raw wool rendered the imported fiber so expensive that the manufacturers were confined to the making of cheap satinets, broadcloths, flannels, and blankets. The only notable gains of this period were due to the invention of power looms for the weaving of knit goods and the manufacture of ingrain and Brussels carpets.

Bishop, II, 474–482.

Notable Inventions. — Under the stimulus of the patent law, improved machinery was being introduced into every branch of manufacture. From 1840 to 1850 patents were granted at the rate of 646 per year. Most notable among the inventions affecting manufactures was the sewing-machine. Elias Howe brought out his invention in 1846. The machine proved an immediate success, and Howe made a fortune from its sale. Improved patents were soon put upon the market, but the rival manufacturers entered into an agreement (1856) for the merging of their rights and the division of royalties. I. M. Singer introduced the method of sale by installments, and by this means the labor-saving device was brought within reach of the poor. The output in 1853 was 2266 machines; six years later it was 42,539. The advantages accruing to the large workshop by the division of labor and superintendence of details, speedily converted the manufacture of ready-made clothing from a domestic to a factory industry. The capital invested in this business doubled between 1850 and 1860, and the value of the output increased from $48,000,000 to $80,000,000, but the number of employees increased only 19 per cent in the same interval. The saving in wages reduced the cost of the factory product to one fourth that of the hand-stitched garment. The duty on ready-made clothing was omitted in the tariff of 1857.

Byrn, Progress of Invention, Ch. XIX.

U. S. Census, *1860*, Manufactures, lix–lxvi.

U. S. Census, *1900*, IX, 259–310.

U.S. Census, *1860*, Manufactures, lxvii–lxxii.

The most important application of the sewing-machine was made in the manufacture of shoes. The invention of a needle that could carry a wax thread through leather, con-

verted the making of boots and shoes into a factory industry in the last decade before the Civil War. In 1861 McKay invented a machine for sewing soles to uppers more cheaply than pegs could be driven, even by machinery. This automatic needle enabled a skilled workman to sew the soles on to nine hundred pairs of shoes in a ten-hour day. The labor cost of the machine-made shoe was reduced to one eleventh of that of the hand-sewn article. So pre-eminent were our advantages in this branch of manufacture, that the import duty might now have been abolished but for the offsetting duty on leather.

U. S. Census, *1900*, IX, 730–738, 754–758.

Agricultural Machinery. — American agriculture was carried on in wasteful, unscientific fashion until the middle of the nineteenth century. Farm implements were of the rudest. Spades, mattocks, pitchforks, and plows were still of home manufacture, the iron parts being clumsily wrought over a blacksmith's forge. In 1807 Peacock succeeded in popularizing his iron plowshare in New Jersey, and in the next decade Smith's plow came into general use in eastern Pennsylvania. The cast-iron moldboard was not only cheaper than the plated wooden share, but stronger and more effective, because it offered less resistance to the soil. More than twelve thousand patents have since been issued for improvements in the structure of the plow.

Bailey, Cyclopedia of Agriculture, IV, Ch. II.

U. S Census, *1860*, Agriculture, xi–xxiv.

U. S. Census, *1900*, X, 352–353, 358–364.

Holmes, Progress of Agr. in U.S.

Patents for an automatic mower were taken out by Obed Hussey, of Baltimore, December 31, 1833, and by Cyrus H. McCormick of Rockbridge, Virginia, in the following June. These reapers enabled one man with a team of horses to cut as much grain as twenty men swinging a cradle. Hands were scarce in the new West, and farmers eagerly availed themselves of this labor-saving device. There were three machines manufactured in 1840, three thousand in 1850, and twenty thousand in 1860. Since the principal market was in the upper Mississippi Valley, the manufacture gravitated to this section. McCormick's first reaper was made at a blacksmith's shop in the Shenandoah Valley. In 1846 the works were transferred to Cincinnati, in 1849 to Chicago.

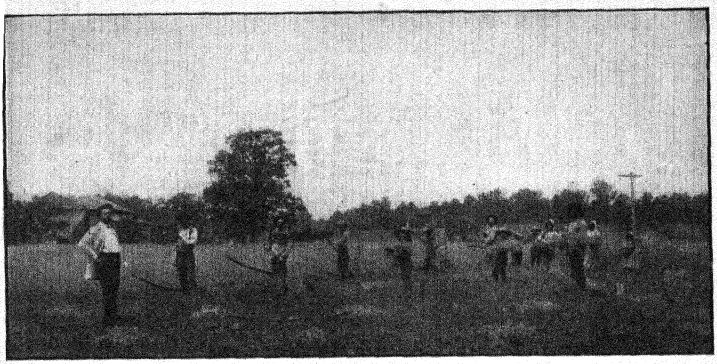
Byrn, Ch. XVI.

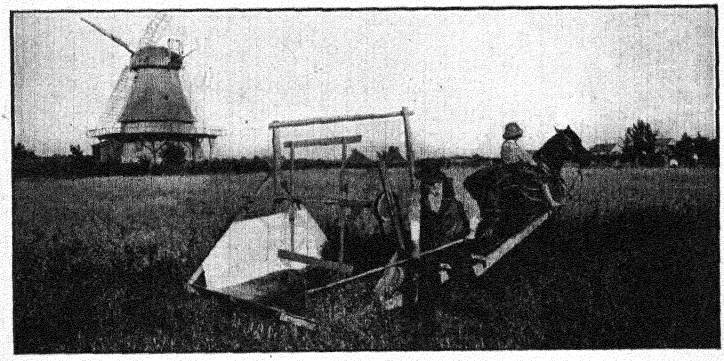
Thwaite's McCormick.

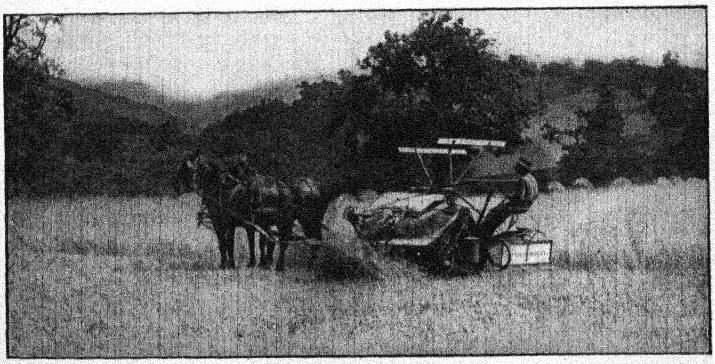
Casson, Romance of the Reaper.

Quaintance, Influence of Farm Machinery.

Roberts, Fertility of the Land, Ch. II.







EVOLUTION OF THE REAPER

to avail themselves of the high wages paid by the leading builders. The construction of a schooner of five hundred tons cost $37,500 in the United States and $42,000 in England. With this advantage we were able to build all our own ships and to sell many abroad. The British embargo on American-built ships was removed in 1849, and this important market was opened to us. In spite of the discriminations against American-built vessels imposed in Lloyd's insurance rates, many ships were "sold foreign" at a fair profit.

All along the New England coast, wherever cove or river mouth gave convenient launching room, smaller vessels were building, — schooners for local trade and smacks for the fishing fleet. Many a Yankee skipper built his own vessel, manned it with friends and neighbors, and made independent commercial ventures up and down the coast. Captain and crew were bred to the sea and excelled in skill and daring, so that American sailors were noted in all ports for self-reliance and resourcefulness. Good wages and the standard food and quarters prescribed by Federal law attracted many foreign seamen to our service.

The great majority of our ships were fast sailing vessels, the famous Yankee clippers, the swiftest and stanchest craft afloat. Half a dozen packet lines made regular monthly trips from New York, Boston, or Philadelphia to Liverpool and Havre. The vessels were built with a view to speed, and such was the seamanship of officers and men that the eastward trip was usually made in from eighteen to twenty days, the westward in from twenty-one to twenty-six days. The repeal of the British Navigation Act 1849 admitted American vessels to traffic between Great Britain and her colonies, and our merchants for the first time secured their full share of the carrying trade between Great Britain and European lands. The reciprocity treaty with England became at last of equal advantage to both parties.

The rush to California brought fast sailing vessels into requisition for the voyage round the Horn, and vessels of the

largest and best models were built for the Pacific trade. Commerce between Atlantic ports and San Diego and San Francisco, by this route or by the Isthmus of Panama, was interpreted to be coastwise trade and was therefore restricted to our own vessels. Extravagant prices were charged for transportation of passengers and freight, and shipmasters reaped golden profits. Cramp on the Delaware, Webb on East River, and McKay on the Mystic vied with one another in producing mammoth vessels for this trade. The California boom was hardly spent when quite as unexpected an opening was furnished by the Crimean War. The combined British and French fleets were unequal to the forwarding of troops and supplies, and American vessels were requisitioned for the transport service.

Johnson, Ocean and Inland Water Transportation, Ch. III.

Subsidy Policy. — Our very preëminence in the building and navigating of sailing vessels proved our ultimate undoing. The attention of the shipping interest was so concentrated on our fast clippers, that the greater possibilities of steam were ignored. The Savannah, the first steamer to cross the Atlantic (1819), had been built on this side the water, but that was regarded a mere deed of bravado, and the venture was not followed up. In England, on the contrary, the scarcity of timber forced the adaptation of the steamboat to ocean commerce. Both coal and iron were then cheaper in England than in the United States, and the English government stood ready to subsidize promising ventures in this new field. The Cunard Company (1839) established a line of transatlantic steamers and was accorded $425,000, and later $850,000, per year for carrying the mails between Liverpool, Halifax, and Boston. The subsidy far exceeded the cost of the mail service, and was, in fact, paid as a bonus on a hazardous investment. In 1840 the Peninsular and Oriental Line to India and China, and the Pacific Steam Navigation Company running steamers along the west coast of South America, were subsidized in like manner. These English lines offered swifter and more regular service than sailing

Lardner, The Atlantic Steam Question.

vessels could ever attain, and, being guaranteed against losses by government subsidy, bade fair to drive American clippers out of the transatlantic, Asiatic, and South American trade.

In 1845 our government came tardily to the aid of steam navigation. The Ocean Steamship Line from New York to Havre and Bremen was subsidized at the rate of $200,000 per year. The Collins Line from New York to Liverpool was offered $385,000, but the stipend was raised to $858,000 because the vessels built exceeded the contract stipulations. The Collins steamers, the largest, swiftest, and most comfortable ships of their day, competed successfully with the Cunard Line for passengers and freight. The reduction of freight rates from £7 10*s.* to £4 per ton seemed an immediate justification of the subsidy policy, and Congress bestowed further favors. The Pacific Mail, subsidized to the amount of $250,000 per year, sent the first steamer round the Horn in October, 1848, and came in for a full share of the profits of the California trade. The Law Line to Colon, and the Aspinwall from Panama to San Francisco, were also subsidized.

Cong. Globe, *1852*, 1146–1149, 1162–1167, 1199–1205, 1227–1231, 1241–1246, 1260–1267, 1269–1270, 1288–1291, 1302–1311, 1325–1327, 1717–1725.

Appendix, 604–615, 701–704, 779–787, 802–806, 813–816, 820–826.

The extraordinary prosperity of our shipping interest was viewed with concern by the Southern and Western states. All the subsidized steamers, with the exception of a single line from Charleston to Havana, sailed from Northern ports, and the ships were built in the North Atlantic states. It was thought unjust that the general government should expend more than one and a half million dollars a year in support of an industry whose profits were accruing to a single section of the country. The Southern planters protested that their cotton could be as cheaply and safely carried in British vessels. Subsidies had been advocated by Butler King of Georgia in the belief that Southern shipping would revive under such auspices, but when these hopes proved fallacious, Southern statesmen vigorously opposed the steamship bonus. In 1856 the subsidy to the Collins Line was reduced from $858,000 to $385,000. The sudden reduction in revenue,

Cong. Globe, *1847–1848*, Appendix, 936–938, *1854–1855*, Pt. I, 752–760, 774–782, Pt. II, 1156.

coming immediately after the loss of two great steamers, wrecked the enterprise, for the company had spent all its income on improvements and held no reserve funds. The surviving vessels were sold for debt and speedily transferred to the English flag. Undeterred by this melancholy example, Congress proceeded in 1858 to limit all subsidies to the amount of sea and land postage on the mails actually carried.

Some compensation for the decay of foreign commerce was found in the **coastwise trade**, which offered abundant scope for the talents of an enterprising captain. The voyage from Calais, Maine, to Point Isabel, Texas, was twenty-six hundred miles, as long as that from Boston to Liverpool, but more profitable because of the many intermediate ports. The hazards of the passage round Cape Hatteras were reduced by the building of the Chesapeake and Albemarle Canal (1855–1860). The voyage from Boston to Puget Sound was fifteen thousand miles, but along this route, too, stops were made at Rio Janeiro, Buenos Aires, Valparaiso, Callao, San Diego, San Pedro, San Francisco, and Portland, with a profitable interchange of cargo.

The Panic of 1857

Sumner, Hist. of Am. Currency, 169–187.

Our third financial panic, like the first and the second, was caused by undue speculation. The extraordinary success of many business ventures tempted men to invest too heavily. The purchase and improvement of lands in the new West, the opening up of mineral resources, — notably coal and iron in Pennsylvania, — the building of ships, the construction of railroads, all required large investments of capital that could bring no immediate return commensurate with expenditure. The $1,350,000,000 buried in railways between 1830 and 1860 represented an enormous drain on the resources of the country. The sinking of one tenth as much capital in canals had wrecked these enterprises in 1837. As then many canal ventures

were abandoned, so now several Western railroad enterprises failed. The New York and Erie, the Illinois Central, the Michigan Central, etc., went into bankruptcy. Doubtless the reduction of import duties in March, 1857, prejudiced such manufacturing interests as reaped no adequate compensation from free raw materials. Some mines and factories were closed, and many curtailed production; but the general depression was slight as compared with that of twenty years previous. Comparatively few operatives were thrown out of employment, and the decline in wages was made good by reduction in the cost of living. The prosperity of farmers and planters was undisturbed, their foreign market for corn, wheat, and cotton being furthered by free trade.

Wright, Industrial Depressions, 56–60.

Stanwood, II, 109–116.

Wages and Prices, 303–308.

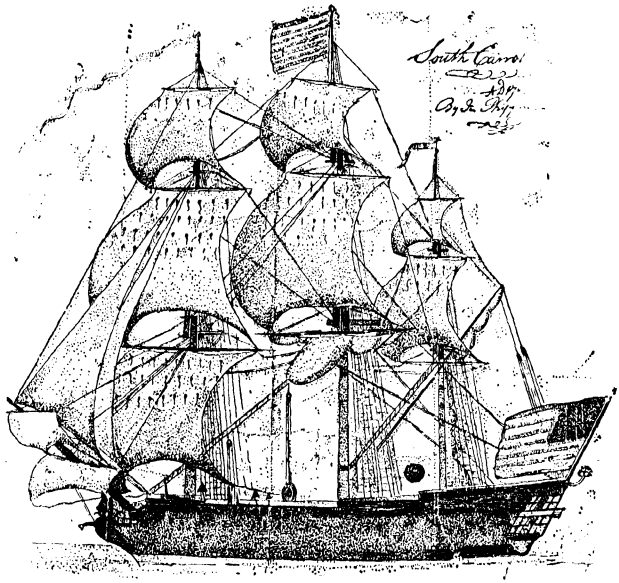
The crisis of 1857 was primarily a financial panic. Bank management had been conservative and wise in the ten years, 1843–1853, notably in the Eastern cities. Few new banks were established, loans were extended with caution, and the issue of notes was kept within reasonable limits. The $100,000,000 worth of gold sent to the mints from the California mines furnished a sufficient specie basis for bank currency. Credit agencies kept pace with the normal business development of the country. But in 1853 a speculative mania took possession of the financial world. In the next four years the number of banking institutions was doubled, credit money was issued to the sum of $214,800,000, more than double the amount outstanding in 1847, and loans ran up to $684,500,000. On August 22, 1857, the obligations of the New York banks were $12,000,000 in excess of their available capital. The failure of the Ohio Life Insurance and Trust Company, on August 24, dragged down some leading New York firms. A run on the banks followed, and all but the most conservative were obliged to suspend, while thousands of the more speculative business ventures went to the wall. There were 4932 failures in 1857, and 4225 in 1858. The losses reached an unprecedented figure, $387,500,000, but they fell largely on bankers and investors. The rank and file

Dewey, 259–264.

Conant, Banks of Issue, 636–640.

Burton, Crises and Depressions, 282–286, 344.

of producers were little affected by the disaster, and no prolonged depression of business followed. Industrial development would have received no serious check but for the overwhelming disaster of a great civil war.



AN OLD TIME CLIPPER

CHAPTER IX

THE CIVIL WAR: ECONOMIC CAUSES AND RESULTS

Slavery versus Free Labor

Trend of Southern Opinion. — In the first decade of our national history, antislavery sentiment was stronger in Virginia than in New England. Washington repeatedly expressed his conviction that slavery should be abolished, and directed his heirs to set free his slaves and provide for their education and maintenance out of the estate. Jefferson regarded slavery as degrading to master and man alike, and introduced in the convention that formulated a state government for Virginia a bill providing for gradual emancipation. Children of slaves born after the passage of the act were to be educated at the public expense "to tillage, arts, or sciences, according to their geniusses, till the females should be eighteen, and the males twenty-one years of age, when they should be colonized to such place as the circumstances of the time should render most proper, sending them out with arms, implements of household and of the handicraft arts, seeds, pairs of the useful domestic animals, etc., to declare them a free and independent people, and extend to them our alliance and protection, till they have acquired strength; and to send vessels at the same time to other parts of the world for an equal number of white inhabitants; to induce whom to migrate hither, proper encouragements were to be proposed." The measure failed because of the opposition of the tobacco planters, but Jefferson hoped for ultimate success. A bill for the emancipation of slaves was brought before the

Ingle, Ch. VIII.

Livermore, Opinions of the Founders, 20–24, 36–44

Writings of Washington, X, 220; XI, 25, 30; XIV. 272, 281.

Jefferson's Writings, III, 192, 243–250, 266–268; IV, 82–84, 184–185.

Collins, Ch. VII.

Virginia legislature in 1831, and a similar proposition was debated in the Kentucky assembly as late as 1849. Virginia prohibited the importation of slaves from abroad (1778), and Maryland followed her example in 1783. The twenty years' extension of the slave trade conceded by the Federal Constitution was condemned by prominent Southerners. James Madison declared: "Twenty years will produce all the mischief that can be apprehended from the liberty to import slaves. So long a term will be more dishonorable to the national character than to say nothing about it in the Constitution."

Writings of James Madison, IV, 303.

A considerable number of slaves was being emancipated by the voluntary act of their owners. John Randolph had signalized his detestation of slavery by freeing his negroes and bequeathing $8000 for settling them on free soil, and this "shocking example" was followed by other conscientious planters. The Friends of Sandy Spring, Maryland, freed their slaves early in the nineteenth century. One wealthy Virginian emancipated his forty-one slaves by will and provided for their transportation to Cass County, Michigan, and for the purchase of land for their use. The number of manumissions steadily increased until they amounted to from two to three thousand a year, and it is probable that in the last decade before the Civil War some twenty thousand negroes were so set free. The number of slaves escaping to the North was by comparison inconsiderable; the total reported for 1850 was 1011, and for 1860, 803. In 1860 the free colored population of the United States reached a total of 500,000, of whom 250,000 were found in the Southern states and 11,000 at the national capital. The presence of this large body of freedmen, neither citizens nor slaves, and having, therefore, no political status, caused considerable uneasiness to the ruling class, and laws regulating their conduct passed by several states were hardly less severe than the slave code itself.

Thom, Negroes of Sandy Spring.

Washington, Booker, Two Generations under Freedom.

U. S. Census, *1860*, Population, XV, XVI.

Olmstead, Seaboard Slave States, 125–133, 633–637.

Washington, Story of the Negro, I, Ch. X.

De Bow, II, 269–292.

To Southern statesmen the insuperable obstacle to general emancipation was the difficulty of providing for

African freedmen in the American social and industrial order. Henry Clay hated slavery and ardently hoped to "eradicate this deepest stain upon the character of our country"; nevertheless, he assured the Colonization Society of Kentucky: "If the question were submitted whether there should be either immediate or gradual emancipation of all the slaves in the United States without their removal or colonization, painful as it is to express the opinion, I have no doubt that it would be unwise to emancipate them. For I believe that the aggregate of all the evils which would be engendered upon society upon the supposition of such general emancipation and of the liberated slaves remaining promiscuously among us, would be greater than all the evils of slavery, great as they unquestionably are." Clay favored the colonization of emancipated slaves in the land from which they had been originally abducted, and urged upon Congress the duty of furnishing the means of transportation for at least 52,000 each year — the equivalent of the annual increase in the colored population. He believed that if this opportunity to dispose of the freedmen safely were given, the slave states would enact laws providing for gradual emancipation, and thus ultimately rid themselves "of a universally acknowledged curse."

De Bow, II, 262–264, 267–269.

Speeches of Henry Clay, Dec. 17, 1829.

Speeches of Henry Clay, Jan. 20, 1827.

The American Colonization Society was organized at Washington in 1815, in the hope of founding a freedmen's colony on the west coast of Africa, under conditions that should secure their immediate comfort and give some assurance of eventual self-support. The first settlement at Liberia was made in 1822. Seven years later, according to Clay, there were fifteen hundred freedmen in residence, and they were successfully cultivating cotton, rice, and sugar, and were maintaining a fully constituted government together with schools, churches, and a public library. In 1849, when Liberia became an independent state, there were but eighteen thousand blacks of American origin in its population. The deportations had amounted to far less than the anticipated fifty-two thousand a year, and

Martineau, I, 345–395.

De Bow, II, 234, 267, 309–310, 342.

it became evident that the solution offered by the American Colonization Society was utterly inadequate.

Brown, Lower South in Am. Hist., 50–83.

The Proslavery Movement. — Meantime, as the interests of the cotton planters gained ascendancy in the councils of the South, a vigorous agitation in favor of the "peculiar institution" took the place of emancipation projects. The attempt of Northern statesmen to extend the prohibition of slavery to the new state of Missouri failed (1820), and only that part of Louisiana Territory lying north of 36° 30′ was reserved to free labor. Virginia and Maryland and the Carolinas were as desirous as the Gulf states for the extension of the slave system, for they had more negroes than could be profitably employed on the wornout plantations, and the planters would be ruined without an enlarged market for their one surplus product.

De Bow, II, 253; III, 131.

The capital invested in cotton plantations amounted, in 1840, to $327,000,000, and the annual product represented a gross income of twenty, and a net income of eight per cent. Large-scale production seemed to necessitate slave labor. Governor Hammond of South Carolina declared that the cotton industry would be ruined by the emancipation of the negroes. "The first and most obvious effect would be to put an end to the cultivation of our great southern staple. And this would be equally the result, if we suppose the emancipated negroes to be in no way distinguished from the free laborers of other countries, and that their labor would be equally effective. In that case, they would soon cease to be laborers for hire, but would scatter themselves over our unbounded territory, to become independent landowners themselves. The cultivation of the soil on an extensive scale can only be carried on where there are slaves, or in countries superabounding with free labor. No such operations are carried on in any portion of our own country where there are not slaves. Such are carried on in England, where there is an overflowing population and intense competition for employment. And our institutions seem suited to the exigencies of our respective situations. There, a much greater number of

Holmes, Ch. VIII.

De Bow, II, 235.

laborers is required at one season of the year than at another, and the farmer may enlarge or diminish the quantity of labor he employs, as circumstances may require. Here, about the same quantity of labor is required at every season, and the planter suffers no inconvenience from retaining his laborers throughout the year. Imagine an extensive rice or cotton plantation cultivated by free laborers, who might perhaps *strike* for an increase in wages at a season when the neglect of a few days would insure the destruction of the whole crop: even if it were possible to secure laborers at all, what planter would venture to carry on his operations under such circumstances? I need hardly say, that these staples cannot be produced to any extent where the proprietor of the soil cultivates it with his own hands. He can do little more than produce the necessary food for himself and his family."

Bassett, Slavery in North Carolina, 391–425.

As the money interest in slave labor grew more potent, Southern leaders undertook to justify the labor system of the South, and to prove that slavery was no more degrading than wage labor. "What is the essential character of *Slavery*, and in what does it differ from the *servitude* of other countries? If I should venture on a definition, I should say that where a man is compelled to labor at the will of another, and to give him much the greater portion of the product of his labor, there *Slavery* exists; and it is immaterial by what sort of compulsion the will of the laborer is subdued. It is what no human being would do without some sort of compulsion. He cannot be compelled to labor by blows. No, but what difference does it make, if you can inflict any other sort of torture which will be equally effectual in subduing the will? if you can starve him, or alarm him for the subsistence of himself or his family? And is it not under this compulsion that the *freeman* labors?"

De Bow, II, 223.

Against such arguments, one should in all fairness set the conclusions of a careful Northern observer. F. L. Olmsted, who made extended horseback journeys through the South in 1853 and 1855, became convinced that the

Olmsted, The Cotton Kingdom, II, 184–212, 236–251, 252–271.

industrial efficiency of free labor was from two to four times that of slaves who lack the stimulus of acquisition. "This is the truth, then — is it not? The slaves are generally sufficiently well-fed to be in tolerable working condition; but not as well as our free laborers generally are: slavery, in practice, affords no safety against occasional suffering for want of food among laborers, or even against their starvation, any more than the competitive system; while it withholds all encouragement from the laborer to improve his faculties and his skill; destroys his self-respect, misdirects and debases his ambition, and withholds all the natural motives which lead men to endeavor to increase their capacity of usefulness to their country and the world. To all this, the *occasional suffering* of the free laborer is favorable, on the whole. The occasional suffering of the slave has no such advantage. To deceit, indolence, malevolence, and thievery, it may lead, as may the suffering . . . of the laborer, but to industry, cultivation of skill, perseverance, economy, and virtuous habits, neither the suffering, nor the dread of it as a possibility, ever can lead the slave, as it generally does the free laborer, unless it is by inducing him to run away."

Olmsted, Seaboard Slave States, 90–91, 98–99, 105, 185–186, 686–715.

Trend of Opinion in the North. — The emancipation movement of the North, in its later stages at least, gathered inspiration from the democratic theories of Thomas Jefferson. The gospel of liberty, equality, and fraternity imbibed in revolutionary France led Jefferson to prefix to the Declaration of Independence the assertion that "all men are created equal," the potent shibboleth of every humanitarian movement that has agitated the American people since his day. Earnest of his faith in this democratic dogma was given in Jefferson's plan for the organization of the Northwest Territory (submitted to the Congress of the Confederation in March, 1784), in which manhood suffrage, the sale to actual settlers of the public lands, and the prohibition of slavery were guaranteed in the region Virginia was about to cede to the United States. Jefferson's accession to the presidency was hailed as the

Steiner, Slavery in Connecticut, 407–452.

Hart, Slavery and Abolition.

triumph of the people's party. The removal of the original limitations on the suffrage in the first decades of the nineteenth century and the extension of the ballot privilege to every male citizen was the fruition of his doctrine of popular sovereignty.

The Humanitarian Movement originated with the visit to the United States in 1825 of Robert Owen, the English communist. Owen was the founder of a model factory town at New Lanark, Scotland, and the chief promoter of the factory act of 1819, the first successful attempt to limit child labor in the cotton mills of Great Britain. The vested interests of the Old World opposed vexatious obstacles to the carrying out of his social and economic ideals, and he determined to make his experiment in communism on virgin soil. A tract of thirty thousand acres along the Wabash River was purchased of the Rappists, a German religious community, and hither Owen invited the "industrious and well-disposed of all nations" who desired to test the socializing potency of human brotherhood. Some nine hundred people gathered at New Harmony, and $200,000 out of Owen's private fortune was invested in the experiment; but the ideal community held together only three years. Owen found explanation of the failure in the latent selfishness of human nature. "There was not disinterested industry; there was not mutual confidence; there was not practical experience; there was not unison of action, because there was not unanimity of counsel. These were the points of difference and dissension, the rock upon which the social bark struck and was wrecked." During this and subsequent visits to the United States, this apostle of a new social order lectured to great audiences in Eastern cities, and addressed a distinguished assembly at the national capital. He counted such men as John Quincy Adams among his friends, and solicited public indorsement of his panacea for the woes of society. Undiscouraged by the failure at New Harmony, his disciples undertook a series of similar experiments. In the stirring years from 1830 to 1860 eleven Owenite communities were

Robert Dale Owen, Autobiography, Ch. III, VIII, IX.

Sargant, Robt Owen, Ch XX-XXII.

Noyes, Hist. of Am. Socialisms, Ch. II–IV.

planted, flourished for brief periods, and died. Most of the settlers came from New England, and, with the sole exception of Nashoba, an experiment in emancipation, their settlements were north of Mason and Dixon's line. Owen failed to demonstrate the practicability of communism, but his influence for social betterment was great. Faith in human brotherhood and in the possibilities of social and economic reform spread like a religious revival throughout the North. Many of the men prominent in the humanitarian movements of the next thirty years were originally converts to Robert Owen's gospel.

Ely, Labor Movements in America, Ch. III. McNeill, The Labor Movement, Ch. IV. Mitchell, Organized Labor, Ch. VIII.

The Organization of Labor began with the introduction of machinery and the massing of operatives in factories and workshops. The natural effect was the consciousness of common interests and the determination to promote the betterment of working conditions by concerted demand. The first trade unions appeared in the industrial centers of the North Atlantic states. New York witnessed its first strike in 1802, Boston in 1825, the first trade union council was convened in New York in 1833. With improved facilities for communication and assembly, these local unions were converted into federal associations. The printers were so organized in 1852, the hat finishers in 1854, the iron workers and machinists in 1858 and 1859.

Commons and Sumner, Labor Movement, 1820–1860.

Bodies of mechanics affiliated along trade union lines will further their own immediate interests with small regard for the well-being of unskilled laborers, but with the extension of the suffrage, workingmen began to organize to secure, by means of the ballot, laws that should benefit not their trade fellows merely, but the whole body of wage-earners. The Workingmen's party held its first general convention at Syracuse in 1830. In the following year the New England Association of Farmers, Mechanics, and Other Workingmen proposed "the organization of the whole laboring population of this United Republic" and the revision of "our social and political system." The founders declared their "fixed determination to persevere till our wrongs are redressed, and to imbue the minds of

Sotheran, Horace Greeley, 106–107.

our offspring with a spirit of abhorrence for the usurpations of aristocracy, and of resistance to their oppressions, so invincible, that they shall dedicate their lives to a completion of the work which their ancestors commenced in their struggle for national and their sires have continued in their contest for personal independence." In 1830 the Workingmen's party of New York polled less than three thousand votes in the state elections, but in New York City, where the organization had a strong constituency, it succeeded in electing three or four members of the legislature. In 1832 the party declared for Andrew Jackson and threw all its weight in favor of the Democratic president. In 1835, as "Locofocos," they captured the New York Democratic convention and promulgated a party platform based on the Declaration of Independence. Martin Van Buren owed his election in good part to the votes of the workingmen of the Eastern states, and he rewarded their loyalty (1840) by prescribing a ten-hour day for all employees of the national government. The crisis of 1837 and the subsequent industrial depression checked, for the time being, the growth of the labor movement.

Rept. Mass. Bureau Statistics of Labor, 1870, 91–100.

In 1842 a second wave of **socialist enthusiasm** passed over New England and the North. Albert Brisbane, the apostle of Fourier's gospel of association, found a hearing among the most thoughtful men of the day, such as Horace Greeley, the editor of the *New York Tribune*, and William Henry Channing, who edited the *Spirit of the Age*, Wendell Phillips, Parke Godwin, etc. A number of Fourierist phalansteries, thirty or forty in all, were set on foot, and to these came men and women of all classes and conditions, hoping to find in community of property and labor the secret of social regeneration. These associations, without exception, made their experiments in the Northern tier of states — Massachusetts, New York, Pennsylvania, Ohio, Indiana, Illinois, and Iowa. The practical results of the propaganda were no more encouraging than accrued from the Owenite movement; but its influence was even greater

Commons, Horace Greeley.
Sotheran, 121–122, 148–153, 187.
Noyes, Hist. of Am. Socialisms, Ch. II.

and more lasting. Failing to establish ideal communities, the reformers undertook to remedy the abuses of the society in which they were forced to live. The labor movement gathered fresh energy. George Henry Evans and Robert Dale Owen and Frances Wright, all three of English birth and Owenites, addressed great audiences in the Hall of Science, New York, and convinced their hearers of the necessity of agitating for legislative reforms. Evans's paper, *Young America*, set forth among the objects to be attained "the abolition of chattel slavery" and the free distribution of the public lands.

Slavery and the Territories. — The advocates of the rights of free labor strenuously opposed the annexation of Texas and the resulting war with Mexico. The Mexican cession an accomplished fact, they strove to prevent the admission of slavery into the territories both north and south of the Missouri Compromise line. As the Democratic party fell under the sway of Southern political leaders and became committed to the policy of non-interference, the labor men transferred their allegiance to the Liberty party, with whose fight against slavery and championship of free land they were in hearty accord. The Free-Soil Democracy, organized at Buffalo in 1848, combined the more moderate wing of the Liberty party, the malcontent Whigs and Democrats, with the elements of the Workingmen's party. The platform declared the prime object of this revolt to be to maintain "the rights of free labor against the aggression of the slave power and to secure free soil to a free people." The Massachusetts state convention more succinctly expressed the point of view of the wage-earners: "*Resolved*, That labor is universally dishonored and its interests compromised by the existence of slavery in this country, and that the first step for its elevation must be the limitation and extinction of slavery." Van Buren, the nominee of the Free-Soil Democrats, secured 291,000 votes, of which 120,000 were polled in New York, 38,000 in Massachusetts, and 35,000 in Ohio; but he was defeated by Zachary Taylor, a slave owner who had

Ingle, Ch. IX.

Brown, Lower South in Am. Hist., 83–112.

The Spirit of the Age, I, 203–204.

Julian, Political Recollections, Ch. II, III, VI–VIII.

won popular favor by brilliant service in the Mexican War. In its platform of 1852 the Free-Soil Democracy declared explicitly that slavery must be excluded from the territories, and that "the public land of the United States belongs to the people and should not be sold to individuals nor granted to corporations, but should be held as a sacred trust for the benefit of the people and should be granted in limited quantities, free of cost, to landless settlers." The 156,000 votes cast for Hale and Julian in 1852 fell far short of Van Buren's total, but represented a body of men thoroughly convinced on these two points.

Julian, First Republican National Convention.

The utterances of the **Republican party** on the mooted questions of slavery and the public lands were more cautious, but its platform served as a rallying ground for the abolitionists, the free-soilers, and the men who cared most of all for the preservation of the Union. Frémont, in 1856, secured the total electoral vote of New England, together with that of New York, Ohio, Michigan, Iowa, and Wisconsin; and Lincoln in 1860 added to the list of Republican states New Jersey, Pennsylvania, Indiana, Illinois, Minnesota, California, and Oregon.

The triumph of the Republican party meant the exclusion of slavery from the territories and the ultimate ruin of the "peculiar institution." The proslavery men of the Southern states forced the issue. Six weeks after Lincoln's election South Carolina adopted the Ordinance of Secession, and her example was immediately followed by the six Gulf states. Delaware, Maryland, Kentucky, and Missouri were the only slaveholding states that did not secede from the Union.

The Cost of the War

Each party to the controversy was fighting for the maintenance of a political principle on which depended the success of its peculiar economic and social order. The five years' conflict was waged with obstinate endurance and

reckless expenditure of men and money by North and South alike, and the issue of the war was determined by the final exhaustion of the Confederacy. The resources of the cotton kingdom were far less than those of the Northern states. The population of the South was twelve million souls, of whom four millions were slaves. The North opposed a population of nineteen millions, all free. The taxable property of the South was, by the census of 1860, estimated at five billion dollars, of which two billions represented slaves and one billion and a half real estate devoted, in the main, to the growing of cotton. The property of the Northern states approximated eleven billion dollars, and consisted, in good part, of manufacturing, mining, and commercial plants whose products were more readily convertible into the sinews of war. When Lee surrendered at Appomattox, his men were found utterly destitute of supplies and weak from lack of food.

Goodloe, Resources and Industrial Conditions of Southern States, 110.

Kettell, Southern Wealth and Northern Profits.

Confederate Finances. — It was expected that the expenses of the Confederate government would be met by customs revenue, but the effectual blockade maintained by the Federal navy stopped foreign trade, and the returns were disappointing. The individual states were then asked to levy a direct property tax of one half of one per cent, and to turn over the proceeds to the general treasury. No more than $18,000,000 resulted from this requisition, and payments were usually made, not in cash, but in state bonds. It speedily became evident that the augmenting military expenses must be met by loans. In the first year of the war the Confederate government issued bonds to the amount of $15,000,000 at 8 per cent, interest and principal being secured by an export tax on cotton of one eighth of a cent a pound. This issue was taken up by Southern bankers, notably those of New Orleans and Charleston, and brought all the available specie in the Confederacy into the government treasury. The money was immediately sent abroad for military supplies. A bond issue of $150,000,000, ordered in the following year, was made payable in produce. By this loan the government

Schwab, Confederate States of America, Ch. XI, XII.

Schwab, Ch. III, IV.



DISTRIBUTION OF POPULATION, 1860

came into possession of large stores of cotton, tobacco, wheat, rice, sugar, and molasses, commodities that were a drug in the market, together with $1,000,000 in paper currency. A foreign loan of $150,000,000 was negotiated in January, 1863, the bonds being made redeemable in cotton, and since cotton was selling at famine prices in England and on the Continent, these securities sold without difficulty. The government held against this pledge 350,000 bales of cotton, and the supply might have been doubled readily, but all efforts to ship the cotton to the foreign creditors failed.

Schwab, Ch. V, VII, VIII.

It soon became evident to Confederate financiers that but a fraction of the military expenditure could be met by bond issues and that recourse to credit money was inevitable. Treasury notes, redeemable within the year and bearing interest at 3.65 per cent, had been issued in March, 1861; on the issue of April, 1862, the rate was raised to 7.3 per cent. Government notes, offering no interest and not to be redeemed till "six months after the ratification of a treaty of peace," were ordered at the same time. This paper currency was made receivable for taxes, but the Confederate Congress refrained from declaring it legal tender in payment of private debts. The issues of 1861 amounted to $30,000,000; by December, 1862, $450,000,000 had been forced into circulation; the output of 1863 was $150,000,000, and no less was issued in each of the last two years of the war. The sum of the issues of Confederate currency approximated one billion. To this appalling total were added millions of dollars by the unrecorded issues of the state governments, the banks, and private business firms. Depreciation followed inevitably, — in part because the currency was inflated, in part because men lost confidence in its ultimate redemption. In January, 1863, a gold dollar was worth three dollars in Confederate paper, twelve months later gold exchanged for twenty-one, and in January, 1865, for fifty-three dollars in the debased currency. After the fall of Richmond, the Confederate money passed out of circulation. The notes

were lost or destroyed or found their way into historical museums.

In her extremity the South resorted to various other financial expedients that had proven futile during the Revolutionary War. Men who refused to receive Confederate money were denounced as traitors and condemned by the state legislatures to heavy penalties; price conventions were held with a view to fixing fair rates of exchange; stay laws were passed suspending the collection of debts, notably in case of Confederate soldiers, till the close of the war; the sequestration of obligations owing to the Federal government and to Northern creditors was ordered, and confiscation of Union stores and the property of the United States to military uses was authorized by the Confederate Congress.

Schwab, Ch. VI, IX.

Federal Finances. — When the Charleston batteries fired on Fort Sumter, the Federal government was entirely unprepared for war. The surplus revenues of 1857 were exhausted, and the treasury showed a deficit of $56,000,000. Customs receipts under the Democratic tariff proving inadequate to ordinary expenditure, the rates had been somewhat increased by the Morrill Act of 1861, and in accordance with the recommendations of Secretary Chase, a further increase, notably in the revenue duties on salt, coffee, and tea, was legislated in the first year of the war. The rates were raised from year to year, but the customs receipts did not wax in proportion. Commerce was seriously interrupted by the depredations of Confederate cruisers, and there was a marked decline in imports.

Sherman, Recollections, I, Ch. XI, XII.

Wells, Recent Financial, etc., Experiences of the U.S.

Dewey, Ch. XII, XIII.

Bolles, III, Bk. I, Ch. I–III.

Year	Customs Receipts	Imports
1860–1861	$39,000,000	$289,000,000
1861–1862	49,000,000	189,000,000
1862–1863	69,000,000	243,000,000
1863–1864	102,000,000	316,000,000
1864–1865	85,000,000	239,000,000

Receipts from direct taxes were also disappointing, and the government had resort to other devices. Sumptuary taxes were laid on luxuries, such as carriages, yachts, billiard tables, and plate; licenses were exacted of many occupations; manufacturing and transportation companies were taxed in proportion to earnings; stamps were required on contracts, legal documents, etc.; and excise duties were collected from the producers of spirits, ale, beer, and tobacco. With a view to adjusting the burden to wealth, Congress, for the first time in its history, levied an income tax. In 1861 three per cent was laid on all incomes of more than $800 a year, and in 1865 this tax was raised to five per cent on incomes ranging from $600 to $5000, while ten per cent was required from ampler revenues. Since the Republican party was enthusiastically supported by the bulk of business men, there was little protest against these "war measures." Even the income tax was paid with no grumbling, and with but little attempt at evasion. The Federal revenues of 1865–1866 reached the unprecedented sum of $559,000,000; but military expenses augmented even more rapidly than income, and the government was obliged to borrow the money with which to carry on the war.

EXPENDITURE FOR ARMY AND NAVY

1861	$35,389,000
1862	431,813,000
1863	666,575,000
1864	776,096,000
1865	1,153,307,000

Bolles, III, Bk. I, Ch. IV, V, VIII. Dewey, 354–358.

In February, 1862, Congress authorized a loan of $500,000,000 in long-term bonds at six per cent, and at the same time authorized the issue of $150,000,000 in non-interest-bearing notes. The bonds sold but slowly, for the rate of interest in view of the risk of ultimate repudiation was not high. Only $23,750,000 was secured from bond sales in the course of the first year, and the government

was forced to have recourse to bills of credit. An issue of $150,000,000 was made in July, 1862, and equal amounts were ordered in January and March of 1863. The act of February, 1862, had given these "greenbacks" legal tender value, and the constitutionality of this provision was later sustained by the Supreme Court. The notes nevertheless declined in purchasing power. The amount of depreciation varied with the fluctuating fortunes of war, but the nadir point was reached in July and August of 1864, when this paper dollar was worth but one third its face in gold. On June 30, 1864, further issues were forbidden, but the mischief was already done. The depreciated currency had driven gold from circulation everywhere except on the Pacific Coast, and prices of all commodities were doubled and trebled. It is estimated that the war debt was at least one fifth greater than if government purchases had been made in specie.

Mitchell, Hist. of the Greenbacks, Pt. I.

Dewey, 360–367.

Oberholtzer, Jay Cooke and the Financing of the Civil War.

Mitchell, Hist of the Greenbacks, 405, 419.

Industrial Transformation

The National Banking System. — By legislation of February, 1863, amended in June, 1864, Congress provided for a national bank currency guaranteed by government bonds. Every banking association complying with the terms of the law was to be furnished by the comptroller of the currency with engraved notes amounting to 90 per cent of the market value though never more than the par value of the securities subscribed. A steady demand for United States bonds was thus developed. The sales of 1863 amounted to $400,000,000, and $600,000,000 additional was sold without difficulty during the next two years. Sixteen hundred national banks were organized, and $175,000,000 of redeemable currency was issued before the close of the war. The political advantages of this policy were no less than in Hamilton's day. Bank officials and stockholders were naturally eager to maintain the solvency of the Federal treasury, and all the business interests of the North were firmly attached to the Union.

Dewey, 317–328, 383–390.

Bolles, III, Bk. I, Ch. XI; Bk. II, Ch. IV.

The fiscal advantages of the national banking system were equally important and enduring. For the uncertainties of seven thousand varieties of state bank notes issued by fifteen hundred private banks that were chartered by twenty-nine state legislatures of varying financial proclivities, was substituted a uniform currency whose redemption was guaranteed by bonds of the United States. The state banks could make but a losing fight against such odds, but the retirement of their issues was forced by a ten per cent tax (March, 1865).

Dewey, 329–330, 360–378.

Redemption of the Greenbacks. — The accumulated war debt of the Federal government, represented in bonds, treasury notes, certificates of indebtedness, and greenbacks, amounted (September, 1865) to $2,546,000,000, and of this enormous sum no part was repudiated. The tax-paying capacity of the country was ample to care for both interest and principal. An act of April, 1866, provided for the funding of the bond issues and for the redemption of the government notes. Greenbacks to the amount of $10,000,000 were to be called in and exchanged for specie within the first six months, and the secretary of the treasury was authorized thereafter to redeem not more than $4,000,000 per month. Only $44,000,000 was cancelled in accordance with this plan, but the contraction in the volume of the currency was attended by a shrinkage in prices that proved disturbing to business interests developed under inflated conditions. The redemption of this part of the government debt was opposed, moreover, by the advocates of cheap and abundant money and by the enemies of the national banks. Congress yielded to popular pressure; in February, 1868, the cancelling of the greenbacks was suspended, and the outstanding notes were allowed to form a permanent element in our circulating medium. The resumption of specie payments by the United States treasury in 1879 brought these legal tender notes to a parity with gold.

Bolles, III, Bk. II, Ch. I, II.

Dewey, 378–382.

Report of the Sec. of the Treas., 1897, CXXXI.

Noyes, Forty Years of American Finance, Ch. I, III.

Revival of Protective Tariffs. — The increase of import duties was necessitated by the heavy taxes imposed on

domestic industries, a tax amounting to eight and fifteen and, in some cases, to twenty per cent. Our factories, distilleries, and iron works, burdened by such requisitions, could not continue to produce in competition with untaxed imports, and it was agreed that the excise paid on textiles, on iron and steel, petroleum, sugar, salt, paper, leather, etc., must be offset by corresponding import duties. Within a fortnight of the passing of the internal revenue act of 1862, Congress passed a tariff law raising the impost on salt from 12 cents to 18 cents per hundredweight, on glass and iron manufactures from 30 to 35 per cent, on cottons from 25 to 30 per cent, on silks from 30 to 40 per cent, on woolens from 25 to 30 per cent with an added specific duty of 18 cents per pound. The average rate for the tariff schedule of 1862 was 37.2 per cent.

Taussig, Tariff Hist. of the U.S., 155–193.
Rabbeno, 200–258.
Bolles, III, Bk. II, Ch. VII.
Cong. Globe, 1861–1862, 1196, 2979.
Stanwood, II, 126–138

In 1864 a second internal revenue act raised the excise and income taxes and greatly increased the list of industries subject to the levy. A tariff act immediately followed, by which the average rate on imports was raised to 47 per cent. The duty on glass manufactures mounted from 35 to 40 per cent, 10 per cent was added to the import tax on silks, the specific duty on woolens was raised to 24 cents per pound and the ad valorem rate to 40 per cent, while the duties on raw wool imposed by the Morrill Tariff were doubled. So urgent was the need of revenue, and so ready were loyal Republicans to strengthen the army and navy, that little attention was given to the industrial bearing of this extraordinary tariff schedule. The bill was accepted as it came from the Committee on Ways and Means without amendment. Only three days' discussion was allowed it in the House, and but two days' in the Senate. Undoubtedly the representatives of certain business interests influenced the details of the bill, asking and securing better rates than were necessary to offset their excise tax, and the result was a degree of protection beyond that accorded by any previous tariff. Import duties as high or higher had been imposed in 1812, but they were laid to meet the financial emergency and were reduced

Dewey, 391–401.

the year following the declaration of peace. Not so the tariff arising out of the Civil War. The internal taxes levied by the Federal Congress (with the exception of the excise on liquors, tobacco, matches, patent medicines, etc.) were repealed before 1872; but no corresponding reduction of import duties was initiated by the party in power. The industries that had prospered within the tariff barrier protested against opening the gates to foreign products, and they were too influential to be gainsaid. Among the people at large a protective tariff was closely associated with the vindication of Federal authority and the emancipation of the slaves, and was regarded as essential to the maintenance of the Union.

Stanwood, II, Ch. XIV.

As it became evident that the import tax imposed a heavy burden on consumers, sundry attempts were made to revise the schedule, but these efforts secured only the reduction or repeal of nonprotective duties. Finally, when a surplus revenue of $100,000,000 had accumulated from customs receipts, Congress was forced to take the question of revision under serious consideration. The act of 1872 repealed the duties on tea and coffee, halved the tax on salt, and provided that but ninety per cent of the existing duties should be imposed on other imports. But the financial panic of 1873 alarmed the friends of the protected interests, the horizontal reduction of ten per cent was repealed, and the previous rates were restored in the tariff act of 1875.

Material Prosperity. — The war demands, coupled with the protective tariff, induced an extraordinary activity in every department of business enterprise. Universal buoyancy and unbounded confidence in the future rendered it easy to borrow money at home and abroad. European capitalists invested readily in United States securities, railroad bonds, and mining stock, and the resources of the country were exploited as never before. The farm acreage was doubled and the farmers began to export wheat and corn and cattle to Europe, where a series of crop failures insured them extraordinary prices. The

English manufactures offered an unlimited market for American cotton and our exports developed to phenomenal proportions. The balance of trade, which had been against us since 1850, was reversed in our favor in 1875. The annual output of pig iron was doubled, that of coal quintupled, while the production of steel increased a hundredfold in the decade following on the war. The iron ranges of the Lake Superior region were opened up and began shipping ore in vast quantities to the works at Pittsburg, Buffalo, Cleveland, and Chicago. The Marquette, Menominee, and Gogebic ranges were within easy reach of the ports, whence direct transportation by freight steamer was provided. Improvements in methods of mining and smelting soon reduced the cost of producing iron and steel to the English average.

Fite, Social and Industrial Conditions during the Civil War, Ch. II, IV.

Special Rept U. S. Census on Mines and Quarries, *1902*, 395–425.

Meantime, the copper deposits of the Keweenaw Peninsula were contributing their share to the gains of this phenomenal period. Mining operations had begun in 1844, but the output was inconsiderable till after the war. In 1875 the copper mines of northern Michigan produced sixteen thousand tons, ninety per cent of the total yield of the United States. Since copper was then selling at $400 per ton, this was an investment even more attractive than that offered by the iron ranges. Entrepreneurs and workmen swarmed into the new El Dorado, and the wastes of the Upper Peninsula were converted into income-bearing properties.

Rept. on Mines and Quarries, 482–486.

The yield of gold from California had fallen off, but other sources of supply were found. The Comstock Lode, bearing veins of gold and silver in fortunate conjunction, was discovered in 1859. Here, in the heart of the Great Basin, in precisely the most barren region of the Cordilleran Range, a fountain of wealth was opened up. In 1860 silver was produced to the value of $550,000, and gold to the value of $200,000; prospectors and speculators flocked to the district, and mushroom towns sprang into being. The population of Nevada grew from 6857 in 1860 to 42,491 in 1870, and 62,266 in 1880. The climax of pro-

Rept. on Mines and Quarries, 563, 571–577.

Shinn, Story of the Mine, Ch. I, II.

duction was reached in 1877, when the Comstock Lode yielded gold and silver to the value of $36,000,000. Thereafter the output declined, and Nevada yielded first place to Colorado. The production of the precious metals began to exceed domestic needs, and the surplus was exported. In 1873 we sent $40,000,000 worth of silver to foreign markets, and in 1875 $67,000,000 worth of gold.

The development of manufactures was no less phenomenal than that of mines. New inventions and improved machinery stimulated business enterprise in every line of production. The increase in the number of establishments, output, employees, and wages during the war decade exceeded that of the decades before and after.

DEVELOPMENT OF MANUFACTURES

DECADE	ESTABLISHMENTS	EMPLOYEES	WAGES PAID	OUTPUT
	Increase	Increase	Increase	
1850–1860	14.2 %	37.0 %	60.0 %	85.5 %
1860–1870	79.6	56.6	104.7	124.4
1870–1880	.7	33.0	22.2	26.9

Tarbell, Hist. of the Standard Oil Company, I, Ch. I, II.

Bishop, II, 501–502.

Notable among the material achievements of the war period was the utilization of a new and valuable raw material, petroleum. The farmers of northwestern Pennsylvania had long known and used in rude fashion the "rock oil" that floated to the surface of streams and ponds. It was at first bottled for medicinal purposes, and Seneca Oil, Keer's Oil, etc., were sold as liniment all over the United States. Finally the inflammable character of the fluid attracted the attention of scientists, and analysis proved that petroleum possessed constituents of high market value. Distillation developed illuminating oil, lubricating oil, naphtha, gasoline, benzine, paraffin, etc. A company was organized in Boston to produce and refine petroleum on a large scale, and their agent, E. L.

Drake, sunk an artesian well at Titusville in the summer of 1859, from which he pumped twenty-five barrels of oil on the first day. Since crude petroleum was then worth $20 a barrel, his success converted this remote and barren region into a scene of wild speculation. The farmers began to drill for oil, and many a man discovered a fountain of wealth beneath his rugged fields. Prospectors flocked to the region and bought claims at random, and soon the upper valley of the Allegheny River and its tributaries, French and Oil Creeks, was bristling with pumps and derricks. The total output of 1859 was two thousand barrels. Many of the wells required no pumping, but gushed oil night and day, while a yield of two, three, and four thousand barrels a day was not extraordinary. The difficulty was to dispose of the product. At first the crude oil was carted in barrels to the river, loaded on scows, and floated downstream to Pittsburg; but a branch railroad from Erie was built to Titusville in 1863, and to Oil City by 1865. Then pipes were laid from the wells to the railway, and iron tanks were constructed at centers of deposit for storing the oil. Forty million barrels of crude oil were brought to the surface in the first twelve years, refined, and sold in the domestic and foreign market. The new illuminant was sent to Egypt, China, East India, and Africa, and by 1872 reached fourth rank in the exports of the United States. Meantime, twenty refineries had been set up in the oil region, but these enterprises were hampered by the difficulty of getting distilling apparatus and the necessary chemicals over rough mountain roads. It was cheaper to transport the crude oil to Pittsburg, Cleveland, or Erie. The refining business was even undertaken at Boston, New York, Philadelphia, and Baltimore, and foreign consignees began to ask for crude oil that they might secure the profits of manufacture. By 1869 Cleveland took the lead in the refining of oil, distancing in capacity and value of output Pittsburg, New York, Boston, and the oil region itself. The largest and most enterprising of the Cleveland refineries, the Standard Oil Company, succeeded in buying

U. S. Census, *1900*, X, 683–688.

up all local competitors, and in securing from the railroads preferential freight rates that gave its product an advantage in Eastern and Western markets. Wholesale production gave opportunity to convert the wastes of the refinery into by-products far more valuable than the main output.

The wealth of the country as a whole, despite the disasters that had fallen on the South, rose from $16,000,000,000 in 1860 to $39,000,000,000 in 1870 and $43,000,000,000 in 1880. During this same twenty-year period, the population of the United States grew from thirty millions to fifty millions, an extraordinary increase but yet less rapid than that of wealth.

PER CAPITA WEALTH

YEAR	U S.	NO. ATL.	NO. CENT.	SO ATL.	SO. CENT	WESTERN
1860 . .	$514	$528	$436	$537	$598	$434
1870 . .	780	1243	735	384	334	843
1880 . .	850	1207	932	495	435	1291
1890 . .	1039	1232	1129	579	569	2250

The increase in per capita wealth of the Northern states is the more remarkable because of the accessions to population five and a half millions were newly arrived immigrants. The Irish, German, and Scandinavian peasants, who thronged into the North Atlantic ports, made a welcome addition to the labor force, but contributed little capital to the communities in which they settled.

Marvin, Ch. XIV. Bates, Ch. IX. U. S. Census, *1880*, VIII, 96–130.

Decline of our Mercantile Marine. — In striking contrast to the development of mining and manufactures shows the decay of the shipping interest. During the civil conflict United States vessels were fairly driven from the sea by the mischances of war. The Confederate government had no navy and abandoned all hope of breaking the blockade of Southern ports, but half a dozen men-of-

war, purchased in England, managed to effect great damage on American commerce. The Florida and the Alabama scoured the high seas, seeking merchantmen flying the Federal flag. Since these were usually wooden sailing vessels and unarmed, they fell easy prey to the Confederate cruisers, and the loss in ships sunk, burned, or captured amounted to 110,000 tons. Abnormal insurance charges and the difficulty of securing cargoes for vessels liable to seizure, rendered ocean commerce unprofitable. American ships were held in port or made over to the government or "sold foreign" at ruinous sacrifice. The ships purchased by the government were converted into transports or cruisers, and did effective work throughout the war, more than one half of the suddenly improvised Federal navy being made up of armed merchantmen. Four fifths of the officers and five sixths of the men came directly from the merchant service.

Report of Joseph Nimmo, 41st Cong., 2d Session, Ex. Docs., III.

The falling off in United States vessels registered for foreign trade amounted to one million tons. The proportion of foreign commerce accruing to American vessels declined from 66 per cent in 1860 to 27 per cent in 1865. The transatlantic trade of 1866 exceeded that of any previous year, and our merchants bravely strove to recover their due share of freight; but it was a losing battle, for they came into competition with the subsidized lines of England. In vain they petitioned for government aid. Congress awarded a mail subsidy of $15,000 to a line running from New York to Brazil, and another of $500,000 to the Pacific mail steamers, but no such support was vouchsafed to entrepreneurs in the Atlantic service.

Johnson, Water Transportation, Ch. XX.

Cong. Globe, *1864*, 2117–2118, 2283, 2372–2375.

American shipbuilders, too, labored under heavy disadvantages. The excise tax of 2 per cent on the hulls of vessels and of from 3 to 5 per cent on marine engines was repealed in 1868, but tariff duties on cordage, iron, and copper, ranging from 30 to 45 per cent, were allowed to stand. A congressional committee, appointed (1870) to investigate the shipping industry, recommended the repeal of the duties on shipbuilders' raw materials. Copper

Wells, 516–522.

Rept. of Lynch Committee, 41st Cong., 2d Session, House Rept. No. 28.

Bates, Ch. XI.

sheathing, iron rods and bars, bolts, etc., "necessary for the construction of vessels built in the United States for the foreign trade" were accordingly admitted free under the tariff act of 1872. The duties were, however, reimposed in 1875, because of protests from the men who had iron and copper to sell. With the passing of the wooden sailing vessel, our preëminence in shipbuilding was lost. The new steamers could be built more economically in England, where fuel, iron, and labor were comparatively cheap. There was some agitation for the admission of foreign-built ships to our registry, but the proposition was defeated. The shipbuilders protested against the reversal of a policy that had held for eighty years, and handicapped by these permanent disadvantages, our ocean marine steadily declined.

President's Message, 41st Cong., 2d Session, Ex. Doc. 115.

Cong. Record, VIII, Pt. III, Appendix, 23–26.

The war that had proved so disastrous to our ocean marine stimulated the growth of the coastwise service. The transportation of troops and provisions gave profitable employment, and ocean steamers were temporarily converted to this trade. The tonnage of coasting craft rose from 2,599,319 in 1860 to 3,353,657 in 1865. Moreover, the exploitation of the lumber lands and mineral deposits of the Lake Superior region brought into requisition freight and passenger steamers of size and speed approaching the sea-going models. The traffic of the Great Lakes began to rival the transatlantic trade in dimensions and value, and offered some compensation for the vantage lost on the high seas.

Donaldson, 332–350.

Sato, 428–439.

Powderly, Thirty Years of Labor, Ch. VIII.

Cong. Globe, 1850, 1149–1150.

The Homestead Act. — Agitation for the free distribution of the public lands had been persistent and unflagging for twenty years before the war. The Free-Soil Democracy had led the movement with its proposal that "the soil of our extensive domain be kept free for the hardy pioneers of our own land and the oppressed and banished of other lands seeking homes of comfort and fields of enterprise in the New World." Whigs, like Daniel Webster, humanitarians, like Horace Greeley, abolitionists, like Gerrit Smith, labor reformers, like

George Henry Evans, were not less ardent supporters of a democratic land policy. In 1845 Andrew Johnson of Tennessee had brought forward in the House of Representatives a resolution in favor of giving every homeless citizen a portion of the national domain, and Senator Stephen A. Douglas introduced a bill to the same effect in 1849. Several times a homestead bill passed the House of Representatives, only to be defeated in the Senate, the negative vote coming largely from the Southern states, which then held the balance of power in the upper house. Finally (June 19, 1860), after lengthy conferences, Senate and House agreed to concur in a bill providing that any citizen of the United States, being the head of a family, might take up a quarter section of unappropriated public land, settle thereon, and secure title after proved residence of five years. The Senate's contention, that a cash payment of twenty-five cents an acre be required, was accepted by the House with considerable demur, but even so, the bill was vetoed by President Buchanan. In a message to Congress the President justified this action as follows. The free distribution of public lands would be unjust to the "old settlers," who paid $1.25 per acre for their lands, and whose "labors in building roads, schools, and market towns had increased the value of the adjacent and unoccupied lands now to be given out at 25 cents an acre." It could confer no benefits on artisans and laborers of factory towns, who "cannot, even by emigrating to the West, take advantage of the provisions of this bill without entering upon a new occupation, for which their habits of life have rendered them unfit." It would operate to the disadvantage of the older states, whose supply of public lands was exhausted, and whose population would be drawn off by the prospect of cheap lands farther west. "The offer of free farms would probably have a powerful effect in encouraging emigration, especially from states like Illinois, Tennessee, and Kentucky, to the west of the Mississippi, and could not fail to reduce the price of property within their limits." The President further raised the

Cong. Globe, 1849–1850, 75, 87.

Cong. Globe, 1854, Appendix, 207–209.

Donaldson, 345.

question whether it was "expedient to proclaim to all nations of the earth that whoever shall arrive in this country from a foreign shore, and declare his intention to become a citizen, shall receive a farm of 160 acres at a cost of 25 or 20 cents per acre, if he will only reside on it and cultivate it." The loss to the government in the way of revenue would, moreover, be considerable. The annual income from this source ($4,000,000) would be reduced to $1,000,000. "The people of the United States have advanced with steady but rapid strides to their present condition of power and prosperity. They have been guided in their progress by the fixed principle of protecting the equal rights of all, whether they be rich or poor. No agrarian sentiment has ever prevailed among them. The honest poor man, by frugality and industry can, in any part of our country, acquire a competence for himself and his family, and in doing this he feels that he eats the bread of independence. He desires no charity, either from the government or from his neighbors. This bill, which proposes to give him land, at an almost nominal price, out of the property of the government, will go far to demoralize the people, and repress this noble spirit of independence. It may introduce among us those pernicious social theories which have proved so disastrous in other countries."

Cong. Globe, 1861–1862, 40, 132–139, 909–910.

When the slave states had withdrawn their representatives from the Federal legislature, the Homestead Bill passed both Houses without opposition, and received the signature of Abraham Lincoln, May 20, 1862. The acreage charge did not appear in the final enactment, and a special concession was made to Union soldiers in that they were allowed to deduct from the five years' occupancy required to establish title, the term of army service. Homestead entries were inaugurated immediately, and proved very popular. Quarter section farms to the amount of twenty-seven million acres were claimed between 1867 and 1874. The revenue from land sales declined as Buchanan had foreseen, but the loss was soon made good in the enlarged

tax-paying capacity of the West. To some extent population was drawn from the East, and the value of agricultural land in the seaboard states depreciated. The center of population, of wealth, and of manufactures moved steadily west. The opportunity to get possession of land without money and without price attracted hundreds of thousands of Old World peasants to the United States. Between 1860 and 1870, 800,000 Germans and 456,000 Irish came to America, and the inflow augmented from year to year, until, in 1873, the annual immigration attained the startling total of 460,000.

The democratic land policy was far from prejudicial to the artisan class, since operatives in the East, young men at least, were free to choose between a farm and a trade. Surplus labor was thus drained off to the West, and the rate of wages was readily maintained at the standard of living set by the self-employed farmer. Speculation in land and land monopoly were rendered difficult, since no man might take up more than two quarter sections — one of arable land and one of timber land. The average size of holdings declined from 199 acres in 1860 to 153 in 1870, and 134 in 1880, and intensive farming became more general.

The Transcontinental Railways. — The project for a railway that should span the Cordilleran Range, make connection between the Mississippi Valley and the California coast, and thus serve as channel for the westward movement of population as well as facilitate trade with the Pacific ports, with China and the Far East, had been agitating the minds of men for twenty years before it was actually undertaken. The scheme was first brought before Congress in a memorial drawn up by Asa Whitney in 1845. This far-seeing New York merchant proposed to build a road from Lake Michigan to the mouth of the Columbia River, and petitioned for a grant of land sixty miles wide along the entire route. This was to be assigned in ten-mile sections as construction proceeded, and thereafter sold by the railway company to settlers as fast as

Davis, The Union Pacific Railway, Ch. I–III.

Smalley, Northern Pacific Railroad, Ch. VII, X.

Whitney, Project for a Railroad to the Pacific.

they arrived. "It is proposed to establish an entirely new system of settlement, on which the hopes of success are based, and upon which all depend. The settler on the line of the road would, as soon as his house or cabin was up and a crop in, find employment to grade the road; the next season, when his crop will have ripened, there would be a market for it at his door, by those in the same situation as himself the season before; if any surplus, he would have the road at low tolls to take it to market; and if he had in the first instance paid for his land, the money would go back, either directly or indirectly, for labor and materials for the work. So that in one year the settler would have his home, with settlement and civilization surrounding, a demand for his labor, a market at his door for his produce, a railroad to communicate with civilization and markets, without having cost one dollar. And the settler who might not have means in money to purchase land, his labor on the road and a first crop would give him that means, and he too would in one year have his home with the same advantages and equally independent."

Whitney estimated the cost of construction at $50,000,000, and this sum, together with running expenses for the initial years, he expected to realize from land sales. The road was to be a national highway, operated in the public interest, and the rates charged for transportation were to be merely sufficient to cover current expenses. Whitney advocated his patriotic project on the platform and in the press through the length and breadth of the country, making modifications in his plan from time to time with a view to securing the support of influential cities. His first route was drawn from Milwaukee through Prairie du Chien, Wisconsin, to Portland, Oregon; the second connected Prairie du Chien with Tacoma; the third, in deference to Southern interests, was to run from Memphis through New Mexico, to San Francisco. Bills embodying these and other routes came before Congress session after session in the last decade before the Civil War, but sectional feeling ran high. Southern repre-

De Bow, II, 486–519.

sentatives advocated a line from Charleston through Vicksburg to San Diego; the miners of California and Nevada clamored for a central route via the Salt Lake Trail from St. Louis to Sacramento. Every party and all public men declared in favor of a transcontinental railroad; but local interests were strong enough to defeat each specific measure until the Republican party came into full control of the national government.

By enactments of 1862 and 1864 Congress chartered the Union Pacific Railroad Company and authorized the construction of a road from Omaha directly west to Ogden, the proposed point of junction with the Central Pacific Railway, already incorporated by the state of California. Rival interests on the Missouri River were provided for by branch roads to Sioux City, St. Joseph, Leavenworth, and Kansas City; but the trunk line made direct connection with Chicago and the railway systems centering in New York and Boston. The incorporated companies were given the right of way along the projected route (private property being subject to condemnation for this use), together with such lands as might be needed for stations, workshops, etc., and the privilege of taking timber, stone, and earth, as might be required for the track. To defray the costs of construction Congress offered liberal grants from the public domain. The railroad lands were assigned, as construction proceeded, in ten alternate sections within a tract twenty miles in width, on each side the roadbed, grants previously made and squatters' claims being, of course, excepted. Thus, within forty-one days after the passage of the Homestead Act, Congress authorized the giving away of 23,500,000 acres of the public domain to private corporations, and inaugurated a new phase of land monopoly. The reservation of alternate sections for distribution to actual settlers was intended to secure the people's rights, but the ultimate effect was to raise the value of the railroad lands, which were usually withheld from sale.

Davis, Ch. IV.

Smalley, Ch. XII. XIII.

Donaldson, 261–273.

Congress further aided this vast transportation enter-

prise by offering to guarantee the bonds issued by the companies to the amount of $65,000,000. The bonds were to run for thirty years at six per cent, and constituted a second mortgage lien on the railroad property. The first year's interest was paid from the United States treasury, and the government stood sponsor for subsequent interest charges, as well as for the payment of the principal. Thus indorsed, the bonds were readily disposed of at public sale. Construction proceeded rapidly. Irishmen were imported as laborers on the eastern divisions of the road, while Chinese built the greater part of the Central Pacific. The entire line was in operation by 1869. The initial passenger tariff of ten cents a mile was so high as to be well-nigh prohibitory. Congress had reserved the right to regulate fares and freight rates as soon as the net earnings should exceed ten per cent on the investment, but the rates were reduced by the management long before this happy consummation was attained.

Fite, Ch. III. Sanborn, Congressional Grants of Land in Aid of Railways, Ch. V, VI, VII, VIII.

With the close of the war and the disbanding of the armies, the demand for transportation facilities to the new West grew even more urgent. In the decade following the chartering of the Union Pacific, the bulk of railroad building was west of the Mississippi River. In the first thirty years of railroad history, construction had followed on the heels of trade, and routes were determined by prospect of profits, but the Union Pacific Railroad inaugurated a new epoch. If the West was to be developed by free labor, railroads must be pushed in advance of population, in advance of the organization of state governments. The costs of building were enormous and the traffic light in proportion to distance covered. These great undertakings could only be set on foot by aid of the United States government. Within the ten years following the grant to the Union Pacific, 215,000,000 acres of public land had been assigned to various railroad enterprises, always on condition of completing the roadway within a specified term. Several of the grants were forfeited by noncompliance, but the lands secured by railroad corporations amounted

Powell, Lands of the Arid Region, Ch. X.

to 102,000,000 acres, nearly half the sum total of the farm area granted under the Homestead Act.

The sacrifices, economic and social, involved in the building of our transcontinental railways have been heavy, but the gains to the settlers and to the country at large have been beyond computation. Home seekers make their way to new lands at far less cost in time and money and in physical wear and tear, than in the days of the prairie schooner and the wayside camp. The great trunk lines rendered it possible to sell Western products to Eastern markets, the manufacturing sections were brought within reach of the mining towns and lumber camps of the Rockies. Oriental markets were opened up to the cotton planters of the South, to the cotton manufacturers of New England. Whitney's dream was at last fulfilled: "Then the drills and sheetings of Connecticut, Rhode Island and Massachusetts and other manufactures of the United States may be transported to China in thirty days; and the teas and rich silks of China, in exchange, come back to New Orleans, to Charleston, to Washington, to Baltimore, to Philadelphia, New York and to Boston in thirty days more."

Martin, The Grange Movement, Pt. I.

The Crisis of 1873. — This epoch of unparalleled prosperity was terminated by a business panic and industrial depression, exceeding in extent and severity any the country had yet experienced. Every line of business had felt the stimulus of war tariffs and war prices. In anticipation of unusual profits, entrepreneurs borrowed heavily and at high rates of interest to develop iron works and clothing factories, flour mills and abattoirs, mines and oil refineries, without much regard to prospects for disposing of the goods. The inevitable consequences of this speculative spirit were overproduction in every branch of industry, a general glut of the market, and a ruinous decline in prices. The reduction of import duties in 1872, and the menace of foreign competition, was sufficient to capsize some of these overloaded enterprises. Unable to market their stock at paying prices, many business firms failed to meet their obligations and went into bankruptcy. The

Burton, Financial Crises, 286–289.

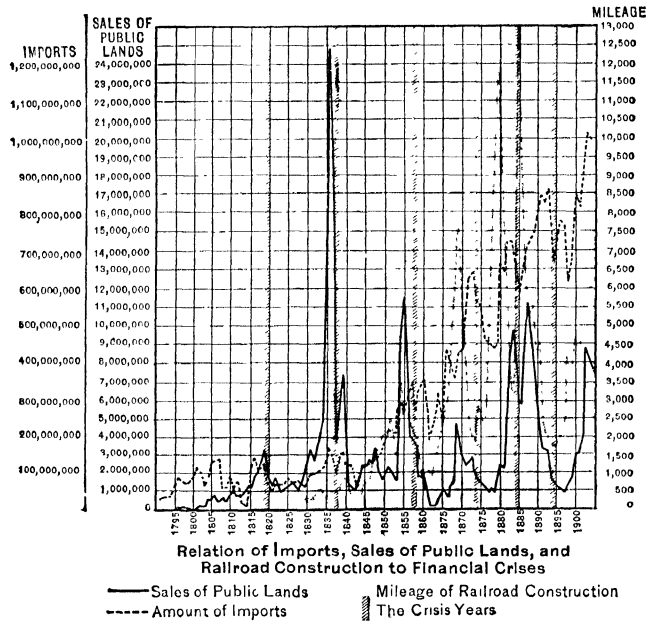
Wright, Industrial Depressions, 60–64.

U. S. Census, *1900*, X, 8.

Rhodes, United States, VII, Ch. XI.

influence of industrial depression is seen in statistics of manufactures for the decade.

Another form of speculative mania was represented in Western railroads. The liberal policy of the government gave promoters a basis on which to solicit subscriptions to stocks and bonds that could bring no return to the purchaser. The sums invested in railway construction during the decade following on the chartering of the Union Pacific aggregated more than a billion dollars. The railroads



built between 1867 and 1873 amounted to thirty-two thousand miles, a sum total exceeding the total mileage of 1859. An undue proportion of the available capital of the country was sunk in roadbed and rolling stock. Unable to meet the interest on the bonded debt, much less provide for the payment of the principal, many of these optimistic transportation schemes were forced into bankruptcy.

The Homestead Act contributed its full share to the craze for investment. The pioneer farmers, eager to improve their little properties, borrowed from Eastern capitalists, mortgaging their lands as security. They, no less than the railroad companies, committed the mistake of sinking in improvements more money than they could make good out of surplus products for years to come. The faraway creditor was fain to foreclose the mortgage and take the land in lieu of payment — an asset that could not readily be converted into cash; thus a Kansas mortgage became the synonym for a losing investment. The money resources of the business world were further strained by disastrous fires and the rebuilding of Chicago (1871) and of Boston (1872).

For two years preceding the crisis, money was scarce and the rates of interest high, notably in the autumn, when farm products were being moved to market. In October, 1872, there was a deficiency of more than a million dollars in the bank reserves of New York City. In September of 1873, financial operations were paralyzed by a series of colossal failures; the leading bankers of the city had made unwarrantable advances to various railroad enterprises and were forced to close their doors against depositors. The Brooklyn Trust Company was heavily involved with the New Haven and Willimantic Railroad; the Mercantile Warehouse and Security Company with the Missouri, Kansas, and Texas; Kenyon Cox and Company with the Canada Southern; Fisk and Hatch with the Vanderbilt Roads; Jay Cooke and Company with the Northern Pacific. The assignment of Jay Cooke, the leading financier of that day, was the signal for a general collapse. More than five thousand failures occurred in the panic year with a loss of $228,500,000, and the number of bankruptcies steadily increased, till in 1878 the appalling total of 10,478 was reached. The industrial depression following on the Wall Street panic was even more fatal to productive industries. The sum of the failures for the country at large aggregated 47,000 and the money

Conant, Banks of Issue, 653–657.

Sherman, I, 488–506.

Smalley, Ch. XX, XXI, XXV, XXVI.

Rhodes, Hist. of U.S., VII, Ch. XL

loss, $1,200,909,754, while some three million workmen were thrown out of employment by the closing down of business enterprises. The consequent curtailment in the demand for goods increased the difficulty of the situation. Gradually, however, the weight of depression was thrown off, as railroads and farms began to return some revenue, mines and mills were reopened, the unemployed found work and were once more able to earn and spend, while with the revival of the market for goods, manufacturers took heart and set their engines in motion.

Mitchell, Organized Labor, Ch. VIII.

Powderly, Ch. I.

McNeill, Ch. V.

Moody, Land and Labor, Ch. VII.

Fite, Ch. VII.

The Labor Movement. — The engrossing problems entailed by the Civil War had diverted attention from the interests of free labor. The workingmen of the North threw themselves heart and soul into the conflict with the slave power and gladly enlisted for service. The drafting of a million men into the army reduced the supply of labor to the point where there was work at good wages for all remaining; but when the soldiers returned to industrial life, the labor market was glutted and difficulties ensued. Wages as represented in paper currency had risen rapidly during the war, and the abnormal rates were maintained by concerted resistance to reduction. Industrial conditions were more favorable to organization than ever before, for the capacity of factories and workshops had been multiplied, and larger bodies of operatives were massed in one establishment. Machinery had superseded hand labor in well-nigh every field, and the workmen, rendered entirely dependent upon capital for employment, organized in self-defense. The unprecedented accumulation of wealth in the hands of a few captains of industry served to further emphasize the antagonism between master and man, so that the necessity for collective bargaining was forced home upon employees of every class.

The movement toward union on a national scale had been apparent before the close of the war. The Brotherhood of Locomotive Engineers was organized in 1863, the Cigar Makers International Union in 1864, and the International Union of Bricklayers and Masons in the same

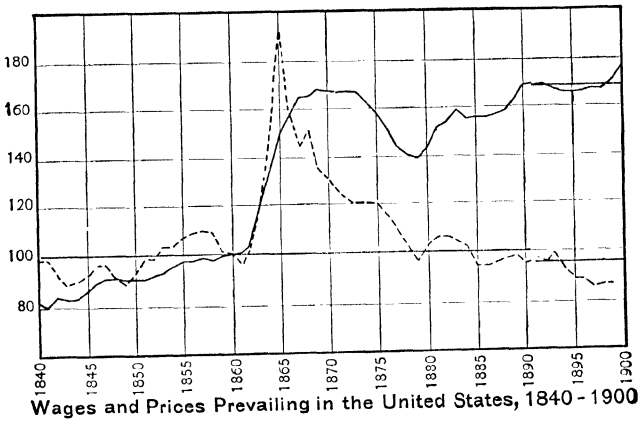
year. By 1866 some thirty or forty national trade organizations had been set on foot. The principal demands of the Workingmen's party — the abolition of chattel slavery, free distribution of public lands, and a ten-hour day — were accomplished facts. The labor leaders of the post bellum era demanded an eight-hour day, protective legislation for women and children employed in factories, the scientific investigation of labor problems, etc.

Commons and Andrews, Labor Movement, I.

The new labor movement repudiated both the great political parties as untrustworthy and aimed to affiliate the trade unions in a common endeavor to better working conditions, not for their own members merely, but for the unskilled workers as well. A National Labor Union Convention was called at Baltimore in 1866 and was attended by one hundred delegates, representing labor organizations in all the Northern and in three border states. The conventions held at Chicago in 1867 and at New York in 1868 were even more widely representative. The total membership of the Workingmen's party was estimated in the latter year at six hundred and forty-five thousand. This potent constituency sent representatives to several of the state legislatures, and was even able to bring some influence to bear upon the national government. In 1869 Congress passed a bill promising an eight-hour day for all laborers in the employ of the United States. The National Labor Union conventions held at Boston in 1870, and at Philadelphia in 1871, gave evidence, however, of faction and waning strength. At Columbus, Ohio, in 1872, a candidate for the presidency of the United States was nominated, but this proved a fatal mistake. The attempt of a few ambitious leaders to use the organization as a political machine wrecked the undertaking.

North, Factory Legislation in New England.

Better success attended the Labor Reform party, which organized in Massachusetts in 1869, fifteen thousand strong. In that same year the General Court of Massachusetts passed a bill providing for the State Bureau of Labor Statistics, the first-fruits of the demand for scientific inquiry into the grievances of the wage earners.



Wages and Prices Prevailing in the United States, 1840-1900

Base Line (1840-1891) for wages and prices, the average of 1860
Base Line (1891-1900) for wages, the average of 1891; for prices, the average of 1890-1892
Currency Quotations 1860-1879 reduced to equivalent in gold

The Farmers' Movement. — During the latter half of the nineteenth century the agricultural population had little in common with the mechanics and operatives of the cities. The farmers were property owners and taxpayers, and naturally conservative, and there was no large class of agricultural laborers or cash tenants. Every able-bodied man expected to acquire land, whether by a homestead claim or by the slower process of farming on shares. All that the farmers asked was a fair chance to market their products. Their grievances were the commission charges of the middleman who forwarded their grain to the flour mills at Minneapolis, their cattle to the packing houses at Chicago, and secured the lion's share of the profits on the transaction. The railroads, moreover, whose advent had been heralded with unalloyed satisfaction, were now charged with imposing exorbitant freight rates and fixing their tariffs on the principle of charging all the market would bear. The railroad land, sold in extensive tracts to the highest bidder, came into the hands of capitalists, who introduced machinery and

Fite, Ch. I.

Rept. Industrial Commission, VI, 36–143, 225–268.

Adams, The Granger Movement.

Moody, Land and Labor, Ch. III.

large-scale production and secured special favors in the freighting of their products. The import duties, levied primarily in the interest of manufacturers, added to the cost of groceries, clothing, implements, and building materials, while curtailing the European market for agricultural produce. Only the wool growers got a compensating advantage in the way of enhanced prices. Most of the Western farmers were heavily in debt, and the contraction of the currency, with the consequent fall in prices, rendered it difficult to meet obligations incurred during the inflation period.

Elliott, American Farms, 94–109.

Peffer, The Farmer's Side.

In 1870 the aggrieved farmers began to agitate for remedial legislation. The Patrons of Industry had been organized (1866) to render farming a pleasanter and more remunerative occupation. They had begun with an attempt to reduce expenses by coöperative buying; they now undertook to regulate freight rates, and so to reduce the cost of marketing their products. The Granges (so called from the grange or local organization) were strong in the upper Mississippi Valley, and they succeeded in inducing the legislatures of Illinois, Iowa, Minnesota, and Wisconsin to fix maximum rates for transportation charges. These laws were bitterly contested by the railway companies and finally repealed, but the movement was not without effect. The extent to which a railroad determines the industrial development of the region served was brought to public attention, and, since the granger laws were declared constitutional by the Supreme Court, a precedent for state control was clearly established.

Martin, History of the Grange Movement, Pt. VI.

Hadley, Railroad Transportation, 129–139.

Adams, Railroads, 123–132.

Detrick, Effects of the Granger Acts.

The Industrial Transformation of the South

For the North, the Civil War had inaugurated a new era of material expansion; for Southern industry, it meant complete prostration. The Confederacy, being the scene of conflict, suffered incalculably more than the loyal states. Towns were burned, bridges wrecked, railroad tracks torn up, plantations fallen to ruin. Cotton, the only marketable

Schwab, Ch. XII.

Garner, Reconstruction in Mississippi, Ch. IV.

Dunning, Reconstruction.

Rhodes, VI, Ch. 32, 37; VII, Ch. 41, 42.

Hammond, 127.

crop, had been used for breastworks, confiscated, or rendered unsalable by exposure. The wealthy were impoverished by the repudiation of the Confederate currency and Confederate bonds; the poor were destitute. One third of the adult males of the white population had fallen in battle or returned home invalided and incapacitated for work, and the proportion of breadwinners was seriously reduced. Slavery, the labor reliance of the old South, was lost beyond recovery. Land had depreciated to half its ante-bellum value, and the capital with which to make good the devastations of war was not to be found south of Mason and Dixon's line.

Du Bois, Souls of Black Folk, Ch. II.

Garner, Ch. XVI.

Washington, Story of the Negro, II, Ch. I.

The disasters of war and reconstruction did not fall on the white population alone. The emancipated blacks suffered for want of food, clothing, and shelter, and thousands of negroes perished of hunger and disease. There is reason to believe that the loss of life was four times greater for blacks than for whites. The Freedmen's Bureau did much to relieve this appalling destitution and to set the freedmen on the way to self-support; but it was obliged to work through the military organization. Army officers, however well intentioned, are hardly fitted to deal with a complicated economic situation.

Fleming, Industrial System in Alabama after the Civil War.

The Labor Problem. — The twenty years following the downfall of the Confederacy witnessed a change in the industrial order of the South that may fairly be termed an agricultural revolution. With emancipation, three million laborers passed immediately from a state of dependence and rigid surveillance to absolute freedom. The economic tie between master and slave was suddenly broken; the one was forced to seek laborers, and the other employment, in the open market. Both were unaccustomed to the wage relation, and both found difficulty in estimating in terms of money the services that had hitherto been rendered for mere subsistence. The freedmen, eager to realize the blessings of liberty and esteeming labor a badge of slavery, wandered about the country in search of pleasure, and rapidly gravitated to the towns. They worked only under

Hammond, Ch. IV.

the compulsion of absolute want, and pay day was usually followed by a week of idleness.

The planters, handicapped by the losses of the war and unable to command ready money, advanced rations to their laborers but postponed the payment of wages till the crops were in. Even then they sometimes failed to make over the money due, and the negroes grew suspicious. The unsatisfactoriness of the hiring system is evidenced by the decline in wage rates from $137.50 per year in 1860 to $129 in 1867, and $100 in 1868. The plantation system, profitable only with gangs of cheap laborers subject to absolute control, broke down under these conditions.

Du Bois, The Negro Farmer, 79–81.

The attempt to grow cotton with borrowed capital and wage labor having failed, landowners began to lease estates on shares. Tracts of from forty to eighty acres were rented to the more reliable negroes on varying conditions. If the landlord furnished seed, mule, plow, and rations, he was entitled to two thirds the crop. If, on the other hand, the renter supplied food, he kept half the crop. If he fed himself and owned stock and implements, he kept two thirds the cotton grown. A negro who had acquired a reputation for intelligence and industry might secure land at a stipulated rental in cotton or money and thus be free from supervision. Planters were ready to sell on easy terms considerable portions of their heavily encumbered estates, and in a series of good seasons, with fair prices, such a tenant might clear enough to buy the land. By 1874, within ten years after emancipation, the negro farmers of Georgia had thus acquired 338,769 acres.

Kelsey, Evolution of the Negro Laborer.

Washington, Story of the Negro, II, Ch. II.

Du Bois, Negro Landholder of Georgia, 665.

The poor whites, too, made good use of this chance to get possession of land and so secure opportunity for self-support. The necessities of planters combined with the ambition of landless laborers to break up the great estates, and the old-time plantations crumbled away into little farms. The tendency is evident in the statistics of farm acreage.

Banks, Land Tenure in Georgia, 30–77.

AVERAGE AREA IN ACRES OF SOUTHERN HOLDINGS

YEAR	ALL SOUTHERN STATES	SOUTH ATLANTIC	SOUTH CENTRAL
1860	335.4	352.8	321.3
1870	214.2	241.1	194.4
1880	153.4	157.4	150.6
1890	130.7	133.6	144.0
1900	138.2	108.4	155.4

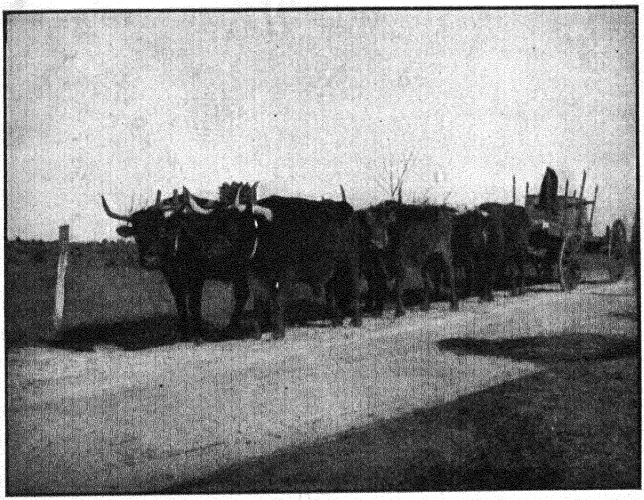
The reconstruction of agriculture was a slow and difficult process, but pluck and patience finally succeeded in rendering the South more productive under free than under slave labor. Dead lands were reclaimed by use of fertilizers; waste lands were brought under cultivation; machinery and scientific methods were brought to bear in the growing of cotton, sugar, and rice. Evidence of the losses of the war period and the gains of the subsequent decades may be gathered from farm statistics.

CROP STATISTICS

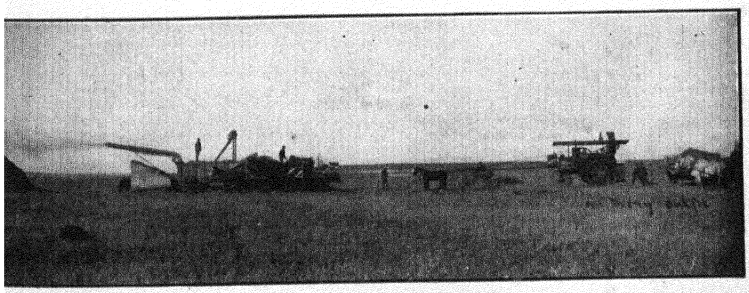
YEAR	COTTON	SUGAR	RICE
	Bales	Tons	Lbs.
1860	5,740,000	193,040	187,167,000
1870	3,000,000	45,000	73,635,000
1880	5,750,000	112,000	110,131,000
1890	7,450,000	136,000	128,591,000
1900	9,500,000	248,000	283,773,000

AVERAGE VALUE OF MACHINERY AND IMPLEMENTS PER ACRE

YEAR	UNITED STATES	NORTH ATLANTIC	NORTH CENTRAL	SOUTH ATLANTIC	SOUTH CENTRAL	WESTERN
1860	$.60	$1.21	$.67	$.32	$.52	$.33
1870	.66	1.43	.89	.22	.30	.48
1880	.76	1.58	1.00	.30	.35	.60
1890	.79	1.86	.98	.36	.37	.64
1900	.90	2.34	1.15	.51	.49	.56



HAULING FERTILIZER ON TO DEAD LANDS, CALHOUN, ALABAMA



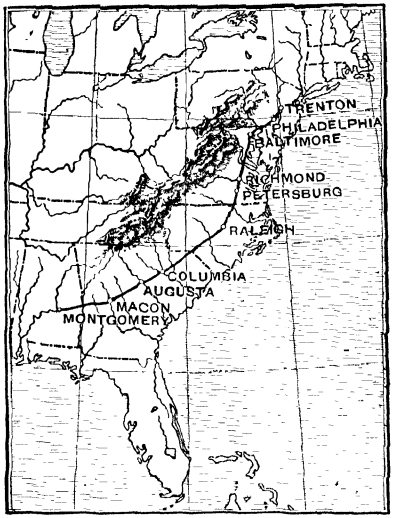
THRESHING WHEAT WITH TRACTION ENGINE, NORTH DAKOTA

Development of Cotton Manufactures. — The South's advantages for the manufacture of cotton goods had long been realized. There was water power in abundance, free all the year round, the raw material was to be had direct from the cotton gin, with no commissions or transportation charges added, and labor was at hand intelligent and willing. The long-dormant energies of the poor whites were utilized at last, capital was secured from the North and from abroad, and the South set upon the textile industry in good earnest. All along the "fall line" cotton mills were built with phenomenal rapidity, and the mountain people were gathered into factory villages. It was cheap labor, for the standard of living was not high, and fuel, food, and shelter cost little. Moreover, there was no prejudice against the employment of women and children and no demand for shorter hours or prohibition of night work. Little could be accomplished in the war decade, but between 1870 and 1880 great strides were made. South Carolina doubled the capacity of her mills and the value of her output, while North Carolina and Georgia were not far behind. By 1880 sixteen thousand people found employment in the Southern cotton mills, and their product was nearly one fourth that of New England. It became apparent that the white laborers had profited more than the blacks from the edict of emancipation.

Mass. Labor Bulletin, No. 10.

Young, American Cotton Industry, 54–99.

U. S. Census, *1900*, IX, 54–57.



THE FALL LINE

SOUTHERN COTTON FACTORIES

YEAR	SPINDLES	EMPLOYEES	VALUE OF PRODUCT
1860	298,551	10,152	$8,460,337
1870	327,871	10,173	11,372,186
1880	542,048	16,741	16,356,598
1890	1,554,000	36,415	41,513,711
1900	4,299,988	97,559	95,002,059

Stubbs, Sugar, 79–101.

Houston, Cotton, 113–128.

Shelfer, Tobacco, 129–144.

Other latent resources were developed by Northern capital and Northern entrepreneurs. The coal and iron deposits of the Appalachian Range were exploited with modern machinery; the phosphate beds of Florida and South Carolina and Tennessee were opened up, and the preparation of fertilizers became an important industry; the sandy levels of Florida were covered with fruit orchards; the bayou lands of Louisiana and Texas were drained and irrigated and converted into rice fields more profitable than those of South Carolina.

CHAPTER X

CONTEMPORARY PROBLEMS

The Protective Policy

NOTWITHSTANDING reductions in excise and customs duties made in the decade following the Civil War, the national revenues increased from year to year, until in 1883 the Treasury reported a surplus of $145,600,000. This was the inevitable result of the growth in wealth and population and in the consequent demand for the commodities subject to tax. The receipts from customs duties on sugar, silks, woolens, and iron manufactures were rapidly augmenting, as also from the excises on liquors and manufactured tobacco.

The surplus revenue could not be applied to the redemption of the outstanding bills of credit for fear of giving umbrage to the Greenback party, nor to the extinction of the government bonds without curtailing the circulation of the national banks. Financiers recommended the further reduction of Federal taxes, and this was seriously undertaken in 1883. The more obnoxious of the remaining excise taxes were repealed, *e.g.* those on matches, patent medicines, and perfumeries, savings-bank deposits and bank checks, and the charges on chewing and smoking tobacco were reduced by half. This measure relieved these several industries of a considerable burden and met with general approval; not so the attempt to reduce the customs duties. A Tariff Commission, appointed in 1882, submitted an elaborate report recommending general reductions of 20 and 25 per cent on raw materials and articles of necessary consumption. The

Dewey, Financial Hist. of U.S., 415–429.

Stanwood, II, Ch. XV.

Taussig, Tariff Hist. of the U.S., 230–250.

Rept. of the Tariff Commission, 1882, 1681–1710.

Republican majority in the House of Representatives refused to inaugurate action, and the measure was finally introduced in the Senate, as an amendment to the Internal Revenue Bill sent up from the House. The amendment was only accepted by the latter body after considerable modification in the interest of protection had been admitted. The duties on coarse woolens and cottons were reduced, since these manufactures were not menaced by foreign competition, but charges on the finer grades were actually raised. Iron and steel manufactures were taxed not quite so heavily as in 1875, but the duty on pig iron was reduced in proportion. The argument that American laborers must be protected against the "pauper labor" of Europe by high import duties on foreign products had been brought before the Commission by employers as well as by representatives of trade unions. American workmen were receiving on an average one and one half times the English wage, twice that paid in Belgium, three times the rate customary in France, Italy, Germany, and Spain. The counter argument that American prices raised the cost of living to two and three times the European level, and that the enhanced profits accruing from these prices were not necessarily applied to wages, did not have much influence with this Congress. The interest of the agricultural sections was steadily kept in mind, the import duties on beef, pork, lard, cheese, butter, wheat, corn, and oats being maintained. Since these commodities were not imported except from Nova Scotia and Canada, the New England farmers alone realized any benefit from such duties, while the wool growers of the Middle West were outraged by a repeal of the ad valorem duties on imported wools.

Sherman, II, 849–854.

Dewey, National Problems, Ch. IV.

Rept. of Tariff Com., 1882, 339–344, 431–432, 549, 603–612, 763–764, 838, 872, 887–889, 1053–1054, 1533, 1534, 1686–1688, 2035–2036, 2313–2333.

Rept. Mass. Bureau of Labor Stat., 1884.

Crisis of 1884. — The financial panic of 1884 was attributed to this very moderate abatement in the protection accorded to manufactures, but it would be difficult to prove that factory or mining interests were seriously affected. The crisis originated in Wall Street in the failure of four large banking firms. The collapse of the

Noyes, Forty Years of Amer. Finance, 92–103.

Second National, the Marine, and the Metropolitan banks within one disastrous week was due to no general depression, but to dishonest management and unwarranted speculation. The unusual stringency in the money market was occasioned by the displacement of gold by the newly coined silver, and by the sinking of vast sums in Western farms and railroads. The transcontinental roads had not yet attained a paying basis, and the interests of agriculture were threatened by falling prices. Import duties brought no benefit to the farmers of the interior, since their domestic market was overstocked with produce. The wheat crop of 1884 was the largest that had ever been harvested, and the price fell to sixty-four cents a bushel, half that obtained three years before. This price did not cover the cost of production, and many farmers were ruined. The inability of the agriculturists to meet their obligations to Eastern capitalists and to purchase the products of Eastern mills and workshops, extended and prolonged the industrial depression, and the glut of the market became general.

Sherman, II, 879–881.

Finance Rept., 1884, 157–159.

Wright, Industrial Depressions, 65–90.

U. S. Statistical Abstract, 1904, 376.

Conant, Banks of Issue, 61–62.

The McKinley Act. — When the Democrats came into control of the national government (1884), several half-hearted attempts at tariff revision were made (*e.g.* Morrison of Illinois urged a twenty per cent horizontal reduction and free raw materials); but the party as a whole was not committed to the policy of revision. The issue was definitely formulated by President Cleveland in his annual message of December, 1887, when the excess revenue had mounted to more than $100,000,000 a year, and the taxes must evidently be abated. The President recommended that customs duties be reduced, not arbitrarily and by a sweeping horizontal cut, but with due regard to the business interests involved. Established industries should not suddenly be deprived of advantages on which calculations of success had been based. The welfare of mechanics and operatives must be kept in mind, hence tariff revision should aim to reduce the cost of living without curtailing the opportunity for employment or forcing any reduction

Dewey, National Problems, Ch. XI.

President's Message, Cong. Record, XIX, Pt. I, 9–11.

of wages. The interests of farmers and farm laborers were even more weighty, since nearly half the total population was represented in this class. Unprotected by import duties, the prices of most farm products were conditioned on the foreign market, and this must not be jeopardized by discriminating tariff schedules.

Noyes, Forty Years of American Finance, 127–138.

The surplus and the tariff were the main questions at issue in the campaign of 1888. The result of that election was an unprecedented victory for the Republican party. Accounts may be balanced as effectually by increasing expenditure as by reducing revenue. The former expedient would involve the party in no embarrassing antagonisms, while it afforded opportunity to strengthen political allegiance; hence Congress extended the pension list to the point where the annual appropriation on this account would speedily exhaust the surplus. The excess revenues thus disposed of, the question of tariff revision was taken up. In May, 1890, the Committee on Ways and Means (William McKinley, chairman) reported a bill proposing a general increase of duties. The measure was adopted in House and Senate by a strict party vote, only three Republicans, representatives of the farming interest, voting against the bill. Higher duties were imposed on the finer grades of cottons and woolens, on iron and steel, glass manufactures, etc., but the rates on raw materials were not reduced. A serious effort was made to extend the benefits of protection to farm products, the war duties on wool were restored, while heavy imposts were laid on eggs, potatoes, beans, barley, wheat, corn, tobacco, flax, and hemp. The tobacco growers realized some advantage from the exclusion of the high-grade leaf from Cuba and Sumatra, but the grain growers were unaffected, since no cereals were imported. James G. Blaine asserted, and truly: "There is not a section or line in the entire bill that will open the market for another bushel of wheat or another barrel of pork." There was, on the other hand, reason to fear that our exclusive policy might seriously curtail the foreign market for our agricultural produce.

Taussig, Tariff Hist. of U.S., 251–283.

Blaine, Reciprocity Letter.

51st Cong., 1st Session, Sen. Ex. Doc. 158.

In the hope of inducing foreign nations to abate their retaliatory tariffs, Blaine urged upon Congress and finally secured the so-called reciprocity clause of the McKinley Act. The President of the United States was empowered to restore former import duties on sugar, molasses, tea, coffee, and hides in case of any country whose import charges on our produce (agricultural or otherwise) he might deem to be unreasonable and unjust. The immediate result of this threat was the negotiation of trade agreements with Brazil, San Domingo, Cuba, Porto Rico, Guatemala, Salvador, British Guiana, Nicaragua, and Honduras. Of European nations, Austria-Hungary and the German Empire alone accepted our offer of reciprocal commercial advantage.

Ford, Reciprocity under the Tariff Act of 1890.

Laughlin and Willis, Reciprocity, Ch. VI, VII.

Griffin, List of References on Reciprocity.

The enactment was notable for the appearance of certain business combinations as influential factors in the determination of duties. The binding twine trust, for example, requested a duty of two and a half cents a pound on its product. The tax was protested by the farmers of Kansas and the West, who were using great quantities of twine for binding sheaves, and their representatives refused to vote for the bill unless binding twine was placed on the free list. This conflict of interest was compromised, and the duty was fixed at seven tenths of a cent per pound. The American Sugar Refining Company urged that a differential of profit be secured their industry by increasing the duty on refined sugar or by the repeal of the tax on their raw material. The former device was protested by consumers, since sugar had become a necessity, even to the poor; the latter was protested by the cane planters of Louisiana and the beet farmers of the Middle West. The duty on refined sugar was reduced from three and a half cents to one half a cent a pound, while raw sugar was admitted free; but full compensation was accorded domestic producers in a bounty of two cents a pound on all sugars grown in the United States. The only loser in this bargain was the government. Since the bounty charge amounted to $6,000,000 per year and the remission of the

Census, *1900*, VI, 452–460; IX, 545–555.

duty cut down the annual revenue by $55,000,000, the concession to the sugar trust cost the Treasury dear. The annual surplus was speedily converted into a deficit.

Aldrich, Rept. Wholesale Wages, Prices, and Transportation, I, 8–14.

The McKinley Act proved highly unpopular, for prices and cost of living increased with little compensating advance in wages. The farmers experienced no improvement in the market for their products. Wheat fell from eighty-four cents a bushel in 1890 to forty-nine cents in 1894, and prices of corn, oats, rye, and barley declined in the same proportion. The woolen manufacturers complained that the protection given them did not offset the enhanced cost of their raw materials.

Dewey, 455–458.

Sherman, II, Ch. LXV.

Stanwood, II, Ch. XVII.

Laughlin and Willis, Ch. VIII.

Dewey, National Problems, Ch. XVII.

The Wilson-Gorman Act. — The tariff was the dominant issue in the campaign of 1892, when the Democrats won the election and Cleveland was returned to the presidency. He immediately intrusted Wilson of West Virginia with the task of devising a tariff schedule that should embody the Democratic doctrine of free raw materials and moderate ad valorem duties on finished products. The Wilson Bill placed wool, iron, steel, coal, and lumber, together with sugar, on the free list, and proposed a proportionate reduction in the duties on the corresponding manufactures. The necessary revenue was to be derived from duties on tobacco, spirits, playing cards, etc., but lest these taxes should prove insufficient, a tax of two per cent on incomes above $4000 per year was added by amendment. This revival of an emergency war measure was opposed in the moneyed sections of the country, but enthusiastically supported by the Populists of the South and West. The Wilson Bill passed the House with no further amendment; but in the Senate, where the Republicans had control, it met with serious resistance. With the aid of Senator Gorman, amendments were adopted imposing duties on low-grade sugars, on wool, coal, iron, and other raw materials, together with compensating rates on refined sugar, woolens, and a long list of manufactured articles. When the mutilated bill was returned to the House, that body refused to concur. The questions in dispute were referred







SUGAR PLANTATION IN HAWAIAN ISLANDS

Japanese laborers.

to a conference with slight avail, and the bill was in danger of going by default, when the Democratic leaders of the House agreed to accept the Senate amendments, except the wool tax, in the hope of later enlarging the free list by separate enactments. Thus the Wilson-Gorman Bill became law though disapproved by both parties and meeting the needs of no interest, public or private. The range of duties was reduced from the McKinley Act average of 49.5 per cent to an average rate of 39.94 per cent.

The Dingley Act. — The Republicans won the election of 1896 on the currency issue, but President McKinley regarded the victory as an indorsement of his protective policy. Dingley of Maine was commissioned to prepare the tariff bill that was submitted to the House of Representatives in an extra session convened immediately after the inauguration. The bill was rushed through the House in the form proposed by the Committee of Ways and Means, but in the Senate, where parties were more equally divided, it met with stubborn resistance. The Finance Committee, to which the measure was referred after the initial debate, was made up of four Republicans, four Democrats, and one Populist, and thus the balance of power rested with the latter, Senator Jones of Nevada. He succeeded in incorporating in the reported bill a series of amendments in the interest of the farmers, ranchers, and lumbermen of the Far West. A duty of one cent a pound on citrous fruits was introduced in response to the demands of the orange growers of California, one and one half cents a pound on hides was offered as a concession to the cattlemen of the plains, while a protective duty on carpet wools was admitted in the interest of the sheep ranches of Montana and Idaho. The duty on lumber ($2 per thousand feet) served to protect our lumber merchants against competition from Canada. The bill, when finally passed, accorded protective duties to every business interest that could profit by them, at rates higher than had been adopted in any previous tariff. The average range of duties was 57 per cent.

Taussig, Tariff Act of 1897.

Laughlin and Willis, Ch. IX.

Tariff Hearings, 1897.

Moody, Truth about the Trusts, 66.

The Dingley Tariff met with serious criticism on the ground that it served to promote industrial combinations. It was asserted that the representatives of various trusts brought the influence of vast wealth to bear upon the congressional deliberations. The tin plate combination, for example, secured a renewal of the rates of the McKinley Act, although the tin mines in whose interest the duties were originally proposed had failed to materialize. The sugar trust extorted a differential of three fourths of a cent a pound, two and one half times that allowed under the Wilson Tariff. Even the protection intended to advantage the farmers and other raw material producers accrued to the centralized industries. The enhanced value of American hides enriched the beef packers, since tanning had become a by-industry of the slaughterhouse, while the duty on lumber insured monopoly of the domestic market to great timber companies and hastened the ruinous exploitation of our forest lands. The conflict of interest between manufacturer and producer of raw material induced further criticism. The woolen manufacturers protested the high duties on wool, the shoe manufacturers opposed the tax on hides, the paper manufacturers demanded free bleaching powder; but these interests were usually able to make good the enhanced cost of raw materials by advancing the selling price of their products. Certain great business combinations, such as the United States Steel Corporation, realized enormous profits from the protected market. The output of iron and steel developed to phenomenal proportions under the Dingley Tariff. High prices on domestic sales enabled our manufacturers to export agricultural implements, structural iron, steel rails, etc., to foreign markets, and there to underbid their English and German competitors. But the prosperity of the manufacturer was promoted at the expense of the consumer. The prices of all the essentials that enter into the cost of living — food, clothing, fuel, building materials, house furnishings, etc. — have risen steadily since 1897. The total rise in prices amounted, in

Patten, Economic Basis of Protection.

Bulletins, Bureau of Labor, Nos. 51, 53.

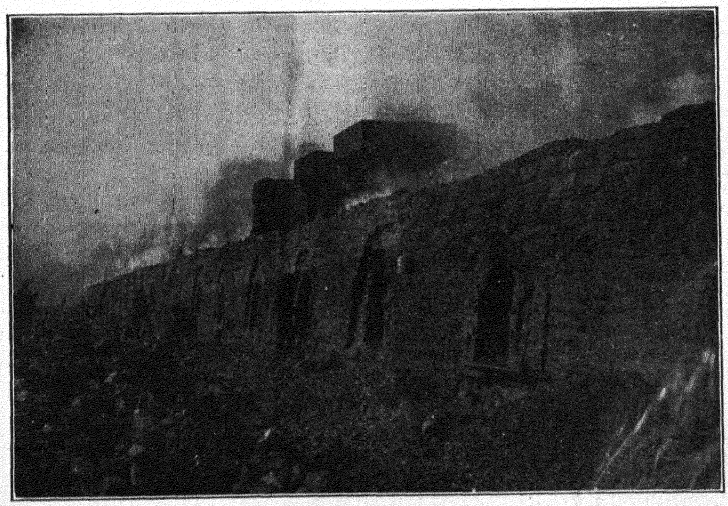
1908, to an addition of forty-three per cent to the prices prevailing in 1896. Hamilton's assumption that manufactures once established, domestic competition would reduce prices to the cost of production held good in an epoch when industrial monopolies were unknown; but the business combinations of to-day, having established control of the domestic market, fix prices without regard to cost.

The enactment of the Dingley Tariff coincided with a revival of prosperity in which all the leading industries shared. A failure of the foreign wheat crops in 1896 and 1897 created a demand for American grain that brought up the price from 53 cents a bushel in August, 1896, to $1 a bushel in August, 1897. A phenomenal crop in the latter year brought $500,000,000 into the hands of the producers. This meant the turning of the tide. The farmers of Kansas and Nebraska began to pay off their mortgages, and the enhanced purchasing power of the agricultural sections was felt in renewed demand for a great variety of manufactured goods. The factories that had shut down or curtailed output during the period of depression began to run on full time, workshops and rolling mills were reopened, operatives and artisans found ready employment at good wages, and the freight capacity of the railroads was taxed to transport the augmenting volume of traffic. Importation fell off in the years immediately following the Dingley Tariff, but foreign merchants rapidly recovered their American market until the importations of 1903 passed the billion dollar mark. Export figures reached $1,032,007,600 in 1897, and the volume steadily increased from year to year. Of the total exports in 1908, 24.5 per cent were foodstuffs, 46.86 per cent raw materials of manufacture, and 27.77 per cent manufactured goods.

The Dingley Tariff was in force twelve years and thereby attained the distinction of being the longest-lived tariff in our financial history. During this period changes in methods of production, in natural resources, and in market conditions had so far altered the status of the protected industries that some revision of the schedules seemed in-



WAYSIDE FORGE



COKE OVENS OF BIRMINGHAM, ALABAMA

consin, and Michigan, whose representatives determined to "stand pat" for the old régime. The citizens of the mountain states, Washington, Wyoming, Idaho, Utah, and Montana, rallied to the support of duties on lumber, hides, wool, copper, and beet sugar. Even Missouri sent Republican representatives to secure protection for her zinc mines. California was opposed to duties on lumber and manufactured goods, but was eager to obtain additional protection for her fruits and wines. The stanch Democracy of the "Solid South" was breaking down under the influence of her infant industries, the cotton mills, iron manufactures, phosphate mines, and petroleum wells that clamored for protection. The interest of the consumers, though the majority of the population in every section, were not so well organized and therefore less influential.

The overwhelming Republican victory of November, 1908, assured revision on conservative lines. The House of Representatives had rejected a proposition for a tariff commission that should make an impartial study of the comparative cost of production at home and abroad and so indicate the just measure of reduction in the several schedules, but had empowered the Committee of Ways and Means to collect information in a series of tariff hearings. During the winter public hearings were held at Washington and a mass of testimony was accumulated, furnished for the most part by manufacturers and other interested parties. The extra session convened on March 15, 1909, lasted until August, and the tariff was the sole subject under debate. The bill as reported by the Committee of Ways and Means (Sereno Payne of New York, chairman) proposed a thoroughgoing revision, involving a considerable reduction of the duties on manufactures and on free raw materials, *i.e.* coal, iron ore, and hides. The attempt to put lumber and petroleum on the free list had failed because of the persistent opposition of the "stand-patters," and various rates had been raised above the Dingley level in the interest of influential manufacturers.

Tariff Hearings, 1908–1909.

The "insurgent" Republicans from the Middle West strove to amend the bill in the consumer's interest, and did succeed in removing duties on the products of petroleum, but the bill as it passed the House was distinctly a protective measure. Meantime Senator Aldrich, chairman of the Finance Committee, had been preparing a bill more in keeping with Republican traditions, and this was introduced in the Senate as a substitute for the House bill. The Dingley rates on petroleum products, twenty-five cents per ton on iron ore, sixty cents per ton on coal, $1.50 per thousand feet on lumber, together with many well-concealed advances on diverse manufactures, rendered the Aldrich bill as it passed the Senate, a more effectively protective measure than the Dingley Act itself.

Willis, Tariff of 1909.

The House rejected the Senate bill and the Senate rejected that sent up from the House, so that both bills with the mass of amendments attached were referred to a Joint Conference. Here there was a veritable tug of war (July 12–29), but when, exhausted by the fatigues of a midsummer session, the conferees were about to agree upon a measure that embodied some of the worst features of the rival bills, President Taft intervened. He intimated his determination to sign no measure that did not provide for the consumer's interests, and urged the restoration of coal, hides, and lumber to the free list. Under executive pressure the most obnoxious schedules were hastily revised within the limits defined by the original bills and the numerous amendments thereto; the duty on iron was reduced to fifteen cents per ton, that on coal to forty-five cents, the lumber duty to $1.25 per thousand feet, while hides were admitted free. The Payne-Aldrich Bill passed the House on July 31 and the Senate on August 5, and was signed by the President on the same day. In the official statement of his reasons for signing the bill, Mr. Taft asserted that it represented a substantial revision downward, that with the exception of the duties on "whiskey, liquors and wines, silks and high class cotton goods, all of which may be treated as luxuries and proper

subjects of a revenue tariff," there were few increases in rates. The admission of tobacco and of three hundred thousand tons per annum of sugar from the Philippine Islands duty free, was an act of justice in which he took much pride. The woolen schedule where the Dingley rates were maintained, although confessedly far above the rates necessary to protect the manufacturer against foreign competition, the President regarded as the "one important defect in the bill."

Shaw, Payne Aldrich Tariff.

Comparisons of the rates imposed in the Payne-Aldrich Act with the Dingley average, made by the Finance Committee of the Senate, by the customs house experts, and by the public press, failed to demonstrate any substantial change. The critics of the measure asserted that there had been an average advance of two per cent ad valorem on goods imported; its defendants claimed a reduction of from one and a half to two per cent. The difference in cost of production at home and abroad, so much talked of during the campaign, was not the determining issue in congressional debate, since the effort to secure adequate data for the estimation of such difference had been defeated by the leaders of the party in power. Senator Beveridge's bill for a preliminary tariff commission had been voted down although indorsed by the National Manufacturers Association, and the provision of the new law for a Tariff Board was shorn of all significance by eliminating the function of investigation. The evidence submitted by the German government as to costs of production in that country was not published until the Payne-Aldrich Bill had reached the final stages.

Taussig, Tariff of 1909.

The mysteries of tariff-making were never better exemplified than in this most recent attempt to meet all the demands of a widely diversified constituency, to reconcile the conflicting interests of manufacturer and consumer, to adjust the balance between the producers of raw material and finished product. A conspicuous example was the battle waged over Schedule M, Paper and Woodpulp. In spite of a vigorous campaign on the part of newspapers

and publishers against the excessive import duties on paper, the powerful business combinations in control of this industry were able to resist thoroughgoing revision. Early in 1908 the House of Representatives had appointed a select committee to investigate the paper manufacture and consider modifications in the duties. They made a careful and impartial inquiry and brought in a report to the effect that the cost of production was somewhat greater in this country than abroad, together with the recommendation that wood pulp be transferred to the free list and that the duty on print paper be reduced from $6 to $2 per ton. The recommendations of the committee were adopted by the House, but in the Senate the duty on print paper was raised to $4 per ton. The Joint Conference agreed upon $3.75, and stipulated that the duties on wood pulp were to be remitted only in case Canada should remove her export duties on the same. The International Paper Trust owns 4,500,000 acres of spruce timber on both sides the boundary and therefore prefers to manufacture its own pulp. There is no import duty on spruce timber.

Willis, Tariff, 1909.

The reciprocity policy that had been so successful a feature of the McKinley and Dingley acts was abandoned. In place of the proposal to lower customs duties in respect to countries that offered reciprocal favors, the Payne-Aldrich Tariff provided that an increment of twenty-five per cent ad valorem should be added to the whole range of duties on imports from countries that fail to accord us the most favored nation treatment. Under the Dingley Act a reduction of twenty per cent on specific commodities had been made in a series of treaties with governments that agreed to accord us corresponding favors; but now a threat was substituted for an invitation, the termination of the reciprocity treaties was announced, and only by the most skillful diplomacy was tariff war with France and Germany averted. Moreover, our trade with Canada, amounting to $242,000,000 per annum, was in jeopardy.

The revenue-producing capacity of the new tariff was in doubt from the first. Commercial restrictions mean declining imports and diminishing customs receipts. Certain sumptuary taxes were imposed on articles of luxury, such as automobiles and foreign-built yachts, on wines and brandies, and on injurious drugs, such as opium, morphia, and cocaine; but even so a deficit was feared. Provision for an inheritance tax was introduced by the House Committee on Ways and Means, but this was abandoned on the ground that such taxes were already levied in many states, and an income tax amendment was carried in the Senate by insurgent and Democratic votes. In place of this unpalatable expedient, the Administration suggested a tax of two per cent (later reduced to one per cent) on the net revenues of all business corporations whose income exceeded $5000 per annum. The constitutionality of this federal tax on corporations chartered by the states is yet to be tested.

Conant, Corporation Tax.

Expansion of Commerce: Decline of Shipping

The high tariff policy, maintained with slight modification for fifty years, has had the effect of checking the importation of foreign goods. Imports have increased, indeed, but not more rapidly than population, while the ratio of exports to population has steadily risen.

Year	Imports per Capita	Exports per Capita
1860	$11.21	$10.60
1870	11.31	10.19
1880	13.32	16.43
1890	12.60	13.50
1900	11.14	17.96
1908	13.57	21.04

With the exceptions of 1875, 1888 and 1889, and 1893, years of industrial depression, the balance of trade has

Laughlin and Willis, Ch. X.

been in our favor for a generation. The total excess of exports over imports for thirty years past exceeds eight and a quarter billion dollars.

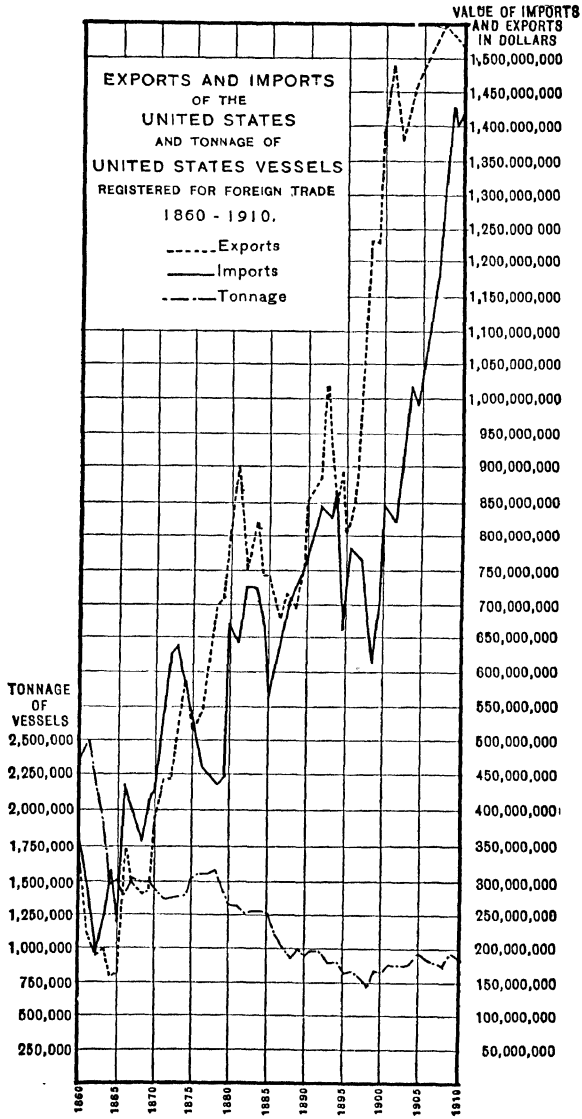
For every year following on 1897 the value of our exports has exceeded $1,000,000,000. This extraordinary showing is due in part to the increasing foreign demand for the raw materials supplied by American farms, mines, and forests. The export tables of 1908 report $437,800,000 in raw cotton, $100,000,000 in pig copper, $34,000,000 in leaf tobacco, and $21,000,000 in naval stores. During the last two decades of the nineteenth century we achieved a notable commercial triumph in the conquest of foreign markets for our manufactured commodities. The surplus products of our cotton mills, shoe factories, iron and steel works, etc., have sought and secured purchasers abroad. Cotton goods to the value of $22,000,000 are sent to the Orient, where they sell in competition with English and German goods. Sewing machines to the amount of $7,000,000 and agricultural implements worth $24,000,000 are annually sent to foreign markets, and the total export of iron manufactures in 1908 amounted to $184,000,000. Farm products are now being exported, not only in the rough, as grain, cattle, etc., but as prepared foods, which represent greater value in proportion to bulk. The mills of Minnesota grind not for domestic markets only, but for European as well. The Pacific ports — San Francisco, Portland, Seattle, and Tacoma — ship the harvests of the wheat ranches of California and the Columbia River basin to Hawaii, Japan, China, and India. One third of these shipments is sent in the form of flour, that wheat may the more easily supplant rice in the Oriental diet. Refrigerator cars and refrigerator steamers enable the packing houses of Chicago and Omaha to send dressed meats to any part of the world. The exports of prepared meats in 1908 were six times the value of the live animals shipped abroad. Modern transportation facilities bring the American farmer, whether on the cotton lands of the "black belt," the cattle ranches of the plains, the orange groves

Rept. of the Industrial Commission, VI, Pt. III, VIII.

North, Tariff and Export Trade.

Rept. Indust. Com., VI, Pt. I, II.

Rept. Indust. Com., VI, Pt. I, II.


EXPORTS AND IMPORTS
OF THE
UNITED STATES
AND TONNAGE OF
UNITED STATES VESSELS
REGISTERED FOR FOREIGN TRADE
1860 - 1910.
Exports
Imports
Tonnage
VALUE OF IMPORTS AND EXPORTS IN DOLLARS
1,500,000,000
1,450,000,000
1,400,000,000
1,350,000,000
1,300,000,000
1,250,000,000
1,200,000,000
1,150,000,000
1,100,000,000
1,050,000,000
1,000,000,000
950,000,000
900,000,000
850,000,000
800,000,000
750,000,000
700,000,000
650,000,000
600,000,000
550,000,000
500,000,000
450,000,000
400,000,000
350,000,000
300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
TONNAGE OF VESSELS
2,500,000
2,250,000
2,000,000
1,750,000
1,500,000
1,250,000
1,000,000
750,000
500,000
250,000
1860
1865
1870
1875
1880
1885
1890
1895
1900
1905
1910

of California, or the vegetable gardens of Texas, within reach of a profitable market. Apples are sent from Hood River, Oregon, to the epicures of Paris, and pineapples from Hawaii reach the fruiterers of New York City.

Laughlin and Willis, Ch. III, XI.

The rapidly increasing proportions of our export trade necessitate the seeking out of new purchasers. The industrial justification for the purchase of Alaska, the annexation of the Hawaiian Islands and of Porto Rico, the retention of the Philippines, and the maintenance of reciprocity relations with Cuba is the advantage of securing commercial control of these complementary markets. To the mining camps of Alaska we send provisions in exchange for gold; to the tropic islands we send foodstuffs, textiles, and machinery in exchange for raw sugar, fruits, and hemp. Our exports to Cuba come to more than $42,000,000 annually, Hawaii and Alaska take from us more than $18,000,000 each, and Porto Rico $23,000,000, while our exports to the Philippine Islands amount to $5,000,000 a year, not more than half their total sales to the United States.

Semple, Ch. XVIII.

Stat. Abstract of U. S., 1909, 358, 557–562.

Marvin, Ch. XVI.

This period of extraordinary commercial expansion has witnessed an unparalleled falling off in our ocean marine.

Stat. Abstract of U. S., 1908, 284, 296–298.

Year	Tonnage	Tonnage per Capita	Proportion of Foreign Commerce carried on in American Vessels
			Per Cent
1860	2,379,396	.075	66.5
1870	1,448,846	.037	35.6
1880	1,314,402	.026	17.4
1890	928,062	.014	12.9
1900	816,795	.010	9.3
1908	930,413		9.8

U.S. Census, *1900*, X, 209–239.

The reverses of the Civil War have never been made good. During the generation following, the tonnage registered for the foreign trade decreased fifty per cent. The lowest

ebb was reached in 1898, the year of the Spanish War, when our total tonnage of steam and sailing vessels combined was but 726,213. Now, at the opening of the twentieth century, nine tenths of our exports and imports are consigned to ships that float a foreign flag.

This decay in our ocean marine is the more striking because the tonange employed in the coastwise trade has doubled, and that on the Great Lakes has trebled during the same period. Commercial ventures in these waters are protected by the exclusion of foreign competitors. The immense shipments of iron ore, lumber, and wheat from Duluth, Chicago, and Milwaukee to Buffalo and other Lake Erie ports, call into requisition great freight steamers of speed, strength, and hold capacity not excelled in seagoing vessels. The extension of our coastwise regulations to Alaska, the Hawaiian Islands, and the Philippines has given the growing traffic from our Pacific ports largely into the hands of American vessels, and the tonnage registered for the Pacific trade has increased by 120 per cent since 1897. The total tonnage now employed in the coastwise trade and in the service of the Great Lakes and western rivers is 6,500,000, eight times the tonnage registered for foreign trade.

Stat. Abstract of U.S., 1909, 301–302.

Marvin, 375–380, 400–412.

Bates, Ch. XVIII.

Semple, Ch. XIX.

The Subsidy Policy. — Legislation in behalf of our seagoing marine has been broached in Congress several times in the past twenty years. Differential tonnage duties and preferential tariffs, after the precedent of the first decades of our national history, are incompatible with the commercial treaties now in force, and the subsidy policy, practiced by our principal European competitors, has been adopted as the best means of strengthening our merchant service. Senator Frye of Maine brought forward two bills in 1891, the first proposing to subsidize mail steamers and the second freight steamers and sailing vessels, in proportion to speed and tonnage. Both measures passed the Senate, but the second was defeated in the House, and the Postal Aid Law, as finally enacted, provided for much lower rates than Frye had originally proposed.

Marvin, Ch. XVIII.

Bates, Ch. XXVII.

Griffin, List of References on Subsidies.

Rept. Frye Committee, 51 Cong., 1st Session, House Rept No. 1210, also Nos. 2766, 3273.

SUBSIDY OFFERED TO MAIL STEAMERS, 1891

CLASS	TONNAGE	SPEED	PAYMENT FOR OUTWARD VOYAGE
		Knots	Per Mile
First	8000	20	$4.00
Second	5000	16	2.00
Third	2500	14	1.00
Fourth	1500	12	0.67

Frye, North Atlantic Steamship Transportation.

Under this law, mail contracts were negotiated with the Pacific Mail Company for service between New York and Colon, Panama, and San Francisco, and from San Francisco to Hongkong and Yokohama; with the Oceanic Steamship Company for service between San Francisco and Honolulu and Australia; with the Ward Line to Havana and Mexico; with the Red D Line to Venezuela, etc.; but our Pacific and South American service was not endangered by European competition. The only company prepared to undertake a mail contract for transatlantic service was the Inman Line, recently come under American management. The subsidy of $12,000 on every outward voyage enabled this company to maintain a fleet of four first-class steamers. These vessels, together with some of the larger coasting steamers, were requisitioned for the government service during the Spanish War, when the requirement that all of the officers and one half of the crew of a subsidized ship be American citizens proved to have political as well as economic significance.

McVey, The Frye Subsidy Bill.

The subsidy offered in 1891 proved insufficient to induce new ventures in the transatlantic service or to maintain contract vessels on the longer routes to South America, Australasia, and the Orient. Although four fifths of the freight and three fourths of the first cabin passenger traffic originates in the United States, the major part of the shipping employed belongs to Great Britain, Germany, France, and Japan, so that large sums are every year paid to foreign companies in freights and fares as

well as for mail service. In the hope of enabling American ships to compete with the heavily subsidized English lines, Senator Frye reintroduced in 1901 a general subsidy bill. It called for an annual appropriation of $9,000,000 for a term of thirty years. The rates proposed were one third higher than those already prevailing, and they were offered to freight steamers and to sailing vessels. The bill was vigorously supported by the commercial and shipbuilding interests, but it was ultimately defeated by the opposition of the agricultural sections South and West.

Repts. Frye Committee, 55th Cong., 3rd Session. Senate Rept. No. 1551.

57th Cong. 1st Session, Senate Rept. No. 201.

Again in January, 1910, when the number of contract vessels had dwindled to four on the Atlantic and four on the Pacific, and the mail subsidy had shrunken to $1,185,000 per year, Congressman Humphreys of the State of Washington introduced a bill in behalf of the Pacific merchant marine. Foreign built steel vessels were to be admitted to American registry and the mail subsidy was doubled for vessels of the second and third class engaged in Pacific service, ships owned by railway companies being excluded. The tonnage tax was raised from six cents to twelve cents (never to exceed $1.20 per ton per year) but eighty per cent of this charge was to be remitted for United States vessels carrying American boys as apprentices.

Spring, Ship Subsidies.

The International Mercantile Marine Company. — The restoration to ordinary trade of the merchantmen requisitioned for transport service in the South African and Spanish-American wars brought on ruinous competition and a rate war that threatened disaster even to well-established lines. In 1902 a combination of the principal transatlantic companies, with a view to maintaining profitable rates, distributing tonnage among the ports and railroads to be served, and adjusting sailings to traffic, was undertaken by C. A. Griscom, president of the Inman Line, and J. P. Morgan, the great New York banker. The possession of the Inman, Red Star, and Leland lines, and the purchase of a majority interest in the Atlantic Transport, White Star, and Dominion lines gave the combination control of one hundred and forty first-class

Gunsburg, The Atlantic Shipping Combine.

Meade, Capitalization of the Int. Mer. Marine Co.

Chamberlain, The New Cunard Steamship Contract.

steamers, representing more than a million tons freight capacity and one third the transatlantic passenger accommodations. The negotiation of a "working agreement" with the two great German lines and the principal French and Dutch companies gave the International Mercantile Marine a practical monopoly of commerce between Europe and America. Alarmed for the integrity of their merchant service, the British government offered the Cunard Company, as the price of independence, an annual subsidy of $750,000 on a twenty-year contract, and subsidies were withdrawn from the White Star line.

OCEAN FREIGHT RATES ON WHEAT, CORN, RYE PER CWT. FROM NEW YORK TO LIVERPOOL

1886	11.59	1897	10.72
1887	8.75	1898	12.03
1888	9.19	1899	8.53
1889	13.78	1900	11.81
1890	8.53	1901	4.38
1891	10.94	1902	5.03
1892	9.19	1903	5.03
1893	8.31	1904	3.94
1894	6.78	1905	5.69
1895	8.97	1906	5.03
1896	10.28		

The Morgan combination was formed at the close of a decade of abnormal prosperity, and the subsidizing companies were taken over at a price based on the revenues of 1900 with no regard to cost of ships or previous capitalization. The economies of combination were overestimated and the difficulties in the way of maintaining monopoly of the transatlantic trade were miscalculated. The panic of 1903 well-nigh wrecked the enterprise, and its capital stock of $170,600,000 shrank to $70,000,000 market value. No dividends have as yet been paid on preferred or common stock. The International Mercan-

tile Marine has lost control of its French, German, and English lines, but it has done much to insure financial permanence to the American transatlantic service.

Currency Problems

Demonetization of Silver: the Gold Standard. — Our bimetallic currency system has never been in full and successful operation. The overvaluation of gold in the Coinage Act of 1834 was enhanced by the enormous output of the California mines. Production of silver in the United States was inconsiderable until 1870 and the annual output was readily absorbed in the arts, little was brought to the mints, and that little was coined into debased fractional currency, as provided by the Act of 1853. The sum total of the silver dollars coined from 1789 to 1873 was but eight millions, while gold had been coined since 1850 at the rate of $32,000,000 per year. No specie was in circulation during the war period except the $25,000,000 in gold used on the Pacific coast. In the attempt to get back to a specie basis, Congress naturally overlooked the part that silver had been intended to serve in our currency system. The Coinage Act of 1873 aimed to conform currency legislation to existing conditions; the silver dollar of 371.25 grains was dropped from the list of coins to be minted, but the manufacture of a coin containing 378 grains of pure silver was authorized for use in the Oriental trade. This trade dollar, like the fractional silver, was given legal tender efficiency to the amount of five dollars only.

Dewey, 403–410.
Laughlin, Ch. VII.
Rept. of the U.S. Monetary Commission, 1876.
Noyes, American Finance, 35–42.

The demonetization of silver attracted little attention at the moment, but it was soon denounced in bitterest terms as a fraud perpetrated upon an unsuspecting people by the money lenders of Wall Street. The supposed plot was not discovered until the increasing output of silver from the Nevada mines brought an oversupply of that metal into the market and caused a fall in price. Unfortunately for this interest, the foreign market was seriously

curtailed at this same time by the demonetization of silver in Germany (1871), in Holland and the Scandinavian Peninsula (1875), and in Austria (1879). The Latin Union continued to use silver as legal tender, but suspended coinage in 1873. By consequence, the market ratio of silver to gold veered from 15.57 in 1871 to 17.87 in 1876. Close upon this drop in market value arose a demand for the renewed coinage of silver at the legal ratio of sixteen to one. The agitation originated with the mine owners of Nevada and Colorado, who wished to dispose of their product at the mint; but it was eagerly seconded by the debtor class, the unfailing advocates of cheap and abundant money. The farmers of the new West, struggling under heavy mortgages, were easily convinced that the value of gold had been advanced by the money monopolists of New York City, and that silver was the true measure of purchasing power. The panic of 1873 and the prolonged stringency in the money market lent plausibility to this not unnatural inference.

Laughlin, Ch. XIII.

Sherman, II, 603–635.

Richard Bland of Missouri brought before the House (1876) a bill providing for the free and unlimited coinage of silver at the ratio established in 1834. The bill passed the House after protracted debate, but a Senate amendment restricted the amount of silver bullion that might be presented at the mint and authorized the secretary of the treasury to coin at his discretion from two to four million dollars' worth of silver per month. President Hayes vetoed the measure on the ground that the proposed dollar was eight or ten cents less in value than it professed to be; but the bill was carried over his veto and became law in 1878. The silver dollars coined under the Bland Act were to have full legal tender efficiency, and their circulation was furthered by the issue of paper certificates against the coin held at the mints.

Noyes, Am. Finance, Ch. IV, VI.

This law was in force for twelve years, during which time there were coined $369,400,000 silver dollars, and the coinage of gold for the same interval amounted to $470,600,000. The volume of the specie currency was

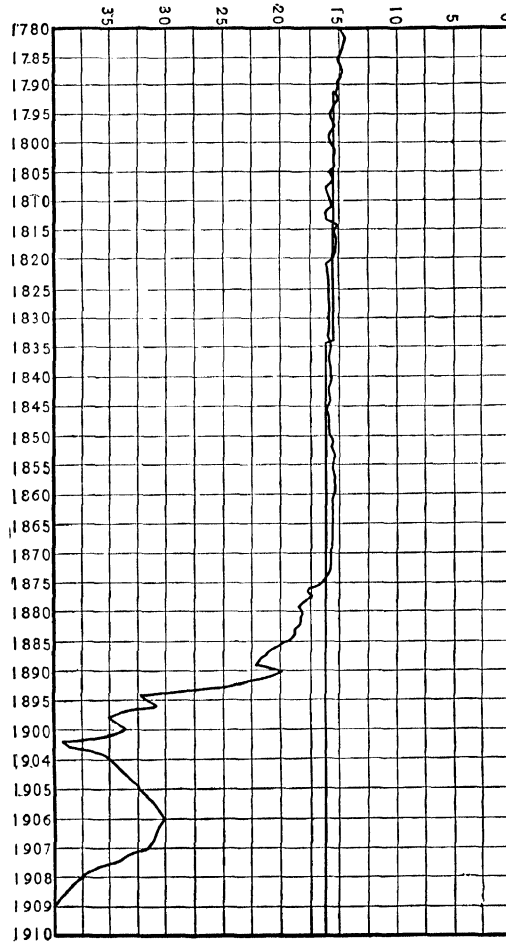
doubled, the total per capita circulation rising from $15.32 in 1878 to $22.82 in 1880, and money was more abundant than in the years of inflation preceding the crisis of 1873. Gold began to leave the country ($32,000,000 was exported in 1882 and $41,000,000 in 1884), and silver superseded gold in payments on government obligations as well as in private exchange. The crisis of 1884 was due in some degree to this adoption of a depreciated currency.

Dewey, 436–450. Rept. of the Sec. of the Treasury, *1889*, lx–lxxxiv.

The advocates of cheap money were not alarmed by the prospect of the substitution of a silver standard. They persistently urged the free and unlimited coinage of silver as the only means of doing justice between debtor and creditor. Under the names of the Farmers Alliance and the Populist party, the agricultural sections argued now as always for inflation of the currency. The agitation for and against free silver culminated in the Sherman Act of August 14, 1890, a measure that represented the desires of neither party, but was a compromise of contending interests. The secretary of the treasury was directed to purchase silver bullion at the rate of 4,500,000 ounces per month, the market price (up to the limit of one dollar for 371.25 grains) being paid in treasury notes issued for this purpose and redeemable in gold or silver on demand. The Bland Act was repealed, but the treasurer was authorized to coin as much of this bullion into standard silver dollars as might be needed from time to time for the redemption of the notes. The fixed demand for fifty-four million ounces a year, coupled with exports, promised to absorb the total annual output of the mines of the United States, and this prospect brought the value of silver well-nigh up to par. The market ratio in August, 1890, was 17.26 to one, and the value of the silver bullion in a standard dollar rose from seventy-five to ninety-two cents. The Sherman Act held for three years and a half, and during that time the government bought up one hundred and sixty-nine million ounces of silver at a cost of $156,000,000. After

Sherman, II 1061–1071. Hoxie, Debate of 1890. Taussig, The Silver Situation, 1–71. Noyes, Am. Finance, Ch. VII. Rept. of Monetary Commission, 1898, 138–145.

a brief revival, the value of silver slumped again, and the Treasury lost $16,000,000 on account of this depreciated deposit.



This chart is to be read from left side of page. Each square from 1904 to 1909 represents one year.

This desperate endeavor to raise the market value of silver to the mint ratio was ultimately thwarted by events in the far East. The British government suspended the coinage of the silver rupee in June, 1893, the East Indian market was suddenly cut off, and the ratio of silver to gold veered immediately to 28.25 to one. President Cleveland called a midsummer extra session of Congress and presented the necessity of stopping the purchase of silver. The House readily acquiesced, but the Senate, where the silver interest had been recruited by the admission of several Western states, — Wyoming, Idaho, and Montana, — stubbornly contested the measure. The Sherman Act was finally repealed, and the purchases of silver bullion ceased in December, 1894. The coinage of the silver bullion in the treasury was suspended until 1898, when the minting of $1,500,000 per month was ordered. The rating of the discredited metal sank to 32.56 to one in 1894. At that ratio, the value of the silver in a standard dollar was but forty-nine cents.

Cong. Record, XXV, Pt. I, 205–206.

Sherman, II, 1175–1200.

The Financial Crisis of 1893. — Meantime, the business world was convulsed by a panic of unprecedented severity. Advancing prices had induced speculative investments, and the banking facilities of New York City had become heavily involved. The failure of the Philadelphia and Reading Railroad (February 20, 1893) occasioned widespread alarm, and the general public became uneasy as to the solvency of the banking system. Depositors, notably in the South and West, began to demand their hard-earned cash, and the banks were forced to call in their deposits from the reserve cities. But the $204,000,000 of currency absorbed by the seaboard institutions had been loaned for investment and was not easily recovered. Some five hundred and fifty of the smaller banks were obliged to suspend, and the financial centers were only saved from a like disaster by resort to an emergency currency after the precedent of 1857 and 1873. The New York Clearing House issued loan certificates for the accommodation of its affiliated banks, and this makeshift

Conant, Banks of Issue, Ch. XXIV.

Burton, 292–305.

Noyes, American Finance, Ch. VIII.

Rept. Monetary Com., 1898, 219–223.

was imitated in Boston, Philadelphia, Baltimore, and Pittsburg. The business failures for 1893 numbered 15,242, the total losses amounted to $346,779,889, and the depression extended to every branch of industry. Many of the silver mines could not be operated at prevailing prices and discharged their laborers; the European demand for wheat fell off, and the price of this great staple dropped to fifty cents a bushel, and this decline, coupled with the failure of the corn crop (1894) involved thousands of farmers in ruin; manufacturers, menaced by the reduction of import duties proposed in the Wilson Bill, curtailed production or shut down altogether, traffic declined and freight receipts fell off to a disastrous degree; railway companies were seriously embarrassed and construction ceased, the demand for rails and structural iron shrank, and steel manufacturers reduced their output by one third. The reaction upon wage earners was severe; idle farm hands tramped the country in search of work, unemployed operatives crowded the streets of the factory towns, demanding work or food, laborers abandoned the mining districts and flocked to the cities. The whole country was prostrated.

The election of 1896, involving the possibility of free coinage of silver at the ratio of sixteen to one, prolonged business unrest, and the failures of that year numbered 15,088, but the victory of the Republicans restored confidence in the stability of the currency. Decisive action was, however, delayed by an opposing majority in the Senate, and not until 1900 was the gold standard declared. The extraordinary revival of business prosperity after McKinley's election was due not so much to legislation as to far-reaching transformation of economic conditions. The failure of the wheat crop in Russia and Australia called for heavy exportations of grain and brought about a welcome rise of prices. With wheat selling at a dollar a bushel, the farmer could pay his debts and spend money for improvements. The foreign market for American steel and structural iron was being developed, and a period

Dewey, 460–462, 468–471.

Taussig, Currency Act of 1900.

Falkner, Currency Law of 1900.



of extraordinary prosperity opened for that basic industry. The discovery of gold in Alaska brought a new supply of the hoarded metal to our mints, and between 1898 and 1908, $1,105,332,650 in gold was coined. The bimetallists' argument, that the supply of gold was short of the demand, and that its value was, therefore, appreciating, ceased to have weight. The per capita currency circulation rose from $21.41 in 1896 to $35.79 in 1907, and the advocates of abundant money were fully satisfied.

Revision of the National Bank System. — The volume of the currency had not been increased by the national banks. Their issues had been actually curtailed after the financial crises of 1873 and 1884 and 1893. The amount of the notes in circulation in 1891 was but $162,000,000, less than that of any time since 1865. The number of the national banks was steadily increasing, but their issues had fallen off, for the approaching extinction of the government bonds gave these securities a high market value. To issue money against ninety per cent of the par value of bonds that were quoted above par was not a profitable proceeding.

Conant, Banks of Issue, Ch. XV.

Dewey, 385–391, 410–412, 471–472.

Bolles, III, 341–372.

The free silver and greenback constituencies were quite content to see this element of our currency disappear. The majority of our national banks were in the wealthy cities of the East and North, and they were regarded in other sections of the country as parties to the conspiracy of the money lenders against the people. Various projects for the revival of the national bank issue were brought forward from time to time, such as the extension of the term of the national bonds, new bond issues, the substitution of state and municipal bonds, and the safety fund system, but no thoroughgoing reform was able to secure a majority vote. Finally the proposition of Secretary Gage for revision of the existing plan was adopted and put into operation. By the act of March 14, 1900, note issue was allowed to the full face value of the bonds, the tax on circulation was reduced from one per cent to one half of one per cent, and national banks with a capital

White, Money and Banking, Ch. XVI, XVII.

Hepburn, State and Nat'l Bank Note Circulation.

Rept. Sec. of the Treas., 1897, 76–77.

of but $25,000 were authorized in towns of not more than three thousand inhabitants. These modifications offered considerable relief from the difficulty under which the banks were laboring. The issue of new Federal bonds for the Spanish War and for the building of the Panama Canal enabled the banks to purchase these securities on terms under which currency could profitably be issued. By September, 1901, 662 new banks were chartered, country banks for the most part, capitalized at less than $50,000. The number of national banks in September, 1907, was 7000, more than at any previous period. The issue has risen to $717,000,000, and the average dividend paid by national banks increased from 3.94 per cent in 1900 to 11.8 per cent in 1907.

Rept. Monetary Com., 1898, 224–276.

Noyes, American Finance, Ch. XX.

Reform Propositions. — The panic of 1907 attracted renewed attention to the defects of our banking system The special strain upon credit agencies that develops in the autumn when the purchase and transportation of crops necessitates extraordinary drafts upon the funds deposited in the central reserve cities was unusually severe, the foreign loans negotiated by Wall Street bankers in the interest of stock exchange speculators in anticipation of grain shipments reached unprecedented dimensions, and the stock market went wild over some dubious industrials. The normal limits of safety were ignored, interest on time loans rose to six and seven per cent, and banks and trust companies extended their loans until the reserves were depleted below the legal minimum of twenty-five per cent. The crash came in October; the exposure of personal speculation on the part of the officers of several banks, trust companies, and insurance companies, and the mismanagement of the Metropolitan Street Railway Company, shook public confidence in stock investments and in the integrity of all credit agencies. A run upon some prominent banks followed. Even solvent institutions were unable to meet their obligations in cash, and many failures occurred. The Banks of England and Germany raised their discount rate, and foreign loans fell off. The extraor-

Conant, Banks of Issue, Ch. XXV.

dinary demand for money forced the rate of interest on demand loans up to 40 per cent, 50 per cent, and even 125 per cent during the few desperate days of panic.

To minimize the effect of the crisis, heroic measures were resorted to. The United States Treasury sent $25,000,000 to New York to deposit with the national banks, enabling them to aid the jeopardized institutions, and certain prominent financiers organized a money pool out of which immediate obligations might be met. Gold was imported from abroad, and clearing house certificates were issued to the amount of $50,000,000. Such mutual liability credentials had been resorted to after the panic of 1857 and during the Civil War and in every subsequent crisis. In the autumn of 1907 this substitute for currency was utilized not only in New York but in Chicago and St. Louis and in practically all of the reserve cities. In districts remote from financial centers, business houses and employers of labor offered their personal checks in lieu of cash payment. Johnson, Panic of 1907.

The crisis of 1907 was unlike all previous crises in that there was no subsequent depression. Few railroad corporations were forced into bankruptcy, and the proportion of business failures was not so high as after the crisis of 1893. It was a rich man's panic, confined to the stock market and credit operations, and the prosperity of the country at large was undiminished. Farms, mines, and factories continued production undeterred, and there was no appreciable decline in prices, wages, land values, or railroad earnings. The output of pig iron, a sure index

PIG IRON PRODUCTION IN THOUSAND TONS, 1897–1908.

1897	9,652	1903	18,009
1898	11,773	1904	16,497
1899	13,620	1905	22,992
1900	13,789	1906	25,307
1901	15,878	1907	25,781
1902	17,821	1908	15,936

of market conditions, reflected the advancing tide of prosperity. Corporation securities alone shrank in value, but here the apparent loss was appalling, amounting to $10,000,000,000, or one third the par value of the stock on the market. Even here, the recovery was rapid beyond precedent, and within a year after the crash we were once more in the heyday of prosperity, and speculators and promoters were again at work developing every known resource of the country. Wiseacres shake their heads and prophesy that we are riding for a fall, but the average business man is confident of success.

The annual stringency is due to no lack of money. Our present per capita circulation is greater than that of any European country except France. In 1907 there was gold coin in the United States to the amount of $1,780,000,000, and of this all but $680,000,000 was deposited in the United States Treasury, a specie reserve that exceeded the combined deposits of the National Banks of England, France, and Germany. The paper money in circulation amounted to $2,332,000,000 practically all of which was in the hands of the people. It was evident that the mechanism of credit was inelastic and that some more effective means of getting hoarded currency into circulation must be provided.

Reynolds, Central Bank.

In 1908 a monetary commission was appointed with authority to investigate banking experience at home and abroad, and report a scheme of reform. Its thirty volume report, published in 1910, is the most thoroughgoing inquiry into the history and practice of banking yet made.

Warburg, Central Reserve Bank.

The recommendation for a central bank, after the foreign model, to serve as the fiscal agent of the Federal government and receive Treasury deposits, and to act as a common reserve for all national banks, is now before the country.

Sprague, Central Bank.

Its advocates believe that such an institution should be authorized to regulate the volume of the currency and to control credit operations by adjusting its rate of discount on loans to meet a financial emergency.

Meantime public discussion has centered about two

other proposed reforms. A postal savings bank had been advocated by Postmaster Meyer and indorsed by President Roosevelt with a view to attracting small deposits from wage earners. The proposition was indorsed in the Republican platform of 1908, and embodied in an enactment of 1910. The post-offices of the country afford the most convenient possible medium for savings accounts and the security offered by the Federal government is absolute. The success of the experiment in some thirty different nations of Europe, Asia, Africa, Australia, and South America would seem to indicate that this opportunity for accumulation would be especially adapted to our immigrant population who, in default of any better provision, are depositing considerable sums with the government in the form of postal orders, but the scheme

FOREIGN POSTAL SAVINGS, 1907

	NUMBER OF DEPOSITORS	TOTAL DEPOSITS	PER CAPITA DEPOSITS
United Kingdom	10,692,555	$766,474,125	$71.68
Italy	4,904,714	273,702,695	55.80
France	4,794,874	258,374,735	53.89
Austria	2,064,403	44,269,223	21.45
Russia	1,788,990	128,873,169	72.04
Netherlands	1,336,846	58,489,302	43.75
Hungary	648,652	18,044,000	27.82
Sweden	566,976	13,582,491	23.96
Finland	60,007	1,410,610	25.51
Japan	8,013,193	46,275,301	5.77

Statistical Abstract, 1908, 727.

was strenuously opposed by small bankers and savings institutions generally on the ground that it would draw off custom which might otherwise accrue to them.

The panacea proposed by the Democratic party was the guarantee of bank deposits on the Oklahoma plan. This new and courageous commonwealth enacted a law (December 17, 1907), immediately after the panic, creating a

Webster, Depositors' Guarantee Law of Oklahoma.

guarantee fund by assessing the banks chartered by the state one per cent on average deposits. The fund was to be administered by a State Banking Board made up of the governor, lieutenant governor, president of board of agriculture, the state treasurer, and the auditor, and was to be drawn upon from time to time to remunerate the depositors of bankrupt institutions. The Board was unfortunately given no adequate powers of inspection and regulation such as are exercised by the Comptroller of the Currency over national banks, and the bankers themselves undertook no form of associated control. The immediate effect was to attract to banking enterprises a number of speculators eager to take advantage of renewed public confidence. The legal minimum for capital required was $10,000, men of little experience and questionable business reputation were able to secure charters, and soon every village in the state had one or more banks. The offer of high rates of interest brought out the latent resources of a prosperous farming community and deposits accumulated with amazing rapidity, insomuch that several national banks surrendered their Federal charters in order to participate in the access of business. When the International State Bank of Coalgate failed, the depositors were paid in full out of the guarantee fund, but the total liabilities were inconsiderable. When, however, the Columbia Bank and Trust Company of Oklahoma City, the largest credit agency in the state, closed its doors (September, 1909) the guarantee system was put to a severe strain. With a capital of $200,000 this institution had acquired deposits amounting to $2,806,000, besides establishing a series of branch banks. Individual depositors were paid in full and trust funds were relegated to their respective bond securities, but to make good the sums due to corresponding banks, a special assessment of three fourths of one per cent was necessary. The more substantial bankers challenged the ruling of the bank commissioner and appealed to the courts to determine the issue. It became evident that the Oklahoma law did not afford suffi-

cient safeguards against wildcat banking, and the plans for guaranteed deposits adopted in 1909 by Kansas, Nebraska, South Dakota, and Texas were more conservative.

Government Control of Railroads

Griffin, List of References on Railroads.

The last two decades of the nineteenth century witnessed a development of railway transportation unparalleled even in the decade following on the Civil War. The industrial depression consequent on the crisis of 1873 once past, track construction was prosecuted with redoubled energy. The total mileage in operation in 1908 is 240,000 as against 74,000 miles in 1875. The capital investment represented amounts to $16,000,000,000, four times that of 1875. The ratio between mileage and population (27 to 10,000) indicates that transportation facilities have more than kept pace with the development of the country.

Stat. Abstract U. S., 1909, 261–262, 281.

The passenger business of the railroads has doubled in the past twenty years, while the freight traffic has increased 335.8 per cent. Passenger rates have been pretty steadily maintained at an average of two cents a mile, but freight rates have fallen from one and one fourth cents per ton mile in 1882 to three fourths of a cent in 1908. This reduction in charges has been usually consistent with maintenance of dividends, because, the roads once established and initial construction expenses covered, traffic grows more rapidly than current expenses.

Charges per ton mile have been of necessity higher on the Western and Southern roads, especially in the initial stages of their development. The effects of the devastations of the Civil War are evident in the high charges on the Richmond and Danville line. Profits depend on the amount and character of the freight transported, rather than on the rates secured, and the volume of traffic fluctuates with general industrial conditions. The average rate of dividends was considered low in 1876, but it fell to two per cent after the crisis of 1884, then rose slightly, only to fall again to one and one half per cent with the

industrial depression of 1893. Since 1897 annual dividends have risen steadily. The ratio of dividends paid to total stock, common and preferred, was 5.25 in 1908.

AVERAGE RECEIPTS PER TON MILE ON LEADING RAILROADS

Stat. Abstract U.S., 1904, 400–402.

	1870	1880	1890	1898	1899	1900	1901	1902	1903
Erie	$1 33	$ 84	$ 64	$ 56	$ 52	$ 56	$ 59	$ 64	$ 61
C. B. & Q.	3.06	1.28	95	93	.87	86	85	.77	.87
Santa Fé	3.23	2 43	1.23	1.03	1.02	.98	1.01	.99	.95
Richmond & Danville	5 37	2 16	.77						
Southern				.93	.90	.92	.94	.93	.95
Union Pacific	4 26	1 99	1 38	1.04	1.02	1.05	1 03	.98	.97
Average for all Roads	2.39	1 16	.80	.62	.62	.63	.63	.64	.66
Average Rate (1876) of Dividend on Stock	3.03%	2.85%	1.82%	1.71%	1.92%	2 44%	2.65%	2.97%	3.03%

The crisis of 1884 was occasioned by over-investment in railroads. The mileage built in 1882 and 1883 (18,314) exceeded the construction of 1870 and 1871 by five thousand miles. In 1884 and 1885 eighty-one railway corporations holding nineteen thousand miles of track were placed under receivership, and thirty-seven smaller railroad properties were sold under foreclosure. Transportation investments had no part in bringing on the panic of 1893, but the railroads suffered severely from the consequent depression. Both freight and passenger traffic fell off, earnings declined, and some of the more speculative enterprises were unable to cover operating expenses and meet interest payments on their bonded debt. Creditors brought suit, and the roads, one after another, were given over to receivers. More than two hundred railway companies, representing fifty-six thousand miles of track and one fourth of the railway capital of the country, went into the hands of receivers between 1892 and 1896. Since 1893 there has been comparatively little increase in mileage and the energies of railway financiers have been devoted to consolidation and to development of the existing lines.

Stat. Abstract U.S., 1909, 287.

White, Hist. of Union Pacific.

Davis, Union Pacific Railway.

Annals Am. Academy, 8: 259.

The rehabilitation of a bankrupt railroad requires time and skill. The claims of bondholders and the public served are met by a receivership or by foreclosure sale, and reorganization under a new company which falls heir to the obligations as well as to the property of the suspended corporation. The processes of reorganization have given opportunity for financiers with reserve capital to combine local interests into a comprehensive railroad system. Branch lines have been absorbed, terminal facilities merged, independent roads bought in, to the end that a composite trunk line might dominate the transportation interests of a great section of the country. Thus the Richmond and Danville line was bought in at foreclosure sale by J. P. Morgan and reorganized as the Southern Railway, and the Pennsylvania Road was able to acquire much more effective control over its territory. The great transcontinental lines — the Santa Fé, the Northern Pacific, and the Union Pacific — were most heavily involved because traffic across the Cordilleran region had not as yet enabled these roads to meet their obligations. The problem in the case of the Union Pacific was to reorganize in such fashion as to enable the management to meet the claims of bondholders and to cancel its accumulated indebtedness to the government. This was finally accomplished in 1898, the depreciated property was bought in by a group of New York financiers, and E. H. Harriman was made president of the company. He was known only as a successful stockbroker, and much doubt was expressed as to his concern for the traffic interests of the road. But Mr. Harriman immediately set about the reconstruction of the system. The roadbed was improved, branch lines were built to tap new industrial centers, the rolling stock was enlarged and brought up to standard, and serious effort was made to meet the needs of the communities served. The death of C. P. Huntington gave opportunity for the purchase of the Central and Southern Pacific and this was quickly seized, funds being secured by bonds issued against Union Pacific stock.

Mitchell, Growth of the Union Pacific.

Davis, Union Pacific Railway.

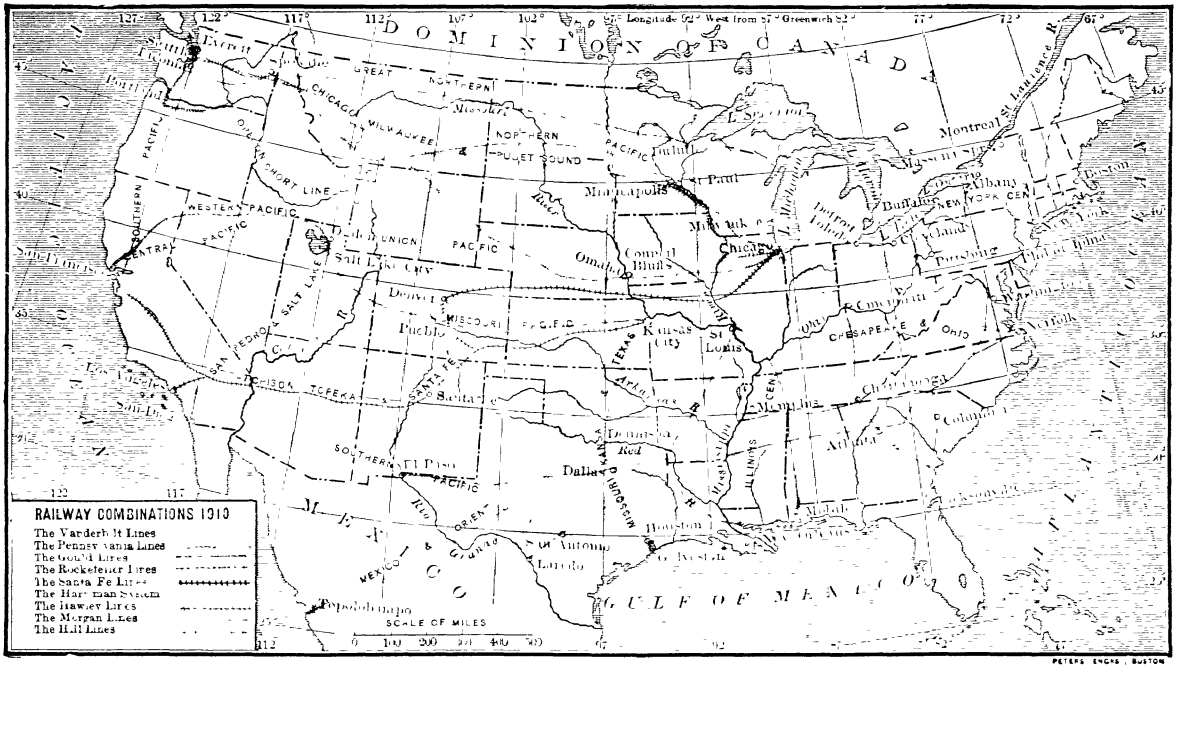
This acquisition extended the original line to San Francisco, gave control of the traffic of the Pacific slope from Portland to Los Angeles, and established connection with El Paso, Houston, and New Orleans. Subsequent purchases of the Oregon Short Line, the Chicago and Alton, and the Illinois Central were negotiated by skillful manipulation of the stock market, funds being provided by mortgaging previous holdings. In the endeavor to get control of the Chicago, Burlington, and Quincy and so to secure a Chicago terminal, Mr. Harriman came into conflict with J. J. Hill, the president of the Great Northern, who in combination with J. P. Morgan had bought a majority stock interest in the C. B. & Q. and the Northern Pacific. The laws of the states of Minnesota and Washington, through which the two northernmost of the transcontinental lines pass, forbid the merging of ownership in parallel and competing roads, but this difficulty Mr. Hill hoped to surmount by the organization of a holding corporation, the Northern Securities Company. The legality of the device was contested and an adverse decision was given by the Supreme Court of the United States. The redistribution of stock left the Northern Pacific and the C. B. & Q. to the control of the Great Northern management, but Harriman secured direct access to Chicago by the acquisition of the Chicago and Alton Railroad.

Meyer, History of Northern Securities Case.

The dissolution of the Northern Securities Company has prevented any farther merging of parallel lines, but the consolidation of connecting roads into a continuous system and the leasing of branch lines greatly conveniences shippers and the traveling public, and is only protested on the ground that so vast an accumulation of wealth and power may transcend government control. Half a dozen great railway systems now control the traffic of the whole country. The Vanderbilt lines dominate the transportation interests of the Northeastern states. The fusion of the New York Central with the Lake Erie and Western, together with the annexation of the Michigan Central

Hatfield, Lectures on Commerce, 29–131.

Rept. Interstate Commerce Com. on Intercorporate Relationships of Railways in the United States, 1906.



PETERS ENGR. BOSTON

and the Michigan Southern, gives this combination control of railway connections between Chicago and New York, while a ninety-nine year lease of the Boston and Albany secures the most direct entry to the northern port. Twelve thousand miles of track and seventy thousand freight cars are operated under this management. The Pennsylvania system monopolizes all the transportation routes between Pittsburg and the sea. The goods to be carried are exceptionally bulky, — coal and coke, iron and steel manufactures. One fourth the freight of the United States is transported by the Pennsylvania, and two hundred and fifteen thousand freight cars are employed in its service. The Baltimore and Ohio and the Long Island Railroads have been brought under the same system, giving a total mileage of thirteen thousand. The Gould lines form the main arteries of the Mississippi Valley traffic, covering the territory from the Gulf to the Great Lakes, from the Alleghany to the Rocky Mountains, with a network of transportation agencies. The Southern Railway management has consolidated the trunk line from Washington to Atlanta with the Mobile and Ohio. These combined lines, with their numerous branches, tap every important industry of the South, conveying cotton from the "black belt" directly to the mills of the "fall line," the coal and the iron manufactures of the southern Appalachians to the factory towns and to the ports. The five transcontinental railroads are controlled by three interests. The Atchison, Topeka, and Santa Fé was successfully reorganized after the collapse of the original management in 1893 and maintains an independent status, although Harriman was admitted to its board of directors. The extension of this line to San Francisco establishes direct connection between Kansas City and the most important ports in California. The Great Northern operates the St. Paul, Minneapolis, and Manitoba under a nine hundred and ninety-nine year lease, and thus lays hold on the wheat lands of the Dakotas and the Columbia River basin, the timber ranges of the

Spearman, Strategy of Great Railroads, 1–173

Newcomb, Recent Railroad Combinations.

Newcomb, Concentration of Railway Control.

Cascades. A working agreement with the Southern Railway enables the Great Northern to carry cotton and hardware from Alabama to Puget Sound without transshipment, the Chicago, Burlington, and Quincy serving as connecting link in this direct commerce from sea to sea. The Harriman system covers the territory between the Missouri River and the Pacific coast. Eighteen thousand miles of track and $350,000,000 of capital are represented in this vast consolidation.

Griffin, List of References on Railroads, §7–68.

Lanier, Harriman the Absolute.

The panic of 1907 gave new opportunity for the acquisition of railway properties, and Mr. Harriman utilized it by the purchase of a controlling interest in the Illinois Central and the Erie Railroad and secured sufficient stock in the New York Central, the Baltimore and Ohio and the Missouri Pacific to entitle him to representation in their management. Since the death of this "wizard of finance," the great railway system built up by his genius shows signs of disintegration. The most important of recent developments is the so-called Hawley system, which by means of the Rock Island road and its extensions dominates the traffic of the Mississippi Valley from the Lakes to the Gulf.

Meyer, Railway Legislation, Pt. II, Ch. IV, Appendix III.

Griffin, List of References on Federal Control of Commerce.

Rept. Indust. Com., IV, 1–105, IX, 897–920.

Stickney, The Railway Problem.

Rate Regulation. — Charters of incorporation, both state and national, and the general incorporation laws adopted in lieu of special charters by the states, have done much to determine the relations of the railroad to the community it is intended to serve. The franchise is usually granted for a limited term and is revocable on failure to comply with its specifications. Provision for the security and comfort of passengers, safety appliances, in the interest of employees, regulations as to speed, grade crossings, whistles, signals, etc., the convenience of time schedules, the adequacy of accommodations, notably in freight car service, — all these requirements have been successfully enforced. The pooling of the interests of competing roads by maintenance of uniform rates, parceling of the territory and distribution of the traffic or division of earnings, has been enjoined by both state and

national authorities, but without much avail. The limitation of charges on passenger and freight traffic, the publicity of tariffs, and the prevention of rebates and of discriminations between shippers and shipping points are matters that even more deeply concern the public welfare.

The fixing of rates by state legislatures was discredited by the repeal of the Granger laws, and the recent experience in Pennsylvania, North Carolina, Minnesota, and Missouri has been even more discouraging. Their laws prescribing a two cents per mile passenger rate were set aside by the courts on the ground that the rates fixed were so low as to be confiscatory and that the penalties proposed for noncompliance were so severe as to amount to intimidation. In lieu of direct legislation, some thirty states have established railway commissions authorized to investigate charges of discrimination preferred by shippers, and to secure justice as to rates, classification of freight, distribution of cars, etc. The exceptions to this general practice are significant. Eight Cordilleran states and two territories where the need of transportation facilities overrides every other consideration, and five Eastern states where the railroad interests rule the legislatures, have as yet provided no supervising commission.

Clark, State Railway Commissions

Dixon, State Railroad Control, Pt. II, III.

State authority, whether exercised through limiting statute or through railway commissions, regulative or advisory, has proved quite inadequate to the control of interstate commerce, notably since the epoch of consolidation. Federal supervision of interstate commerce was provided by congressional enactment in 1887. The Cullom law required full publicity of rates and forbade pooling as well as discrimination between places, persons, and shipments, so far as interstate traffic is concerned; and an Interstate Commerce Commission, appointed by the president of the United States, was empowered to investigate all charges brought before it as to preferential tariffs, rebates, etc., and to denounce an unjust rate. The difficulties in the way of securing even-handed justice for the shipper, the railroad, and the general public were still,

James, The Railway Question.

Meyer, Regulation of Railway Rates, Ch. IX, X.

Noyes, American Railroad Rates.

Ripley, Railway Problems, Ch. XXIV.

Meyer, Railway Legislation, Pt. III, Appendix IV.

Hadley, Workings of the Interstate Commerce Law.

Rept. Senate Com. on Interstate Commerce, 1905.

Rept. Interstate Commerce Com. on Transportation of Freights, etc.

however, many and great. To the complexities of rate regulation were added the elusive methods of discrimination involved in terminal facilities and private-car service, and the problem has seemed to transcend the wisdom of state and federal legislatures. The **Hepburn Amendment** (1906) empowered the Commission to declare a reasonable rate that should be binding upon the transportation agency until set aside by the courts, and brought express companies, sleeping cars, and refrigerator cars under the jurisdiction of the Interstate Commerce Act. But pooling was extensively practiced, and railway combinations increased their territory from year to year. Both President Roosevelt and President Taft recommended the abandonment of the anti-pooling clause of the law of 1887 and the substitution of a check on the acquisition of stock in competing systems. Under the legislation of 1910 the prohibition of traffic agreements is maintained and the powers of the Commission are enlarged. Telephone and telegraph and cable companies are added to the jurisdiction of the Interstate Commerce Commission, and the Commission is authorized to investigate the justice of a new tariff, with or without complaint from shippers, the operation of the rates in question being suspended during the inquiry. A Commerce Court was established to which the decisions of the Commission might be appealed. Notwithstanding persistent legislation and litigation, there has been an effort to advance freight rates in the past few years, occasioned, say the railroad men, by higher cost of construction, rolling stock, labor, etc.

Business Monopolies

Youngman, Economic Causes of Great Fortunes.

Concentration of capital in the hands of successful entrepreneurs has been the most significant tendency in the past thirty years of our industrial history. The wealth of the United States, according to the census of 1900, is $94,300,000,000, three times that reported in 1870. Per capita wealth has increased from $780 in

1870 to $1235 in 1900, but riches are less evenly distributed than before the Civil War. In 1890 there were in the country approximately four thousand millionaires and multimillionaires, whose property aggregated $12,000,000,000. At that time the rich numbered 9 per cent of the population and held 71 per cent of the wealth; the well-to-do were 28 per cent of the population and owned 20 per cent of the wealth; the poor made up 63 per cent of the population, but could claim only 9 per cent of the wealth. It is probable that the inequality is still greater now. The equalizing influences of the pioneer period have passed; the public lands that may be cultivated to advantage by the small farmer are exhausted, and the arid lands of the West can be developed only by irrigation companies commanding large capital. The self-employed artisan is at a hopeless disadvantage in competition with the machine product, and the small enterprise is being driven from the field by large-scale producers. The massing of capital and concentration of industry consequent on the introduction of machinery is evident from statistics.

Holmes, Concentration of Wealth.

West, The Public Domain.

President's Message, Cong. Record, XXXVI, Pt. I, II.

The merging of a number of independent concerns into a business combination has been the especial achievement of the entrepreneurs of the present generation. The advantages accruing from wholesale purchases of raw material, the conversion of wastes into by-products, and the non-competitive marketing of goods, are so great that if the management be wise success seems inevitable. When there was added to these legitimate profits the advantages that the large shipper might secure from transportation agencies in the way of rebates, preferential tariffs, and terminal facilities, the victory of the great combination, when brought into competition with the independent producer, was assured. An industrial revolution, comparable to that resulting from the introduction of machinery, has been accomplished.

Jenks, The Trust Problem, Ch. I–IV.

Most notable of the earlier combinations was the Standard Oil Company. This group of Cleveland refiners

Cotton Manufactures

U.S. Census, *1900*, IX, 27.

Year	No. of Establishments	Capital per Estab.	Spindles per Estab	Wage Earners per Estab	Product per Estab.
1840	1,240	$ 41,292	1,842	58	$ 37,379
1850	1,094	69,745	. . .	84	56,553
1860	1,091	90,362	4,799	112	106,033
1870	956	147,182	7,461	142	185,659
1880	756	275,503	14,092	231	254,087
1890	905	391,183	15,677	242	296,123
1900	973	473,631	19,536	306	342,041

Manufactures of Agricultural Implements

U.S. Census, *1900*, X, 344.

Year	No. of Establishments	Capital per Estab.	No. of Wage Earnfrs per Estab.	Value of Product per Estab.
1850	1,333	$2,674	5	$5,133
1860	2,116	6,553	8	9,840
1870	2,076	16,780	12	25,080
1880	1,943	31,966	20	35,327
1890	910	159,686	43	89,306
1900	715	220,571	65	141,549

Slaughtering and Meat Packing

U.S. Census, *1900*, IX, 387, 412–421.

Year	No. of Establishments	Capital per Estab.	No. of Wage Earners per Estab.	Value of Product per Estab.
1850	185	$ 18,824	18	$ 64,766
1860	259	39,221	20	113,675
1870	768	31,543	11	98,732
1880	872	56,673	31	348,122
1890	1,118	104,551	39	502,336
1900	921	205,427	74	852,945

undertook to secure, not only the advantages of wholesale manufacture, but control of the crude oil market and of the transportation facilities as well. In 1870 the Standard was one of two hundred and fifty oil refineries, and its product was only four per cent of the total output. In 1877 it controlled 95 per cent of the oil refined in the United States. The strenuous opposition of crude oil producers and independent refiners induced in 1882 a completer fusion of the Standard interests. The forty affiliated companies made over their respective properties to a body of trustees, receiving in exchange trust certificates pro rata for the stock surrendered. The business was thereafter managed by the nine trustees, and all possibility of variations in policy was done away. The arrangement was entirely successful so far as control of the industry was concerned. Large-scale production rendered profitable scientific processes of manufacture, improvement in quality, and reductions in selling price, that could never have been brought about by the hand-to-mouth methods in vogue in the oil fields.

Montague, Rise and Progress of the Standard Oil Company.

Tarbell, The Standard Oil Company.

Dodd, Trusts.

Moody, Truth about the Trusts, 109–132.

Rept. Indust. Com., I, 93–173.

The success of the Standard Oil Company suggested similar combinations in other lines of business. The sugar refiners, the whisky distillers, the manufacturers of tobacco, salt, steel, tin plate, etc., pooled their interests in more or less successful combinations. Most of the industries requiring large capital and affording opportunity for monopoly of output or of raw material attempted to organize on a noncompetitive basis during the last decade of the nineteenth century. Some three hundred different industries, representing a capitalization of $7,246,000,000, were so organized under corporate charters during this period. Faith in the efficiency of combination reached its climax in the years from 1898 to 1902, when industrial alliances were formed with small regard for legitimate basis of profits. Promoters and speculators took advantage of the craze for combination, and foisted all manner of dubious and fraudulent schemes upon the investing public. The "silent panic" of 1903

Montague, Trusts of To-day, Ch. I, II.

Rept. Indust. Com. I, 59–253.

Jenks, Michigan Salt Ass'n.

Jenks, The Whisky Trust.

Moody, Trusts, 485–489.

U.S. Census, *1900*, VII, lxxv–lxxxi.

Sammis, Industrial Combination.

called a halt in many adventurous projects, but the progress of centralized control was not retarded.

Lanier, Ore Trust, etc.

Edgerton, Wire Nail Ass'n.

Youngman, Tobacco Pools.

Moody, Trusts, 478–482.

Montague, Trusts of To-day, Ch. III.

Meantime, the outside public has found reason to complain of the effects of industrial monopoly. Consumers protest against an advance in prices inconsistent with diminished cost of production and not warranted by improved quality of goods. The whisky trust, the plate glass combination, and the wire nail pool, for example, each has utilized its temporary monopoly of the market to force prices far beyond their normal level. The producers of raw material, the crude oil men, the tobacco growers, the cattlemen, etc., are helpless when they have no choice but to sell to the agent of a combination, and they denounce the monopoly that reduces their returns to the bare cost of production. Laborers, brought face to face with a combination, can have no recourse to another employer, and they are driven to organize a counter combination, equally monopolistic, and to attempt to win fair terms by an artificial shortage in the labor supply.

Rept. Indust. Com., I, 39–57, 74–93, 199–205; xiii, lviii–lxiv.

Wright, The Amalgamated Ass'n.

Rept. on the Anthracite Coal Strike, 1902.

Roberts, Anthracite Coal Industry, 183–191.

The strike of the Amalgamated Association of Iron and Steel Workers against the United States Steel Corporation is a case in point. The endeavor of the men to secure the union scale of wages in all the plants represented in the combination failed because they had a strike fund of but $32,000 to oppose to the resources of a billion-dollar trust. The Anthracite Coal Syndicate has been more successfully opposed by the United Mine Workers, an organized body of 145,000 men. In two successive strikes (1900 and 1902) they have secured an advance of wages for master miners, reduction of hours for day laborers, and the practical recognition of the justice of collective bargaining.

Rept. on the Beef Industry, Ch. IV.

Rept. Indust. Com., I, 136–143.

The independent producers, moreover, both the large concerns that refused to enter the combination and the small industries that were weak enough to be ignored, have fared badly at the hands of the monopolies. The power to regulate prices has been used to drive competitors from both central and local markets. The wreck

of such enterprises has meant the closing of plants, the disemployment of workmen, and the waste of entrepreneur ability. The vehement criticism of the Standard Oil Company, occasioned by the unsparing and unscrupulous zeal with which independent refiners were cleared from the field, provoked the endeavor to prevent industrial monopoly by state interference.

Jenks, The Trust Problem, Ch. IX.

Anti-trust Legislation. — Public protest first took the form of prohibitive legislation. During the years 1889 to 1894, twenty-five states and territories enacted laws making the trust unlawful, and the Federal law of 1891 declared "every contract, combination in the form of a trust or otherwise, or conspiracy, in restraint of trade or commerce among the several states" illegal and its promoters punishable by fine or imprisonment. The Standard Oil Trust dissolved into twenty distinct companies, but, since a majority of the stock of each company was held by one or another of the original trustees, identity of interest was perpetuated. The Sugar Trust reorganized as the American Sugar Refining Company, a mammoth corporation of $50,000,000, which bought in the stock of the constituent companies. The Whisky Trust incorporated as the Distilling and Cattlefeeding Company, a single corporation with a capital of $35,000,000, etc. In every case, combination was quite as effective under the new form.

Lloyd, Wealth vs. Commonwealth.

Jenks, The Trust Problem, Ch. XI.

Sherman, II, 1071–1076

Rept. Indust Com, II.

Montague, Trusts of To-day, Ch. V, VI.

The general endeavor to impose stringent requirements in the way of corporate limitations has been negatived by the indulgent policy of certain states, — New Jersey, Delaware, and West Virginia. Light incorporation fees and taxes, the absence of specifications as to character of business or amount of capital stock, the secrecy possible under lax administration, have rendered these three states an asylum for monopolistic corporations. Ninety-five per cent of existing corporations hold charters in one or another of these jurisdictions. A company incorporated in one state of the Union is at liberty to carry its produce into every other state; hence nothing short of a Federal

Griffin, List of References Relating to Trusts.

Montague, Trusts of To-day, 162–174.

Jenks, The Trust Problem, Ch. XIII.

incorporation law can prevent injurious combinations. A bill drafted by Attorney-General Wickersham and submitted to Congress in 1910 provides that companies of more than $100,000 capitalization may incorporate under Federal law. Advocates of the measure believe that the additional prestige accruing from a congressional charter and the immunity from state regulation will induce the well-established industries to take advantage of this privilege.

Knox, The Sherman Anti-trust Act.

The effort to penalize restraint of trade has been more successful. Contracts aiming to curtail production or to fix buying or selling prices violate the common law and are nonenforceable. Statutes defining this offense and affixing pains and penalties have been passed by some thirty states, but the transaction usually transcends state jurisdiction. Under the Federal Anti-trust Act (1890), " every person who shall monopolize or attempt to monopolize . . . any part of the trade or commerce among the several states " is deemed guilty of a misdemeanor and liable to fine or imprisonment, the goods in course of transportation are forfeited, and the injured party may recover threefold damages and the costs of suit. The attorney-general and the United States district attorneys are authorized to institute proceedings against unlawful combinations in restraint of trade. Most notable of the anti-monopolistic decisions are those against the Addyston Pipe Company, the Northern Securities Company, the beef packers' combination, and the Standard Oil Company.

Whitney, The Addyston Pipe Co.

Harlan, Decision of the Supreme Court of the U.S.

The Bureau of Corporations, established (1903) under the United States Department of Commerce and Labor, is authorized to make " diligent investigation into the organization, conduct, and management of the business of any corporation, joint stock company, or corporate combination engaged in commerce among the several states . . . and to gather such information and data as will enable the president of the United States to make recommendations to Congress for legislation for the regulation of such com-

merce." The immediate outcomes of this provision are the reports on the beef industry, the petroleum industry, the tobacco combinations, the lumber trade, etc.

The Organization of Labor

The Noble Order of the Knights of Labor was founded in 1869 by a group of Philadelphia garment cutters in the hope of uniting all wage earners into one catholic body, without regard to occupation, sex, creed, color, or nationality. Not until 1881, however, when the pledge of secrecy was set aside, did the society attain national importance. The membership in 1881 was 500,000, in 1886, 1,200,000. The objects proposed by this all-embracing organization were the reduction of the hours of labor to eight per day, the securing of protective legislation for laborers in factory, mine, and workshop, the recognition of employers' liability for accidents, a weekly pay day, the making of wages a first lien on product, the arbitration of labor disputes, the establishment of state and national labor bureaus, the single tax on land, etc. The degradation of American workingmen by the employment of convicts in competition with free labor and by the importation of laborers under wage contract, was protested as vigorously as was the slave system by a former generation of reformers. In its motto, "An injury to one is the concern of all," and in its appeal to the ballot for redress of wrongs, the Knights of Labor may be compared to the Workingmen's party. Their organization by local, district, and general assemblies was, however, more effective than that of any previous labor movement, since it admitted representative government. The Knights did not inaugurate a new political party, but voted with Republicans or Democrats or Populists, as men and measures might determine, and they attained considerable influence with legislative bodies. The establishment of the United States Bureau of Labor and of several state boards of arbitration, legislation restricting

Wright, Hist. Sketch of the Knights of Labor.

Wright, Indust. Evol. of U.S., Ch. XIX.

McNeill, Ch. XV.

Powderly, Ch. IV, V, VI, XIII.

Rept. Indust. Com., III.

Kirk, Knights of Labor and American Federation of Labor.

Levasseur, American Workman, 197–203.

Powderly, Ch. VII.

Rept. Indust. Com., VII, Pt. I, 67–87.

Rept. Ford Com. on Contract Labor, 1888.

the labor of women and children and requiring biweekly payment of wages, the Federal laws prohibiting the importation of contract labor and limiting the immigration of Chinese, were in good measure due to the agitation carried on by the Knights of Labor.

While their characteristic method was legislation, the Knights did not abjure coercion. Several strikes were conducted to a successful finish by aid of a tax levied on the whole membership, but the disastrous strike of the employees of the Missouri Pacific Railroad (1886) greatly discredited the order in the eyes of the public and gave rise to internal dissensions that undermined its strength. In 1896 the Knights of Labor joined in the agitation for free coinage of silver, and the failure of the Democratic party farther diminished its influence. Its membership has declined to but a fraction of its former strength.

Taussig, The Southwestern Strike.

Rept. Indust. Com., VII, Pt. I, 109–110.

Wright, Indust. Evol. of U.S., Ch. XX.

Rept. Indust. Com., VII, Pt.I,108–109, Pt. II, 420–440.

Levasseur, 203–211.

The American Federation of Labor originated in a combination of already existing unions, such as the International Typographical, the Iron and Steel Workers, the Cigar Makers, the Brotherhood of Carpenters and Joiners, the Brotherhood of Locomotive Engineers, etc. In 1881, the year of its origin, the American Federation of Labor represented 262,000 wage earners; in 1886 the membership was 316,000; in 1887, 600,000, and at last account the membership exceeded 1,500,000 men. In distinction from the Knights of Labor, the American Federation encourages organization along trade lines. It is an affiliation of national unions in which each society retains full autonomy. The annual conventions and the Executive Council make general regulations and recommendations, but these have no binding authority over the individual trade organizations. In case a strike is approved by the Executive Council, financial aid may be ordered and the federated unions assessed for a limited period. The possibility that aid may be withheld has usually served to deter the unions from undertaking unwarranted strikes. The influence of the Executive Council and of President Gompers has been generally conservative, and

the American Federation has consistently avoided political complications, refusing to declare for or against socialism, single tax, free coinage of silver, etc., and refraining from any attempt to dictate to its members politically. The leaders have held to the declared purpose of the organization "to render employment and the means of subsistence less precarious by securing to the toilers an equitable share of the fruits of their toil."

Strike Statistics. — One of the first undertakings of the United States Commissioner of Labor was the collection of accurate information concerning the causes and results of all the strikes that had occurred in course of the nineteenth century. The report of 1887, extended in 1894, 1901, and 1906, gives full statistical data for the years from 1881 to date.

Sixteenth Annual Rept. Commissioner of Labor, Ch. I.

Cross, Strike Statistics.

STRIKE STATISTICS, 1881–1900

YEAR	NUMBER	PROPORTION SUCCESSFUL	YEAR	NUMBER	PROPORTION SUCCESSFUL
		Per Cent			Per Cent
1881 . .	451	61.37	1894 . .	1,349	38.09
1882 . .	454	53.59	1895 . .	1,215	55.24
1883 . .	478	58.17	1896 . .	1,026	59.19
1884 . .	443	51.50	1897 . .	1,078	57.31
1885 . .	645	52.80	1898 . .	1,056	64.19
1886 . .	1,432	34.45	1899 . .	1,797	73.24
1887 . .	1,436	45.64	1900 . .	1,779	46.43
1888 . .	906	52.22	1901 . .	2,924	48.77
1889 . .	1,075	46.49	1902 . .	3,161	47.31
1890 . .	1,833	52.65	1903 . .	3,494	40.87
1891 . .	1,717	37.88	1904 . .	2,307	35.28
1892 . .	1,298	39.31	1905 . .	2,077	40.17
1893 . .	1,305	50.86			

Statistical Abstract, 1909, 241–247.

During the twenty-five year period there were reported 36,757 strikes, involving 6,728,048 employees, doubtless a much larger quota than any previous period could show, were full data available. It is significant that strikes

Levasseur, 232–237.

characterize the years of business prosperity, *e.g.* 1889–1891 and 1899–1903. The larger number of lockouts, on the other hand, took place in years of depression, *e.g.* 1886 and 1893, 1903 and 1904.

The proposition that strikes are likely to succeed on a rising and fail on a falling market may be demonstrated from these data. The proportion of successful strikes was 57 per cent for the boom period 1881–1883, and for the highly prosperous epoch, 1896–1900, the successful strikes were 60 per cent of the total. In the years of depression following on financial panic there is, on the other hand, a notable shrinkage in the proportion of successes. The figures show, farther, an apparent increase in the chances of success. Of the 1500 strikes recorded for the first eighty years of the nineteenth century, the results are known for 1053. Of these, 30 per cent were successful, 15 per cent were compromised, and 55 per cent were unsuccessful. Of 3902 strikes occurring from 1881 to 1886, 46.5 per cent were successful, 13 per cent were partially successful, and 40 per cent failed. For the twenty years from 1881–1900, 51 per cent were successful, 13 per cent partially so, and 36 per cent failed. Since 1901, the most prosperous year of the present decade, the proportion of success has declined.

Casson, Organized Self-help.

Foster, Trade Union Ideals.

Rept. U.S. Strike Commission, 1894.

Wright, The Chicago Strike.

With experience and the sense of enlarged responsibility, trade unions have learned caution, and a well-disciplined union will undertake a strike only when success is reasonably sure. The money cost of a strike is usually greater for the men than for the employer. The loss in wages by strikes for the period 1881–1900 was $258,000,000, more than twice the losses accruing to employers, while the assistance rendered by other labor organizations during the same period amounted to $16,000,000. The trade union with no strike fund has slight endurance. The treasury of even well-established organizations is quickly exhausted, and contributions from outside sympathizers are not a permanent reliance. The employer, on the other hand, has, in these days of combination, a large

reserve capital; and, while he will avoid a strike and the losses and embarrassments in the way of unfilled orders, etc., whenever possible, the controversy, once brought to an issue, will be fought to a finish. The Pullman strike demonstrated that employer as well as employee will take heavy risks in defense of a cherished principle.

Schloss, Rept. of Chicago Strike Commission.

Where intelligence and fairness characterize both employer and employed, the collective bargain is advantageous to both parties. Since the settlement of the strike of 1897, delegates of the bituminous coal miners have met the operators in annual conference for the adjustment of a wage scale affecting four hundred thousand men. The anthracite miners attained the same result only after two bitterly contested strikes and the intervention of an Arbitration Commission appointed by President Roosevelt. As individuals the men are helpless, and they can only treat on even terms with the large-scale employer when united in demanding uniform terms. The employer, on the other hand, has more security in dealing with an organized than with an unorganized body of men. It is essential to the success of the collective bargain that the terms of employment be guaranteed by written contract, and that breach of agreement on either side be made punishable by fine. The proposition to increase the responsibility of trade unions by legal incorporation has been urged as a means of providing for the enforcement of the labor contract.

George, Coal Miners Strike, 1897

Rept. Indust. Com., VII, Pt. I, 106–108, Pt. II, 820–827. See Index.

Rept. Anthracite Coal Strike Commission, 1902.

Brandeis *et al.*, Incorporation of Trades Unions.

Criticism of Trade Union Methods. — Aside from the inevitable antagonism of interest between employer and employed, opposition to labor organizations arises from certain of the means used in prosecuting their ends that bring them into conflict with outside parties. Hostility to strike breakers, for example, has frequently taken the form of persecution, belligerent picketing, and bodily violence. Injury wrought to person or property serves to bring the union under condemnation of public opinion and of the law. Order must be restored by police authority, and, when this fails, by the intervention of state

Stimson, Handbook to Labor Laws of U.S., Ch. VIII.

Mitchell, Organized Labor, 272–337.

Levasseur, 240–250.
Taussig, The Homestead Strike.
Bemis, The Homestead Strike.
Stimson, Ch. IX.
Mitchell, Organized Labor, Ch. XXXVII
Indust. Com. XII, LXXXV–CV.
Hall, Sympathetic Strikes and Lockouts.

and even national troops; but breach of the law on the part of employers is equally to be condemned. The employment of Pinkerton men as a private police force has been declared a penal offense by several state legislatures.

The boycotting of obdurate employers, "scab laborers," and nonsympathizers who patronize boycotted concerns, is the frequent resort of a striking union hard bestead. This is a dangerous weapon, since it alienates public sympathy and may involve the union in legal controversies. The writ of injunction has been utilized by employers to forestall attacks on person or property, and it is sometimes the only means of maintaining peace, as in the case of the Cœur d'Alene miners' strike; but this again is a weapon that is likely to infringe on the rights of citizens.

The sympathetic strike is another form of trade union tactics, the fairness of which is hotly disputed. Without grievance of its own or any hope of gain, a labor union may order a strike in support of the contention of an allied organization. The fact that this may be an act of self-sacrifice performed in the interest of brotherhood and the general welfare of labor does not mitigate the injustice to the employer, who is involved in a controversy in which he has no concern, the arbitrament of which he cannot influence. Thus the American Railway Union struck in sympathy with the Pullman Car Company's employees and involved the traffic of Chicago and the Middle West in a disastrous tie-up; thus the Chicago Teamsters' Union refused to carry goods for a mercantile establishment involved in a Garment Workers' strike, and, by consequence, for the business houses that had dealings with the boycotted firm; and thus the organized trades of Philadelphia stopped work in sympathy with the striking street car employees. The failure of these protracted struggles must tend to convince labor leaders that the sympathetic strike should only be undertaken as a last resort.

Levasseur, 237–240, 250–257.

The right or wrong of the union or closed shop has been vigorously debated in recent years. A fully established labor organization will always endeavor to exclude

Yarros, Labor Questions' Newer Aspect.

nonunion men from the shops under its control. This policy is essential to the labor monopoly on which the union depends for the enforcement of the uniform wage and other regulations; but it is protested by the employer on the ground that the management of his business is thereby taken out of his hands. Only when, as in the case of the cigar workers, the union is able to offer as offset a trade label that has market value, is the point readily conceded. The closed shop is said to be un-American and undemocratic, in that it forces workmen to enter the union in order to obtain employment; but the trade unionist holds that a man has no right to enjoy the advantages in the way of higher wages and shorter hours secured by union effort who will contribute nothing to the funds and fighting strength of the organization. The sewing trades are peculiarly liable to incur defeat at the hands of nonunion labor, because theirs is an unskilled trade, perennially overwhelmed by immigrant laborers accustomed to a low standard of living and ready to work for any pay. In spite of the persistent endeavor of many years, the Garment Workers have not yet attained general victory for the union shop and the union label.

Commons *et al.*, Union Shop Policy.
Levasseur, 215–217.
White, The Union Shop.
Pfahler, Free Shops.
Rept. Indust. Com., VII, Pt. II, 715–722. See Index.
Brooks, The Trade Union Label.
Rept. Indust. Com., VII, Pt. I, 181–189. Index to Pt. II.
Hutchinson, Shirt Waist Makers' Strike.
Rept. Indust. Com., VII, Pt. II, 828–873.

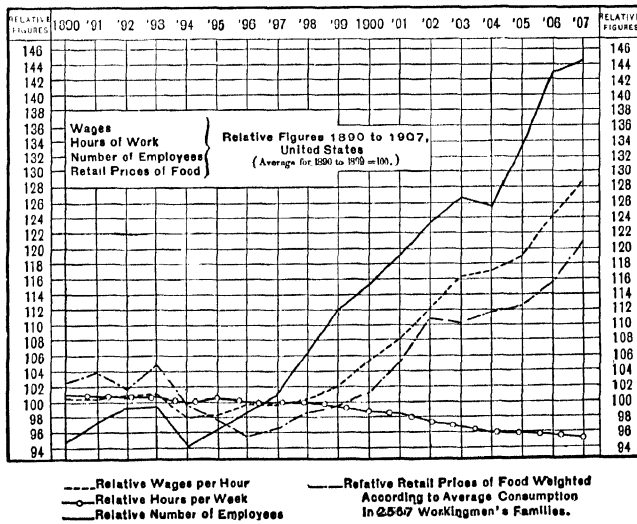
Employers' Associations. — An inevitable consequence of the more efficient organization of labor has been the combination of employers into a defensive alliance. The first labor union attempted in Boston brought about (1825) a union of Boston merchants, who pledged themselves to "drive the shipwrights, caulkers, and gravers to submission or starvation," and pledged $20,000 as a fighting fund. In 1832 one hundred and six merchants and shipowners of Boston agreed to "discountenance and check the unlawful combination formed to control the freedom of individuals as to the hours of labor." In 1872 four hundred employers of New York City organized to resist the ten-hour movement, agreeing to contribute $1000 each to the defense fund, and in 1884 the Master Builders Association of New York was organized to resist a bricklayers' strike. A dozen or more national associa-

Andrews, Development of Employers' Associations.
Luther, Workingmen of New England, 7.

tions of the employers of the various trades were set on foot in the last quarter of the nineteenth century, and in 1903 several national associations united to form the Citizens Industrial Association of America, which comprises sixty national and three hundred and thirty-five local organizations. The objects of this federation of employers' unions, as published, are to assist the constituted authorities in the maintenance of order, to promote and encourage harmonious relations between employers and employees on a basis of equal justice to both, to assist employers in their efforts to maintain industrial peace, and to create a public sentiment in opposition to all forms of violence, coercion, and intimidation. The Citizens Industrial Association does not deny the beneficent possibilities of labor organization nor the advantages of arbitration and collective bargaining, but proposes to combat the abuses of trade unionism as represented in arbitrary and violent action. Reassuring evidence of a more rational relation between labor and capital may be found in the voluntary advance of wages recently made by several

Levasseur, 217–224.

Adams and Sumner, Labor Problems, 279–286.



eastern railway companies and by the United States Steel Corporation.

Immigration

The tide of immigration has been steadily rising during the period under review. With exception of the epochs of business depression, the average annual immigration has approximated five hundred thousand since 1880. The number of arrivals during the last three decades of the nineteenth century amounted to 11,746,000, a sum which exceeds the immigration figures for the fifty years previous. During the first years of the twentieth century, the annual inflow has steadily increased from 448,000 in 1900 to 1,285,349 — the high-water mark — in 1907–1908. The depression of 1907 reduced the number of immigrants to 782,870 for 1908, 751,786 for 1909.

Rept. of the Commissioner of Immigration, 1909.

A notable change in the character of the immigrants has taken place in the past thirty years. Immigration from Great Britain, Ireland, and Germany has fallen off, that from Norway and Sweden has not increased, while the surplus population of eastern Europe has been migrating to the United States in ever increasing numbers. The peasants of Italy, Greece, Hungary, Austria, Roumania, Russia, Lithuania, Armenia — unhappy countries where wages are low and taxes high and where opportunities for land ownership are exhausted — throng the steerage quarters of the transatlantic steamers and the immigrant stations of the United States ports. The immigration from southern and eastern Europe from 1901 to 1908 inclusive made up 55 per cent of the total European for that period.

Commons, Races and Immigrants Ch. II.

These late comers bring little money in their pockets, fully half of them are illiterate, and the majority are unskilled laborers. The more enterprising find their way to the factories of New England, to the mines and iron works of Pennsylvania and Colorado, to the farms and flour mills and abattoirs of the upper Mississippi Valley; but

Wright, Influence of Trade Unions on Immigrants





SLAVIC IMMIGRANTS

wages and standards of living are much less than in the United States, immigrants come into direct competition with American laborers, for machinery and differentiation of mechanical processes render it easy to find occupation. In a few weeks or months the newcomer has acquired as much skill as the old hand, and, since he will work for less money, is likely to supersede him. The sweat shops of New York, Rochester, and Chicago are filled with Italians and Russian Jews; the anthracite coal mines are worked by Slavs and Italians; Bohemians are tilling the corn lands of Kansas; Swedes are taking up the wheat farms of Minnesota and the Dakotas. These European peasants have performed the tasks that were too heavy or unpleasant or low-paid to attract American workmen; they have built our railroads, developed our mines, manned our coke ovens and iron foundries, cleared the forests, tilled the prairies; they have contributed enormously to the exploitation of the resources of the country. How to leave them free to do this, without entailing some degradation of the American standard of living, is the economic phase of the immigration problem.

Hall, Immigration.

Commons, Races and Immigrants, Ch. VI.

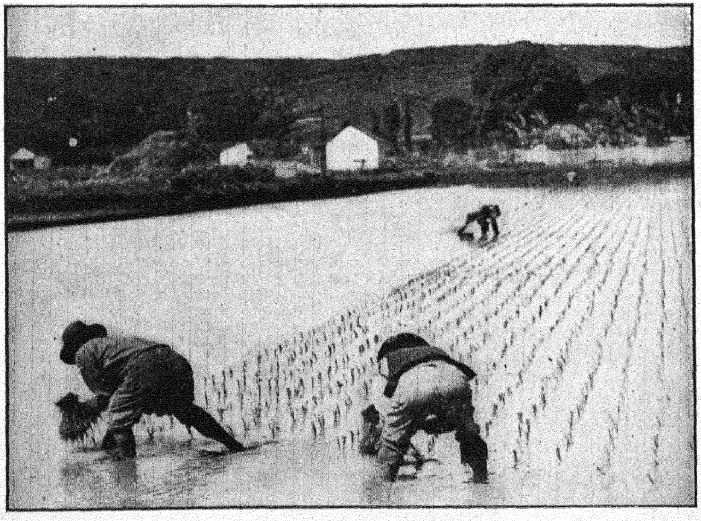
Legislation. — The military requisitions of the Civil War drained the country of laborers, and the agricultural districts needed farm hands, the factory towns operatives. Under the Act to Encourage Immigration approved July 4, 1864, the agents of American employers were allowed to engage laborers in foreign lands and to arrange for their transportation to this country, and the contract pledging wages in payment of charges was declared valid in law and therefore enforcible. The act was repealed in 1868, but the practice of importing laborers under engagement to work at specified wages continued. Under this arrangement, thousands of Italians, Poles, and Hungarians were imported for work on the railroads and in the mines and factories of the Northern states. Abortive efforts were even made to ship laborers to the cotton fields of the South.

Rept. Chandler Com. on Immigration, 52d Cong., 2d Session, Rept. No. 1333.

Whelpley, Problem of the Immigrant.

As the social, political, and industrial effects of unregu-





RICE FIELDS IN THE HAWAIIAN ISLANDS

Chinese laborers.

shop, and although they usually returned to China with their accumulated earnings, there were still, in 1876, one hundred thousand Celestials in California. The Burlingame Treaty (1868) had accorded to the Chinese people the right of voluntary immigration to the United States with the privileges allowed the most favored nation, a concession essential to the free admission of Americans to China. This policy was soon challenged by the labor party, and California politicians were obliged to advocate the exclusion of the Oriental. By 1880, they had induced the Federal government to negotiate a new treaty stipulating the right to "regulate, limit, or suspend" but not to prohibit the immigration of Chinese laborers. Pressure was then brought to bear upon Congress sufficient to secure the passage of the Restriction Law (1882) forbidding for a period of ten years the admission of Chinese laborers "skilled and unskilled, and those engaged in mining." By the Geary Act (1892) the policy of exclusion was adopted for a second ten-year period, and the Chinese already in the country were required to register and submit to the Bertillon record, as a means of identification. In 1898 this legislation was made applicable to Hawaii and the Philippines, and these new dependencies were deprived of their most reliable labor force.

Coolidge, Chinese Immigration, Ch. XI.

The rigid regulations of the immigration officials render the return of laborers who have visited China, and the admission of the exempted classes, travelers, students, and merchants, extremely difficult, and by consequence, a marked anti-American feeling has developed in China. The Boxer revolt was directed against all foreigners, but the commercial boycott of 1903 was declared against the United States. The great importing companies united in an effort to exclude American goods from Chinese markets, and there was a marked shrinkage in our Oriental trade. Sales of cotton cloth to China, our principal foreign purchaser, shrank from $16,000,000 in 1902 to $4,000,000 in 1904, and our total exports were reduced from $29,722,000 to $12,862,000. Some conciliatory modification of the

Geary Law was urged by the textile interests of the Eastern and Southern states, by the grain dealers of Washington and Oregon, and by the employers of labor all along the Pacific coast. The Exclusion Law was reënacted (1904) but the petty persecutions that had attended its enforcement were abated.

Asiatic Immigration. Annals Am. Acad. Soc. and Pol. Sci., 34: 223-387.

The number of Chinamen now resident in the United States is but 70,000, and their place in the labor supply of the Pacific coast is being taken by immigrants from Japan. There were 25,000 Japanese in the United States in 1900, and they came over at the rate of 15,000 a year in the next eight years. Originally 80 per cent of these men were agricultural laborers, and they came under contract to immigration companies made responsible by the Mikado's government for their safe transportation and subsequent welfare. They proved thrifty and industrious but were accustomed to earning one tenth of the wages paid to American laborers of corresponding skill. Exclusion of these new competitors could not be accomplished by mere Congressional enactment, for the Japanese government is stronger than the Chinese and is able and ready to guarantee to its citizens the liberties allowed to any European people. By the treaty negotiated in 1907 only certain classes of laborers may be admitted to the continental territory of the United States and these must show passports from the Japanese emigration officials certifying that they are "former residents," "parents, wives, or children of residents," or "settled agriculturists," *i.e.* already in possession of land in this country.

Rept. Indust. Com., XV, 757.

CHAPTER XI

CONSERVATION

Exploitation of Natural Resources

Destruction of Game and of Fur-bearing Animals. — To European settlers, America seemed a forbidding wilderness. The eastern slope of the Appalachians and the Coastal Plain were heavily wooded, with only an occasional opening where the rivers joined the sea. The dense forest growth afforded refuge to wild beasts and treacherous savages, and was a haunting terror. It was the white man's function to clear away the trees and reduce the wilderness to civilization as rapidly as possible, and every colonist set about this task with zeal. The trees were felled remorselessly, while the trunks and underbrush were piled in heaps and burned as useless waste. The giants of the forest were girdled and left to die standing. The attempt of the home government to conserve " mast trees " in the interest of the navy was one of the grievances of the colonists against British rule. In the virgin forests of the Mississippi Valley, the right of a free-born American to destroy the timber was exercised without stint, and the neighborhood of every settlement was stripped bare.

Wild animals were regarded with like disfavor, and slaughtered ruthlessly. Not only dangerous beasts, as wolves, bears, and wildcats, but useful animals like the deer, the moose, the elk, were driven from the land. Any attempt to preserve the game savored of Old World privilege and was not to be tolerated. Birds shared the fate of quadrupeds. Quail, partridge, wild ducks, wild pigeon are not dependent on the forest for sustenance and protection, and readily adapt their habits to a cultivated

country; but they were shot in season and out of season, with no regard for propagation. The wood pigeon, the most delicious of game birds, was killed for sport. James Flint, the Scotchman, who went down the Mississippi in 1821, describes the process: "The woods abound in pigeons, a small species of fowl which migrates to the southward in winter, and returns to the north in spring. Their numbers are so immense that they sometimes move in clouds, upwards of a mile in length. At the time when they are passing, the people have good sport in shooting them, as one flock frequently succeeds another before the gun can be reloaded. The parts of the woods where they roost are distinguished by the trees having their branches broken off, and many of them deadened by the pressure of the myriads that light upon them."

Laut, The World's Fur Trade.

Fur-bearing animals, too, have been rapidly exterminated. The beaver, the trapper's most profitable prey, was driven from one hunting ground after another, until the stock was practically exhausted. They disappeared from the New England streams toward the end of the seventeenth century, and from the Champlain country but little later. At the headwaters of the Mississippi and the Missouri where beaver dams were abundant in the time of Pike and Lewis and Clark, the hunting grounds were exhausted when settlers arrived. The rivers of the Cordilleran area, east and west, whose beaver dams furnished a livelihood to the *engagés* of the American Fur Company, were trapped out by the middle of the nineteenth century so that the hunters abandoned the industry and took to farming. The remaining isolated breeding grounds have been curtailed by lumbering, sheep-grazing, and agriculture, until the beaver is a curiosity hardly to be seen outside a zoölogical park. The catch of 1870 was 225,000, that of 1890, 82,000, that of 1900, 8000. In marked contrast to this prodigal destruction, the conservative methods of the Hudson's Bay Company have maintained the beaver grounds of Canadian streams at full bearing capacity. No trapping is allowed during the spring and summer, the breeding season,

the females are never killed, and cubs under one year are not taken. By consequence the trade of the Hudson's Bay Company is greater to-day than in the period of its monopoly.

The journals of the explorers give marvelous accounts of the big game that roamed the western plains in search of water and pasturage. In the vast stretch of upland between the Missouri and the Brazos rivers, hundreds of thousands of buffalo, deer, and antelope throve and multiplied, furnishing easy prey to the trapper's rifle. To the Indian and to the pioneer, the buffalo was the most useful of animals, furnishing at one and the same time food, clothing, and shelter. The meat was so nourishing that it was thought to have curative properties, the skin of the calves and cows was suitable for coats and blankets, while the tough hide of the bulls made admirable tepees. The resourceful Joutel, the leader of La Salle's Gulf coast colony, used them to cover his huts. Explorer, trapper, and emigrant alike subsisted on the buffalo, but the animals were slaughtered, none the less, with reckless glee. Cows were killed by preference because their flesh was more tender and their hides more pliable, and usually nothing but the haunches was eaten, the carcass being left for the carrion crow. When the Union Pacific railroad was built across the prairie, only a few dwindling herds remained, and these made up for the most part of disconsolate old bulls. Tourists were accustomed to display their prowess by firing from the car windows at a chance buffalo.

Fur Seal Investigation, 1899.

The sea otter has almost disappeared from the Pacific coast, the catch of 1905 being but 230, while the number of seal is rapidly diminishing in Alaskan waters. In 1874 the seal herd was estimated at 5,000,000. In 1898 the estimate was 1,000,000, and in 1908, 180,000. The annual catch of 100,000 has dwindled to 13,000.

The fur trade of the United States represents a greater money value than ever before, because prices have risen with the pressure of demand upon supply. The market value of beaver, seal, and marten have made these furs

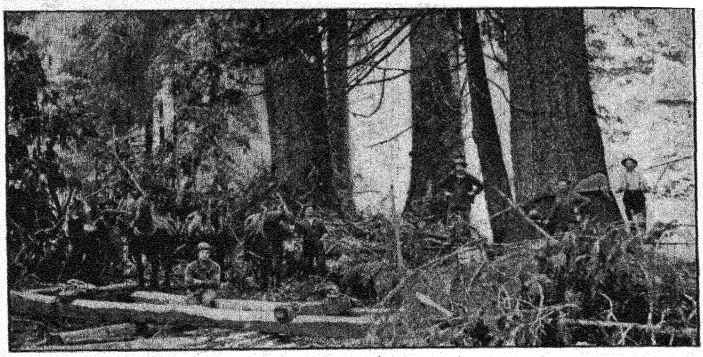
articles of luxury, and there is an increasing sale for squirrel, rabbit, skunk, muskrat, red fox, and pony skins. The trappers of these inferior furs get the prices that used to be paid for beaver.

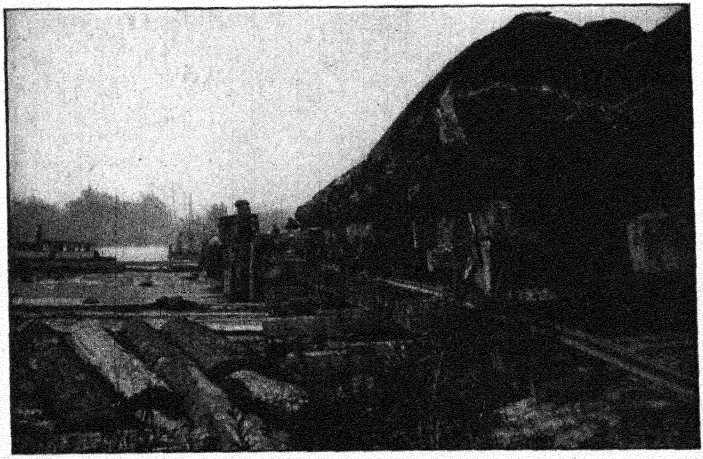
National Conservation Commission, III, 381–386.

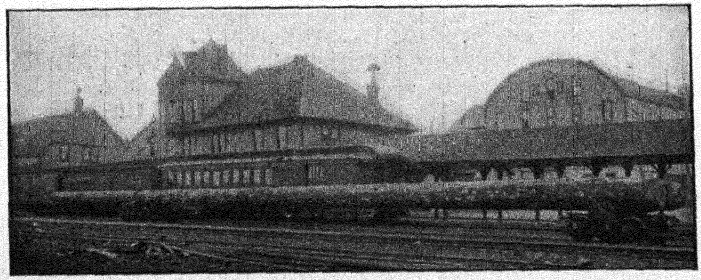
The fishing grounds of the Atlantic coast would have been exhausted long since but for the work of the state and national fish commissions. Fish hatcheries are maintained at convenient stations, and the rivers are restocked with all marketable varieties and many of the game fish. Without this artificial renewal, the supply of cod, herring, shad, salmon, and lobster, would have been reduced to the vanishing point; but the combined efforts of state and national bureaus can hardly keep pace with the reckless methods of the fishermen. Hook and line have been superseded by seines, and these in turn by weirs and traps. "The shad fishery was undoubtedly maintained for many years by hatching operations solely, but recently the fishing has become so intense that most of the spawning run of fish are caught before they reach the spawning grounds, and a sufficient supply of eggs for the hatcheries cannot be obtained." The salmon, the royal fish so sedulously guarded in old Europe, has been driven from the Atlantic coast. On the Pacific coast where, within the memory of white men, the salmon run up the rivers was so heavy that fish were crowded out of the water and could be caught in the hand, the canning industry is threatened with extinction, because the schools fight shy of the fishing grounds. The Indian's spear has been supplanted by wholesale methods, the gill net, the salmon wheel, and the fish trap. The annual run is rapidly diminishing, notwithstanding the fact that 180,000,000 spawn are planted each year in the mountain streams by the states immediately concerned, and as many more by the national government.

National Conservation Com., I, 51–73; II, 179–270, 547–581.

Exhaustion of Forests. — The commercial methods of the great lumber companies have proven even more destructive than the broad ax of the pioneer. Wholesale logging and power machinery have swept large areas clean of the more valuable trees, leaving only underbrush and scrub







LOGGING IN THE CASCADES.

oak. The best timber was cut away from New England, New York, and the upper Mississippi Valley forty years ago. The vast forests of oak and pine that covered the Appalachian range from north to south, and the hard woods of the lowlands have largely disappeared, and the aftergrowth of birch, maple, and poplar is now being logged down the rivers. These inferior woods do not furnish material for the building of houses and ships; they are manufactured into boxes, furniture, and wood pulp. The white pine of the Great Lake region is being exhausted, and the output has declined 70 per cent since 1890. The pine barrens of the Gulf states are now being invaded, and the vast forests that sheltered the sugar plantations and orange groves from frosty "northers" are being laid low. The boxing of the long-leaf pine has weakened the standing trees, and the new growth has been burned out until one fifth the forest that was once the pride of the Carolinas is gone, and the naval stores output has seriously declined. To-day structural timber, cedar, spruce, and fir, are being shipped from Oregon to Maine, the width of the continent. The forests of the Pacific slope have been depleted with reckless disregard of the future. Redwoods, cedars, and Douglas firs that have spent a thousand years in reaching full perfection, are felled, sawed asunder, yanked to the sawmill by donkey engines, and sliced into planks, boards, and shingles by the latest labor-saving devices. Here as in the Eastern states the lumbermen are falling back on inferior species, and converting hemlock into tan bark and wood pulp by means of portable machinery.

Defebaugh, History of the Lumber Industry, I, ch. 26, 27, 28.

Bruncken, North American Forests.

National Conservation Com., II, 498–512.

While we have been wasting our timber resources in this reckless fashion, the demand for wood products has steadily increased. In spite of the various substitutes,—brick, cement and structural iron,—the consumption of timber has grown more rapidly than population. The result is a marked rise in price. Since 1900 the cost of white pine lumber has increased 53 per cent, oak 54 per cent, hemlock 55 per cent, Douglas fir 63 per cent, yellow pine 65 per cent, and yellow poplar 78 per cent. Fully

National Conservation Com., II, 748.

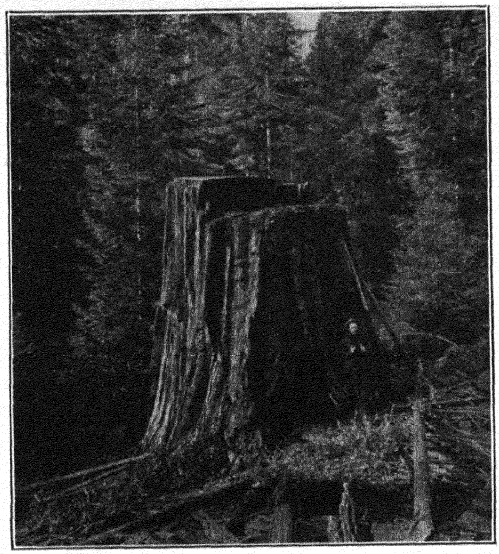
two thirds of the timber felled never reaches the market. One fourth of the tree is lost in cutting and logging, from one third to two thirds is thrown aside at the sawmill, while one third of the mill product disappears in seasoning and adapting for final use. Lumbering may fairly be regarded as the most wasteful of trades.

National Conservation Com., II, 390–469.

Fire is an agent of destruction even more to be feared than the lumberman, and more than one third of our forest wealth has gone up in smoke. The Indians set fires in order to drive the game from cover or to outwit their enemies, and they are perhaps responsible for the treeless condition of the Great Plains and the deserts of Arizona and New Mexico. But civilized man has exercised an even more blighting influence. Sparks from railroad locomotives and unextinguished camp fires, the heedless or intentional conflagrations started in brush piles, etc., have caused incalculable damage. Since 1870, when data were first recorded, the annual loss from forest fires has amounted to $50,000,000, and the loss in human life and in other property is always grave.

The devastated forest lands are unfit for agriculture, and the wreckage of the lumberman serves only to feed destructive fires. "It is stated by the Forest Warden of Michigan that forest fires (notably those of 1871, 1881, and 1896) have done more to hinder settlement in the northern counties of that state than all other agencies combined."

There are in the United States something like 65,000,000 acres of forest land ruined by cutting and by fire, which can only be restored to usefulness by replanting the trees. Reforestation is a costly process, especially in an arid climate. Two thirds of the western slope of the Sierras, once rich in pine and Douglas fir, is now covered with a worthless chaparral growth. When the new growth is destroyed with the adult trees, the burnt-over area cannot be restored to productive forest for many years. It is estimated that 20,000,000 acres of young growth is destroyed every year, and that the cost of replanting this spontaneous crop would amount to $200,000,000.



WASTE IN CUTTING: REDWOOD STUMP LEFT BY LUMBERMEN OF THIRTY YEARS AGO; WHITE FIR AND YOUNG SEQUOIA IN THE BACKGROUND. SIERRA NATIONAL FOREST



THE WASTES OF LOGGING IN PINE FORESTS OF MICHIGAN

The indirect losses from deforestation are even more serious than the direct. There is deterioration of stock, birches, soft maples, laurels, and chaparral taking the place of oak, pine, and spruce; there is inevitable erosion of the unprotected soil, which is washed away by the heavy rains, leaving gullies and gorges; there is serious depletion of the soil, the vegetable mold being burned out and the mineral elements washed away. The increasing irregularity of stream-flow is probably to be accounted for by the cutting of the forests on the higher portions of drainage basins. The snows, exposed to the full heat of the sun, melt quickly, and the run-off is speedy and destructive. As a consequence we have a costly alternation of spring floods and summer droughts and a marked increase in the number and severity of snowslides and landslides. Our reckless policy shows in shameful contrast to that of Switzerland, where "ban" forests have been cultivated for centuries as a guard against avalanches.

National Conservation Com., II, 126–141.

Our reckless assurance is not confined to the growing forests. In 1907 buildings worth $250,000,000 were destroyed by fires, four fifths of which were preventable. The Chicago fire, 1871, cost $168,000,000; the Baltimore fire, $50,000,000; the San Francisco fire, $350,000,000. We might save one million dollars a day by fireproof construction and adequate precautions, but because of our careless habits our fire departments cost ten times as much as in European cities, and our fire insurance rates are twelve times those of Great Britain.

Depletion of Pasturage. — The pioneers who crossed the Great Plains in the forties found them a bovine paradise during April and May, when the vast stretches of pasture, mingled with the gayest flowers, made a pleasing prospect for man and beast. The great watershed rising from the Mississippi to the Rockies in an undulating plateau abounded in native grasses, self-curing and highly nutritious: the buffalo grass of the river bottoms, the grama grasses of semi-arid plains, the bunch-grass of the mountain slopes. Lieutenant Pike described Texas as the most won-

derful pasture land in the world. The luxuriant herbage stood as high as a horse's belly and covered the level plain as far as the eye could reach. Herds of cattle and horses fed at large, grew fat, and multiplied, coining money for the Spanish rancheros, who had nothing to do but corral the beasts for an occasional *matanza*. The Louisiana Purchase gave us 300,000,000 acres of magnificent pasturage, free to all comers, and the chance of making a fortune at public expense was eagerly seized. Cattlemen and horsemen drove their stock from point to point, seeking out watering places and the best grazing ground. Thus was the wealth of the prairie converted into marketable crops, — draft animals, beef cattle, wool, and hides. The old cattle trail ran from Texas to Montana, through Indian Territory, Kansas, and Nebraska, and before the days of the railroad unnumbered cattle were driven along this herders' highway to the abattoirs of St. Louis, Omaha, and Chicago.

National Conservation Com., III, 355–361.

Brisbin, Beef Bonanza.

Adams, Log of a Cowboy.

Unfortunately Uncle Sam imposed no regulations upon the cattle barons, and under their ruthless exploitation this public pasture land has been rapidly exhausted. The most fertile regions have been overstocked, the herbage trampled down and eaten to the roots, and the water holes ruined by careless use, until the old proportion of two cows to an acre has been changed to two acres for a cow. The homesteading of the arable area has curtailed the range until the Great Plains have ceased to be a common pasture. The decade between 1880 and 1890 witnessed the heyday of the cattle industry in the Southwest. In 1890 a serious drought parched the pastures; thousands of cattle died, and many ranches were ruined. The Dingley Tariff raised the price of wool, and a boom in sheep-raising followed. Sheep herders invaded the cattle ranges, and the pastures were eaten to the bone. The cattlemen had no legal title, but they endeavored to protect their accustomed grazing grounds. Disputes grew heated, and the controversy came to blows. Sheep and cattle wars were waged in Lincoln County, New Mexico, in the Tonto Basin, Arizona, and in southern Wyoming.

Rept. Public Lands Commission, *1904*.

The narrowing of the public range has forced the cattlemen to have recourse to forage crops, alfalfa, kaffir corn, cottonseed meal, etc. Beef steers are now shipped from Texas and Montana to Kansas and Nebraska to be fattened for the market, at a notable advance in cost. The proportion of food animals to population has been steadily declining since 1890. Indeed, the figures for the past seventy years show a general decrease.

Bureau of Corporations Rept., Ch IV, on Beef Industry.

Bulletin 91, Dept. of Agriculture, 1909.

NUMBER ANIMALS PER HEAD OF POPULATION

YEAR	CATTLE	SHEEP	SWINE	RATE OF DECREASE IN MEAT SUPPLY
				per cent
1840	.88	1.13	1.54	——
1860	.81	.71	1.07	82.5
1880	.79	.84	.99	72.4
1890	.92	.65	.92	79.4
1900	.69	.52	.83	59.3

The American dietary in 1840 was one half meat; the proportion has now fallen to one third. Nevertheless the price has steadily risen, *e.g.* that of fresh beef as much as thirty per cent in the past twenty years.

Bulletin 41, U. S. Com. of Labor.

The Exhaustion of the Soil is less spectacular but no less real than the curtailment of our pasture and forest areas. A shrewd English observer, the author of American Husbandry (1765), called attention to the reckless exploitation of the farm lands along the Atlantic coast, and denounced as criminal the careless methods then in vogue. His anticipations have long since been realized. Indian corn can no longer be grown on Cape Cod, the hill farms of New England produce only hay, the tobacco lands of tidewater Virginia are virtually "dead," even the comparatively new lands of the West, the wheatfields of California and Minnesota, show a declining yield, lands that formerly bore 50 bushels per acre now averaging only 14 bushels.

The cause is not far to seek. Land has been abundant and cheap in this country, while labor in the agricultural regions has been costly. The farmer has undertaken to get the largest return per unit of labor instead of per unit of land. This means extensive farming with labor-saving machinery, reliance upon one product, and neglect of crop rotation, scientific fertilization, subsoil plowing, drainage, irrigation. The waste from soil erosion is stupendous. It is estimated that the 780,000,000 tons of silt carried down the rivers to the sea reduces the productivity of the farms every year by the amount of $500,000,000. That this depletion is unnecessary is evidenced by the fact that Old World wheat lands bear more heavily than ours, *e.g.* Great Britain 32.2 bushels, Germany 28 bushels, France 19.8 bushels, Austria 17.8 bushels, Hungary 17.6 bushels, while our own average is 13.8 bushels. Only the peasants of Russia secure a lower crop return than the farmers of the United States.

Exhaustion of Mineral Resources has gone on apace. The bog-iron of the Atlantic states was used up in the eighteenth century. The resources of the Appalachian range are reaching the point where mines are abandoned because of high-cost production, and we are drawing upon the seemingly inexhaustible supplies of the Lake Superior district. The experts of the United States Geological Survey estimate that at the present rate of output all the high grade ores will be exhausted within thirty years, when we must have recourse to inferior or less accessible deposits.

Iron is a raw material that may be used over and over again, the wrecks of the scrap-heap being turned into the furnace; but coal, the great industrial fuel, is consumed once for all, and there is no means of restoring the supply. The coal mines of eastern Virginia, whose development Hamilton thought wise to stimulate by an import duty, are long since abandoned. The anthracite coals of eastern Pennsylvania still produce 100,000 tons per year, but at steadily increasing cost. Shafts must be sunk deeper, and thinner veins and deposits of lower grade coal be utilized. The cost

of hoisting, pumping and ventilating apparatus increases as operations are extended. Hence the price of anthracite coal is advancing year by year. The bituminous mines of the Middle West will soon reach the point of diminishing return, and we must then have resort to the lignite coals of the Dakotas and Montana. Geologists estimate that at the present rate of output the high grade coals cannot last much more than a hundred years. There has been a criminal waste of this all-important fuel. The waste in mining is computed at sixty per cent, but this is reduced to forty per cent in the best equipped plants. The waste in consumption is even greater. Steam engines utilize about eight per cent of the coal they burn, not ten per cent of the fuel consumed in power plants is converted into energy, while the electric lighting plants utilize less than one hundredth part of the coal burned.

Campbell, Coal Resources of Public Domain

The by-products of the bituminous coal fields, petroleum and natural gas, furnish heat, light, and energy on easier terms than carbon. We have been using petroleum for sixty years, and have already consumed 1,800,000,000 barrels. At the present rate of output all workable wells will be exhausted by 1950. The output of the Appalachian area is rapidly declining, and the center of production is shifting toward Oklahoma. The demand for kerosene, lubricating oils, and all the by-products of the refinery, is steadily advancing, while the use of crude oil as fuel in locomotives and steam engines has just begun.

National Conservatior Com., III, 446.

Rept Bureau of Corporations, Petroleum Industry.

Natural gas, a much more volatile substance than petroleum, is the most convenient of all fuels for domestic purposes, being piped from the coal fields to distant cities and readily distributed to consumers. This valuable endowment we have thrown away wantonly, like boys at play. Men drilling for oil allowed the gas to escape, as an obstacle to production, or lighted the jet and watched it burn itself out. The actual waste is estimated at 1,000,000,000 cubic feet a day. Preventive legislation, undertaken in Pennsylvania, Ohio, and Indiana, has come too late to conserve the main supply, while new communities have not

National Conservation Com., III, 465.

yet learned caution. The daily waste from the Caddo fields of Louisiana is sufficient to light ten cities of the size of Washington.

National Conservation Com., III, 558.

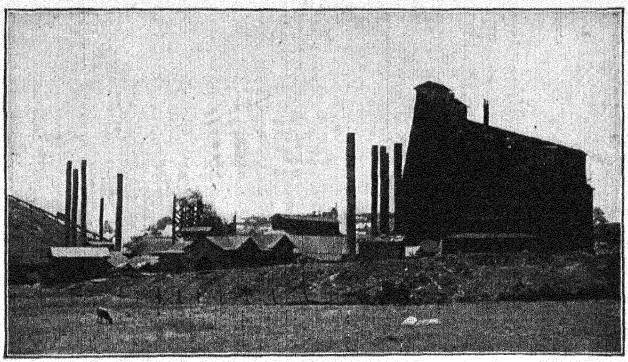
The extensive beds of calcareous deposit in South Carolina, Florida, Tennessee, and northern Arkansas have furnished 30,000,000 tons of phosphate rock, the best-known means of restoring phosphoric acid to our depleted soils. The resources of South Carolina and Florida are approaching the point of exhaustion, while the Tennessee phosphate beds are being monopolized by mining syndicates. The conservation of this important fertilizer is of the utmost importance to our agricultural future. Unless exportation be prevented, low-grade rock utilized, and the new deposits just discovered on the public domain economically administered, our phosphate beds, the slow accumulation of geologic ages, will be exhausted within twenty-five years.

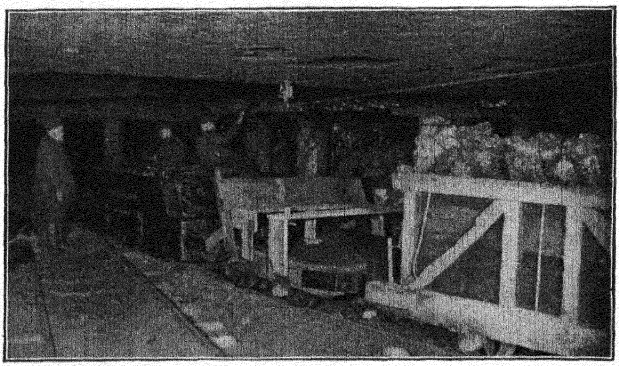
Bulletin U.S. Com. of Labor, The Phosphate Industry.

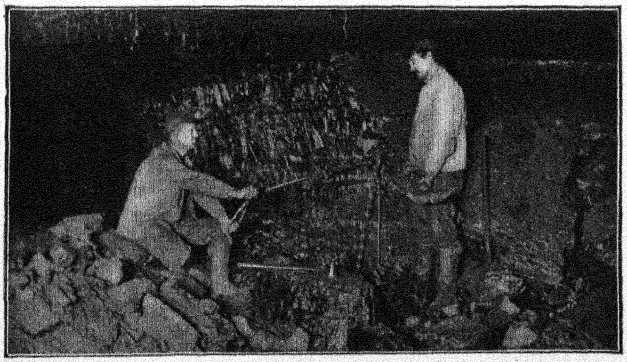
National Conservation Com., III, 521.

The mining of the precious metals, gold and silver, copper, lead, and zinc, was quite as heedless in the early stages of exploitation. In the " golden age " of California, reckless waste characterized the diggings from north to south. While the washing process was in vogue, fully half the surface " dirt " was carried down the rivers to the sea. The maximum yield, $65,000,000, was reached within five years of the discovery, and the output from the diggings dwindled thereafter. Recourse was then had to quartz and hydraulic mining, the stamp mill and quicksilver amalgamation. The best mines of Colorado and Nevada are going through the same process of exhaustion. The Cripple Creek and Yukon discoveries and the cyanide process raised our gold production to $80,000,000 in 1902, and then the output declined. The development of new possibilities in California by the dredging of river wash, the opening up of the latent resources of Nevada, and the rush to Cape Nome raised production to $94,000,000 in 1906, but it is probable that another point of maximum output has been reached.

The Waste of Human Life. — Even more criminal than the waste of material resources is the waste of human energy.







THE ANTHRACITE COAL MINERS

The exploitation of human beings in factories and foundries, in mines and in the railway service, is no less ruthless than the destruction of our forests. Our annual casualty list is a national disgrace, being larger in proportion to the number of employees than that of any civilized country. In the coal mines, for example, the casualty rate is 3.5 per thousand, and this among able-bodied men. In 1908, out of 500,000 employees, 3000 were killed and 7000 injured. When one considers that most of these men have families dependent upon their labor, the social wreckage seems appalling. The death roll increases from year to year, because with the deepening of the mines, the introduction of automatic picks, undercutting machines, and electric transportation, the risks are increased. This is a dangerous occupation, and accidents arising from the firing of coal dust and the explosion of fire damp cannot always be avoided; but many frightful disasters are attributable to the criminal carelessness of men and management. Boys under sixteen should not be employed underground, foreigners who do not understand the English language should not be placed in stations of responsibility, and rigid state inspection should secure that all possible safety devices are employed. The loss of life among railway employees is even more terrible than in the mines, and here again casualties are on the increase. The number killed in 1888, the first year in which such data were collected, was 2451, the number injured five times as great. In 1907 the number of employees killed was 4534, and the number injured, 87,644, while the total casualty list for employees, passengers, and other persons was 11,839 killed and 111,016 injured. The Cuban War was not so destructive of life and health.

National Conservation Com., III, 620–662.

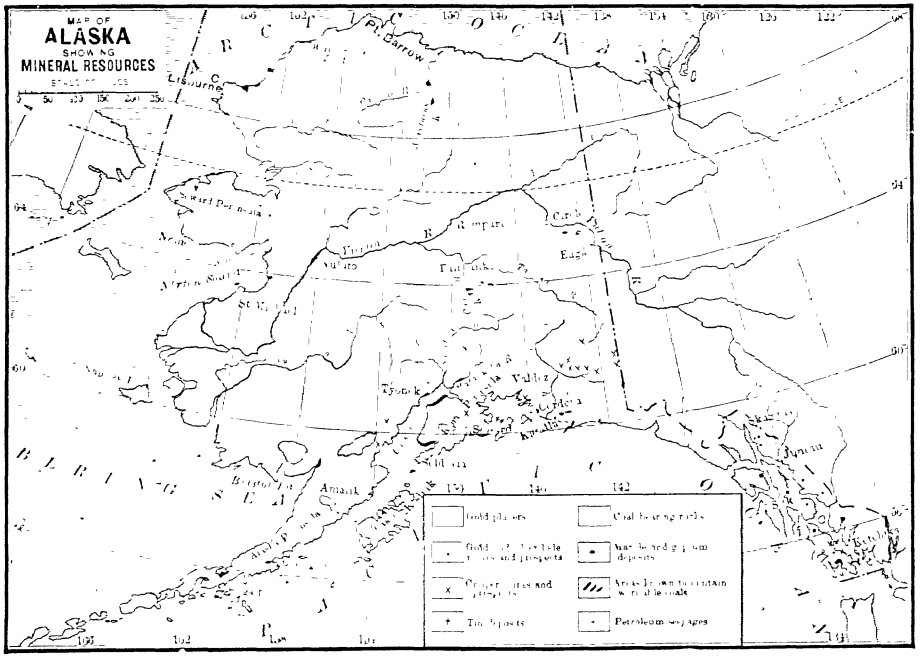
Rept. Interstate Commerce Com., 1909.

Factories and workshops are contributing their quota to this industrial waste. The poisonous fumes from arsenic and cyanide compounds produce blood poisoning; the irritating dust arising where metal and glass are wrought enter the throat and lungs and generate tuberculosis and pneumonia, and the quarries are no less injurious. The mortality among stone and marble workers is six times

that prevailing among professional men. Lead poisoning is another industrial disease which afflicts painters and typesetters and paint-mill employees. Dangerous machinery adds thousands each year to the already long list of casualties, in which the young and venturesome bear the larger proportion. An expert in vital statistics has recently estimated the industrial loss accruing from these several causes at $854,250,000 per year, of which half is represented in wages and an additional third in expenditure for illness, items which are borne by the injured employee.

Census, *1900*, Manufactures, IV, 725.

Utilization of Wastes in Manufacture. — It is only when man is dealing with nature at first hand that he dares to be prodigal. The materials into which he has put labor and thought acquire a market value and are consequently used with care; in the processes of manufacture, therefore, waste has been largely eliminated. The refuse of the oil-refinery is converted into valuable by-products, perfumes, and flavoring extracts, and mineral oils. The slag of the iron furnaces is utilized as ballast in railroad construction or converted into paving stones and slag brick. The low grade coal, heaped into "culmbanks" by the careless operations of the nineteenth century, is now being overhauled, screened, and marketed as chestnut, buckwheat, birdseye, and other fine grained varieties, which prove far better than the coarser grades for the automatic stokers of the great power plants. The by-products of the slaughterhouse fully cover the cost of converting the animals into food. The blood is transformed into albumen for bleaching, the offal into fertilizers, the hoofs into glue, the horns into buttons, knife handles, etc., the bones become ivory and gelatine, the hair is made up into mattresses and felting, the various fats into butterine, glycerine, etc. Pepsin and other medicines are distilled from divers glands, and a nerve specific from the gray brain matter. Cotton seed, the waste of the gin, was cast into the gutters and left to rot and become a public nuisance in the ante-bellum days of the South. Yankee ingenuity has found a use for this refuse.


MAP OF
ALASKA
SHOWING
MINERAL RESOURCES
Fairbanks
Nome
Bering Sea
Arctic Ocean
Yukon
Valley
Alaska Range
Aleutian Range
Brooks Range
Yukon Flats
Tanana Valley
Kuskokwim Mts.
Seward Peninsula
Yukon Territory
Alaska
Canada
Coal-bearing rocks
Petroleum occurrences

By 1870 the crushed seed was used as a fertilizer, by 1880 as a cattle food, and by 1890 it was transformed into articles of human diet. To-day no part of the seed is wasted. The lint is ginned off and made up into felt, the hulls are crushed into mast and may yet be converted into paper. The kernel is ground as fine as flour, the oil pressed out, and the meal cake remaining sold for cattle feed. Cotton-seed oil, refined, becomes cottolene, lubricating oil, and low grade olive oil. Even the wastes of the forests are utilized, once they get to the mill. Sawdust, being elastic, absorptive, and nonconducting, makes the best kind of packing and bedding material, and it is beginning to be worked over into flooring tiles and porous brick, *briquettes* and *bois durci*, after the European example. The cuttings that cannot be used as timber are wrought into a number of valuable by-products. Beech, birch, and maple are converted into oxalic and acetic acid and wood naphtha, the stumps and branches of yellow pine into turpentine, oak slabs into charcoal, the bark of oak and hemlock are sent to the tanneries, while spruce, poplar, and cottonwood furnish wood pulp for the paper mill. Even pine needles may be distilled into camphor.

Preventive Legislation

State and national legislatures have done much to prevent the unnecessary destruction of our natural resources. Game laws, though enforced against persistent opposition, secure a closed season sufficient in length to protect birds and animals during the breeding season and to prevent the annual "kill" exceeding the annual increase. Hunting and fishing licenses impose regulations on the methods of slaughter, and usually bring in a revenue from license fees and fines large enough to maintain the game wardens. In North Carolina and California the leasing of game preserves to private persons and hunting clubs is an accepted policy. The seal fisheries are guarded by an international agreement (1896) between the United States, Great Brit-

Fur Seal Investigation, 1899.

ain, and Russia, in accordance with which pelagic sealing is proscribed the year round within sixty miles of the Pribiloff Islands, and throughout the Behring Sea during the breeding season. Licensed vessels only are permitted to follow the seals into deep water, and in the land-kill fire-arms and explosives are forbidden. The chief violators of this humane code are the Japanese sealers, who are unfortunately not bound by the treaty.

Whittelsey, Labor Legislation in Massachusetts.

Legislation to prevent the waste of human life has developed very slowly in the United States. Massachusetts took the lead in 1874, with a law imposing limitations upon the employment of children. The present labor code of that progressive commonwealth forbids the employment of children under fourteen years, proscribes night work for young persons and women, and enforces a fifty-eight hour week in all factories and workshops. A battle royal has been fought over the legality of limiting the working day for women, on the ground that any interference with the terms of employment would deprive these laborers of the freedom of contract. The contention has been recently overruled by a decision of the Supreme Court in the Oregon case (1908). In upholding the provision for a nine-hour day for the woman wage earner, Justice Brewer gave the opinion that "the limitations which this statute places on her contractual powers, upon her right to agree with her employer as to the time she shall labor, are not imposed solely for her benefit, but also largely for the benefit of all. . . . Since healthy mothers are essential to vigorous offspring, the physical well-being of women becomes an object of public interest and care, in order to preserve the health and vigor of the race." The Supreme Court of Illinois has recently sustained a nine-hour law for women on much the same grounds, and fully half the states of the Union have imposed similar restrictions upon the amount of physical exertion that may be required of female laborers.

Coman, Supreme Court Decision in Oregon Case.

In employments where special risks are encountered or heavy responsibilities imposed, restrictions on the working day for men have been enacted. Utah and seven other

Rocky Mountain states prescribe an eight-hour day for miners, while the federal law of 1907 determines the conditions under which railway employees of the interstate roads may perform their responsible tasks. A nine-hour shift for telephone and telegraph operators, a sixteen-hour limit for train employees, followed by a ten hours' interval for rest, together with safety devices and uniform braking and switching appliances, render the **Esch Law** a highly important safeguard not only for passengers but for the men who run the trains.

The liability of employers for accidents due to unguarded machinery and the negligence of fellow employees was recognized in the federal law of 1907, so far as interstate carriers are concerned. Few of the states have gone so far, and we are still shamefully behind the English and German requirements. The injured workman gets no compensation if contributory negligence can be proven, and the scale of damages is not determined by the law. The operation of the penalty is not automatic, and suit must be brought by the injured man or his family in order to secure damages. It is estimated by the accident insurance companies that three fourths of the indemnity paid by the employer is usually expended in litigation. Some of the great employers of labor, such as the Pennsylvania Railroad and the United States Steel Corporation, maintain a form of voluntary insurance which goes far to make good the shortcomings of the law.

A series of four coal-mine explosions occurring in December, 1907, killed seven hundred men and shocked the happy-go-lucky American public to the point of demanding that something be done. The federal government, through the United States Geological Survey, arranged for rescue stations at Pittsburg, Pa., and Urbana, Ill., where the elements of risk were studied, life-saving appliances devised, and crews of men trained in the best methods of relief. A **Bureau of Mines** was established in 1910 for the purpose of supervising this work and testing explosives, shafting materials, and hoisting machinery, and a

rescue station is to be placed in every large coal field in the country.

National Conservation Com., III, 671–752.

Bailey, Cyclopedia of Agriculture, IV, 486.

The battle against disease is being waged with ever increasing effectiveness. Health commissions, city, state and national, are making scientific study of local and general conditions. Quarantine regulations, sanitary requirements, and tenement house inspection are being enforced in spite of the protests of selfish private interests. The epidemics that devastated our ports in time past are largely done away, and isolated outbreaks are quickly brought under control. Vaccination has banished smallpox; the campaign against mosquitoes has eliminated yellow fever; typhoid will disappear with insistence on pure water and the destruction of the house fly, while California is ridding herself of rats and ground-squirrels, the carriers of bubonic plague. The warfare against contagious diseases of more insidious type may not so soon be accomplished, but we are fighting tuberculosis by tenement house reform, the hookworm disease by cleanliness, and the vice diseases which are responsible for a large proportion of the defectives in our asylums are coming to be regarded as intolerable. Variations in the death rate indicate the hygienic advance made in the course of the second half of the nineteenth century. The numbers of deaths per thousand of population from 1804–1825 was 24.6; from 1826–1850, 25.7; from 1851–1863, 28.3; from 1864–1875, 25.4; 1876–1888, 22.9; from 1889–1901, 21. Since 1890 the death rate in our principal cities has declined in New York from 25.4 to 18.6; in Boston from 23.4 to 18.9; in Chicago from 19.87 to 14.07.

"The public welfare outweighs the right to private gain, and no man may poison the people for his private profit," said President Roosevelt, in recommending to Congress legislation forbidding interstate traffic in adulterated or deteriorated foods. The **Pure Food and Drug** law is enforced with difficulty because of the opposition of the manufacturers concerned, but the new standards imposed will ultimately be insisted upon by state legislation and by

the private purchaser. The proposition for a National Department of Health, brought forward by Congressman Owens in March, 1910, is urged on the ground that the numerous municipal and state agencies should be brought into line with the most advanced achievement, and that communities which are struggling against local influences should have the support of the Federal government. The health of our people is no less important to national prestige than our standing army, while the money cost of neglect is more serious than war. It is estimated that the financial loss represented in preventable deaths amounts to $1,000,000,000 per year, and that the costs of preventable illness and the medical aid incidental thereto amounts to another billion dollars.

Reclamation

The Federal government has not confined its efforts to the guarding of life, brute and human, against reckless exploitation, but has organized and financed certain undertakings to which private enterprise was inadequate. The building of post roads and canals was urged upon Congress by Secretary Gallatin, but the scheme he proposed was too vast for the men of his generation, and only recently have we come to realize the advantage of a comprehensive plan. A large amount of piecemeal work has been done by the general government in the way of improving rivers and harbors. Millions of dollars of public money have been spent in building levees along the Mississippi, in erecting breakwaters where natural harbors needed reënforcement, dredging river channels, removing obstructions to navigation, etc. A considerable portion of this expenditure has gone to waste because appropriations and engineering skill were inadequate to permanent results. Moreover, the advent of the railway diverted public interest from navigation projects, and many of the canals built by state aid and from the proceeds of national land grants have fallen into disuse. Railway traffic has superseded water traffic because it offers

Rept. Inland Waterways Com., *1908*, 177–209, 314–337, 375–376.

greater speed and convenience, but our magnificent system of inland waterways has still a large part to play in industrial development. The accumulation of freight traffic in the autumn months, when the crops are to be shipped to market, taxes all the resources of the railways, and the consequent congestion often involves the shipper in heavy loss. Moreover, where no competing carrier is available, freight rates are likely to be excessive. Recourse to a water route with its possibilities in the way of low cost transportation, would have more effect on freight tariffs than appeals to the Interstate Commerce Commission.

Johnson, Inland Waterways, Ch. IV, V, VI, VII.

National Conservation Com., II, 13–57.

The Inland Waterways Movement has many adherents among business men, and the example of England, France, and Germany, where a large part of bulky products travel by boat, is cited in evidence of our own stupid neglect. We have 25,000 miles of navigated river and 2120 miles of operated canals; but the mileage should be increased and the capacity of the waterways doubled. Except on the Great Lakes, where steamship lines are operated in connection with the railways, there has been a notable decline in the bulk and value of water-borne freight during the past thirty years. Many of the canals built at heavy cost in the second quarter of the nineteenth century have been abandoned, while rivers such as the Hudson and the Mississippi, once the highways of commerce (1850–1880), have surrendered the bulk of traffic to their swift competitor. Our natural waterways must be cleared of débris and alluvial deposits, canals that bear strategic relation to transportation systems must be widened and deepened to accommodate modern craft, so that they may enter into effective competition with the railroad. A steamer with a capacity of 70,000 tons is the equivalent of one hundred freight trains, and can be manned and fired at the cost of one.

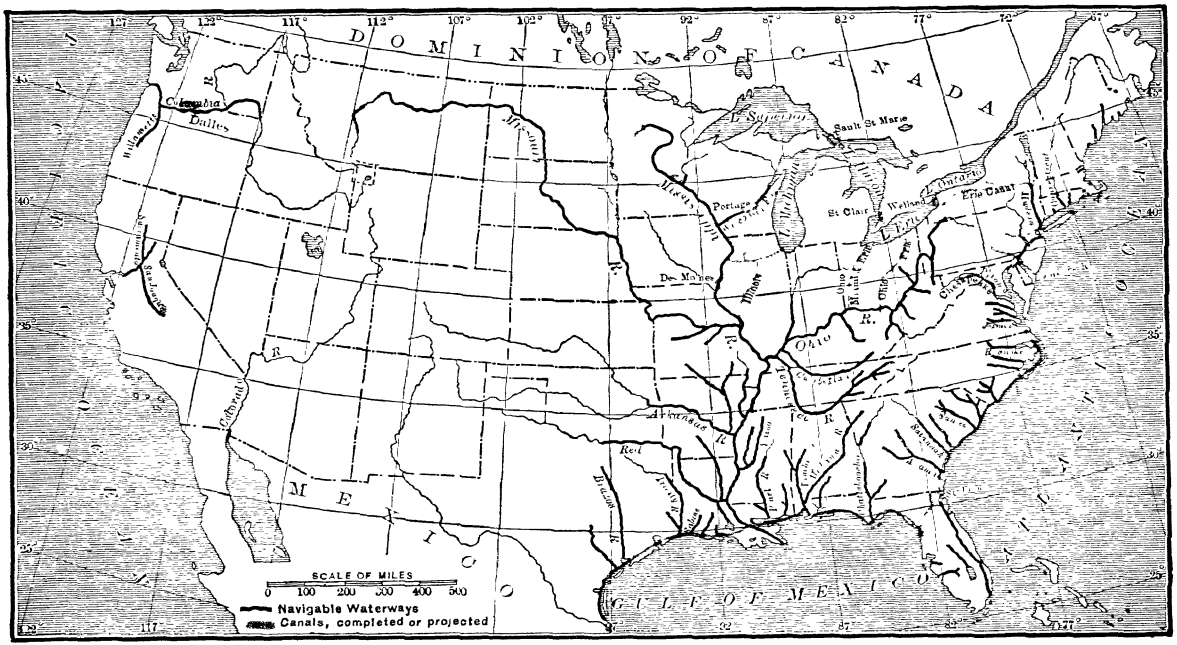
Inland Waterways Com., *1908*, 177–312.

Transportation by Water in U.S., 149–380.

Dixon, Tariff Hist. of Mississippi River System.

Federal aid is invoked in behalf of a series of transportation projects more or less feasible. The Panama Canal, now approaching completion, will promote commerce between New Orleans and San Francisco, and do much toward

American Waterways, Annals Am. Acad. 31; 1–299.



NAVIGABLE WATERWAYS.

abating transcontinental freight rates. The canalization of the Ohio River at a cost of $40,000,000 would give a cheap outlet for the coal, iron, and timber of the Appalachian states. The deep waterway from the Lakes to the Gulf, via the Chicago drainage canal and the Illinois River, is intended to furnish sufficient draft for sea-going vessels, so that the cattle, grain, and cotton grown in the Mississippi Valley can be shipped direct to Europe. The deep waterway from Buffalo to New York, utilizing the Erie Canal and the Hudson River, would tap the Great Lakes at another point and furnish an outlet to the Atlantic. The cost of an all-water route from New York to New Orleans, developed to the capacity of ocean steamers, is estimated at $100,000,000, but this initial expenditure would be quickly made good in the economies of transportation, and it is therefore urged by the shipping interests concerned. The business men of the Northwest are no less insistent that the Federal government should undertake to render the Columbia River navigable for freight steamers by enlarging the locks at the Cascades and canalizing the river at the Dalles. More than one thousand miles of waterway could thus be rendered available for the wheat fields and fruit orchards of the Columbia River Basin.

Matthews, Remaking of the Mississippi.

Deep Waterways Com., *1897*, 7–33.

Johnson, Inland Waterways, Ch. X, XI.

Transportation by Water in U.S., II, 249–280.

Achievements of the Department of Agriculture. — In his last Congressional message, George Washington, our farmer president, recommended the establishment of a government department charged with the furthering of intelligent agriculture. The proposition was debated from time to time, but action was deferred till 1839, when Congress appropriated $1000 to be expended in the purchase of new varieties of seeds and plants under the direction of the Patent Office. The appropriation was increased as the propaganda grew popular, but the Bureau of Agriculture was not organized as a distinct office until 1862. In this same year provision was made for the maintenance of agricultural colleges from the proceeds of land grants, and thus the movement for scientific agriculture obtained full recognition. The first agricultural experiment stations

Greathouse, Hist. Dept. of Agriculture.

were established by Federal appropriation in 1887, and the Bureau of Agriculture was raised to the status of a department with representation on the Cabinet two years after. The annual appropriation to this service is now $16,000,000, while the Third Endowment Act (1907) provides for a money grant of $50,000 a year to each of the forty-six states and territories for the extension of agricultural training.

The functions of the Department of Agriculture are represented in a series of bureaus, *e.g.* the Weather Bureau, where an accurate climatic record is kept, and whence forecasts and weather signals are issued for the benefit of shipping and agriculture; the Bureau of Animal Industry, which studies the diseases of horses, cattle, hogs, and sheep, and publishes information on scientific breeding, hygienic dairy farming, etc. One of its recent achievements is a treatise on effective methods of combating loco weed poisoning. The Bureau of Plant Industry conducts first-hand investigations and experiments in the adaptation of plants, new and old, to the varied conditions of climate, soil, and humidity to be found in this country. Their latest triumph is the discovery of a hardy alfalfa suited to the cattle ranches of Montana and the Northwest, and a Persian clover that will flourish on the arid mesas of Arizona and New Mexico. This achievement cost the discoverer a twelve-year hunt over the sub-Arctic plains of Siberia and the arid steppes of Central Asia. The Bureau of Soils is making an extensive inquiry into agricultural conditions of every state in the Union, and reports are issued, county by county, detailing the constituent properties of the soils represented, their water-holding capacity, facilities for drainage or irrigation, climatic influences, crop yields, etc. The agricultural methods in use and the changes deemed desirable are discussed in each instance. This bureau has carried on a series of experiments in Utah, California, and elsewhere, as to the method of removing alkali from soils impregnated with this plant-killing salt. The Bureau of Entomology is engaged in a campaign against destructive insects, such

Fairchild, Our Plant Immigrants.

as the gypsy moth, the elm beetle, and the brown-tailed moth, notorious enemies to forest growth, and cattle pests, such as the gadfly and the buffalo gnat. The scientists of this branch of the service discovered the sins of the mosquito in spreading malaria and yellow fever, and the responsibility of the house fly for typhoid. The Bureau of Chemistry is made responsible for the enforcement of the Pure Food and Drug law, conducts adulteration tests, and standardizes drugs.

National Conservation Com., III, 108, 269. Hopkins, Soil Fertility.

It has been demonstrated that under suitable rotation of crops the drain on the chemical constituents of the soil may be minimized, and that the introduction of nitrogen-bearing plants — clover, cow peas, and alfalfa — may do much to conserve the fertility of the fields. Under this beneficent department, new varieties of corn and tobacco have been made to flourish on soils formerly regarded as unproductive; experiments with sugar beets have proved that this crop can be successfully grown through a wide belt in the North and West; Egyptian cotton, valuable for its long staple and hardy growth, has been adapted to the uplands of the Carolinas and Georgia; spring wheat has been sown in the Dakotas and macaroni wheat in the semi-arid plains, adding vast areas to our wheat acreage; the navel orange and irrigation have converted the deserts of southern California into a prosperous land of orchards.

Cyclopedia of Agriculture, IV, Ch. VIII.

The Department of Agriculture and the agricultural colleges have set about the systematic education of the American farmer. Bulletins dealing with every problem that can present itself to the cotton planter, the ranchman, market gardener, or dairyman may be had free on application; the information is given in simple, direct fashion, and the improvements proposed are such as can be followed by a man of small capital and meager education. Model farms are operated in the several agricultural districts, in order that the various experiments and successes may serve as object lessons to a farming community. Farmers' institutes are held in every state in the Union. The attendance in 1907 was more than 1,500,000, and the

agricultural colleges were taxed to provide a sufficient number of lecturers. Demonstration trains are sent through the remoter districts, the cars being fitted up with exhibits indicating the latest improvements in dairying, apiculture, viticulture, the best results attained from the several varieties of wheat, alfalfa, corn, etc.

Fernow, Forestry in U. S.

The Forestry Service. — The census of 1870 was the first to suggest the depletion of our forest area and the necessity for safeguarding the future timber supply. The report attracted the attention of public-spirited men, an American Forestry Association was organized, and a systematic campaign undertaken. The Timber Culture Act of 1873 was intended to reforest the treeless areas west of the one hundredth meridian. It provided that a man might secure title to a quarter section in the public lands by planting forty acres of timber and proving a ten-year growth. The terms proved too difficult, and were later modified to ten acres in trees and an eight-year growth; but even so the actual results were slight. The plantations died for lack of moisture and adequate care, and many titles were secured by fraudulent proofs. The act was repealed in 1891, and in that same year the president of the United States was empowered to create forest reserves in the public domain. President Harrison proclaimed four such reservations and President Cleveland thirteen, covering a total area of 17,500,000 acres, while President Roosevelt added 150,000,000 acres to our forest domain. There are today one hundred and fifty national forests in the United States, and the area so reserved amounts to 162,000,000 acres. The public lands segregated for forest use are located almost wholly in the Cordilleran area, and lie in three tiers running from north to south in line with the Continental Divide, the Sierra Nevada and Cascade ranges, and the Coast range. Not all this land is forested; some of it is fitted to agriculture, a large proportion to pasturage only, and some of it doubtless contains important mineral deposits. The United States Geological Survey is engaged in classifying and delimiting the mineral lands, and the

Fernow, Economics of Forestry, Ch. XII.

Forest Service is studying the surface resources with a view to designating their most effective use.

The forest law of 1897 determined that the several reservations should be administered with a view to utilizing the surplus product of grass and timber while conserving the normal growth. The task was intrusted to a Bureau of Forestry under the Department of Agriculture, and an annual appropriation of $15,000,000 is now assigned to its support. The Forestry Service is organized in six districts, with headquarters at Missoula, Ogden, Denver, Albuquerque, San Francisco, and Portland. A forester is placed in charge of each district, and the field staff comprises some 1500 men. The several functions performed by the forest service are (1) Protection against forest fires and timber thieves, the special function of the forest ranger. (2) Timber sales; disposal of mature, dead, or insect-infected timber under suitable conditions as to logging, sawing, transportation, etc. As a timber merchant, Uncle Sam deals by preference with the settlers of the immediate neighborhood, and ninety per cent of the sales are made in lots of less than $100 value. In the year 1908 the timber sales brought in a revenue of only $773,182, but 30,000 permits for free use were issued to settlers, prospectors, schools, churches, etc. The United States government disposes of more lumber than any forest owner except the Czar of Russia. (3) Pasturage. Districts suitable for grazing are leased to cattle and sheepmen under careful restrictions as to overstocking. The government ratio is ten acres to a cow, and under this liberal allowance the weight and quality of the animals is notably superior to those fed upon the open range, while the forage growth is regaining its pristine luxuriance. Here, as everywhere, the settlers and home builders have the first choice. Fully 8,500,000 animals — horses, cattle, sheep, and goats — were pastured on the public range during 1908, and $962,829 was paid into the public treasury by the twenty-four thousand owners. (4) Reforestation. Great care is taken in determining the trees that may be felled, and the conservation

of young growth is a matter of prime concern. Devastated areas are replanted with species adapted to special conditions of soil and climate, — the Douglas fir for the Wasatch Range, the yellow pine for the Sierras, the eucalyptus for the arid and frostless districts of California. (5) Conservation of stream flow, one of the functions prescribed in the law of 1897, and a concern of the Forest Service which is of prime importance to the far West, where fuel is scarce and industry must rely upon water power. Special attention is given to safeguarding the forest cover in the drainage basins where the mountain streams have their source, in order that the winter precipitation may be held over as far into the summer as possible, thus guarding against destructive floods and guaranteeing a constant flow.

National Conservation Com., II, 95–126.

Three fourths of our forests are in private hands, and these are usually the best stocked, containing four fifths of all the timber in the country. Scientific forestry must be practised by the farmer, the timber companies, the owners of great estates, if there is to be any fundamental change in our national habits. At present hardly one per cent of the private forest lands receive adequate care, and fire destroys more timber in the farmer's woodlots than on the public domain. The need of nationalizing certain timbered areas in the Eastern states is becoming evident. The proposed Appalachian forest reserve would enrich the tributary region by conserving an important timber supply, regulating stream flow, and preventing farther erosion of adjacent farm lands.

Pinchot, Private Forests.

Reclamation of Agricultural Land. — The pressure of population on the food supply is becoming evident in the United States. Our exportation of agricultural products is declining, the prices of beef, cereals, hides, wool, etc. are rising, and they are not likely to fall to former levels. It is probable that wheat at one dollar per bushel is a permanent factor in our national economy. Values are mounting from year to year, for we are fast reaching the limit of our cultivable area, while the demand for farms is enhanced by the incoming of land-hungry peasants from Europe.

American farmers are beginning to migrate to the Canadian Northwest, where unexploited wheat areas await cultivation. Sixty thousand emigrants crossed the boundary line in 1907 and again in 1908, and the figure mounted to 75,000 in 1909. The increased value of farm lands is due in part to scientific tillage, resulting in larger crops, and to the capital invested in improvements, — buildings, fences, roads, etc. The average rise in capitalization between 1890 and 1900 is estimated at twenty-five per cent, between 1900 and 1905 at thirty per cent. The greatest augmentation of value has taken place in the West and Southwest, but the older sections of the Union have experienced a considerable rise, — South Central, 40.2 per cent, North Central, 35.3, South Atlantic, 36, North Atlantic, 13.5 per cent.

Holmes, Changes in Farm Values

The agricultural portion of the public domain is practically exhausted; some 400,000,000 acres remain in possession of the government, but of this, three fourths is fit for grazing only. The supply of arable land is being rapidly appropriated, having been sold and taken up by homesteaders for the past decade at the rate of 18,000,000 acres per year. As we approach the limit of our national inheritance, men seem to be possessed by a land mania. The opening of an Indian reservation or an irrigation project is attended by crowds of homeseekers eager to try their chance for a quarter section on the old, easy terms. Proposals for the extension of the cultivable area by the irrigation of arid lands and the drainage of swamp lands readily command attention.

Humphrey, What is the Matter with our Land Laws?

Irrigation of Arid Lands. — Professor Shaler called the Cordilleran area "the curse of the continent." Throughout the greater part of this mountainous region, the rainfall is inadequate for agriculture or for forest growth, except on the west slope of the ranges, where the warm winds from the Pacific precipitate moisture as they rise to cooler altitudes. The total area is 758,000,000 acres. The larger portion is rock or shale or sand, and quite unfit for tillage, but there may be 60,000,000 acres of fairly level and fertile land which could be rendered cultivable by irrigation.

Powell, Lands of the Arid Region.

Where soil and climate are suited, and a water supply available, these arid lands are highly productive.

Census, *1900*, VI, 801–809.

Irrigation has been practised for centuries by the Pueblo Indians along the Rio Grande and Gila rivers, each community building the ditch with which to water the common cornfields, while the irrigated orchards and vineyards of the Franciscan missions in southern California proved what might be done with larger resources. The first successes of the Mormons in Utah have been repeated in a hundred different settlements, until in 1900 the communities of this sect had more than 6,000,000 acres under irrigation. The first attempt of the Federal government to deal with the problem of the arid region was the **Desert Land Act** of 1877, by which tracts of 640 acres were offered at $1.25 per acre, on condition that irrigation be attempted. The only men to take advantage of the law were cattle and sheep ranchers who seized the opportunity to get permanent title to their headquarters, and speculative irrigation companies which put in inadequate waterworks, sold the land without water right, or charged a monopoly price for the water supplied. Land title and water right were rendered inseparable in the **Carey Act** of 1894. This wise law provides that any one of the arid states may appropriate public land to the amount of one million acres in suitable tracts and authorize the contruction of irrigation works thereon by private companies. The engineering plans for each enterprise must be approved by the state land commission, as well as the charge to be made for water rights. The state sells the land to settlers at fifty cents an acre, and full title may be acquired after thirty days' residence. The water right charge varies with the cost of construction, from $30 to $40 per acre, and may be paid in ten annual installments. Ownership in the reservoirs, canals, dams, etc., is held by the company until these payments are complete, and then passes to the water users' association. Seven states, Wyoming, Idaho, Montana, Utah, Colorado, Arizona, and California, have already taken advantage of the Carey Act, and New Mexico and

Brough, Irrigation in Utah.

National Conservation Com., I, 85–91; III, 422.

National Conservation Com., II, 59–95.

Meade, Irrigation Institutions, Ch. II.

Texas have both applied for a land grant in order to develop their irrigation possibilities. Thus far only fertile lands and easily irrigated have been taken up, and the projects now under cultivation are highly successful. The Carey Act does not, however, provide for interstate projects, nor does it lead to any large and comprehensive plan of conserving the water resources of the vast region concerned. Again, the responsibility of maintaining the irrigating plant after the constructing company has surrendered title, devolves upon the farmers, who, while they can readily finance ordinary repairs, would be ruined by a destructive flood.

Newell, Irrigation.

In the **Reclamation Act of 1902** the Federal government assumed the task of irrigating tracts of arid land not otherwise provided for, and the revenue from sales of public lands in the United States, amounting to about $10,000,000 per year, was devoted to this purpose. The initial expenses are met from this fund, but the cost of construction in each case is assessed on the lands to which water is furnished, and must be met ultimately by the settlers in the ten first years of cultivation. The returns are used for the prosecution of new projects within the same state. The provisions of the Homestead Act apply to the lands irrigated by the government. A citizen of the United States may acquire a title to a tract of twenty, forty, or eighty acres (the area being determined by the nature of the soil) on condition of five years' residence and the bringing of half the area under cultivation. The water right charge varies from $20 to $30 per acre, according to cost of construction. The water supply is inalienable from the land, and the government allowance of three acre-feet per year, equivalent to thirty-six inches of rainfall, is sufficient for any crop suited to the climate. The execution of irrigation projects under this law was intrusted to the Reclamation Service, a bureau organized under the Department of the Interior. During the eight years of its activity, twenty-eight projects have been completed, at a cost of $70,000,000, and 1,910,000 acres have been brought under cultivation, fully half of this area under direct irrigation.

Bien, Legal Problems.

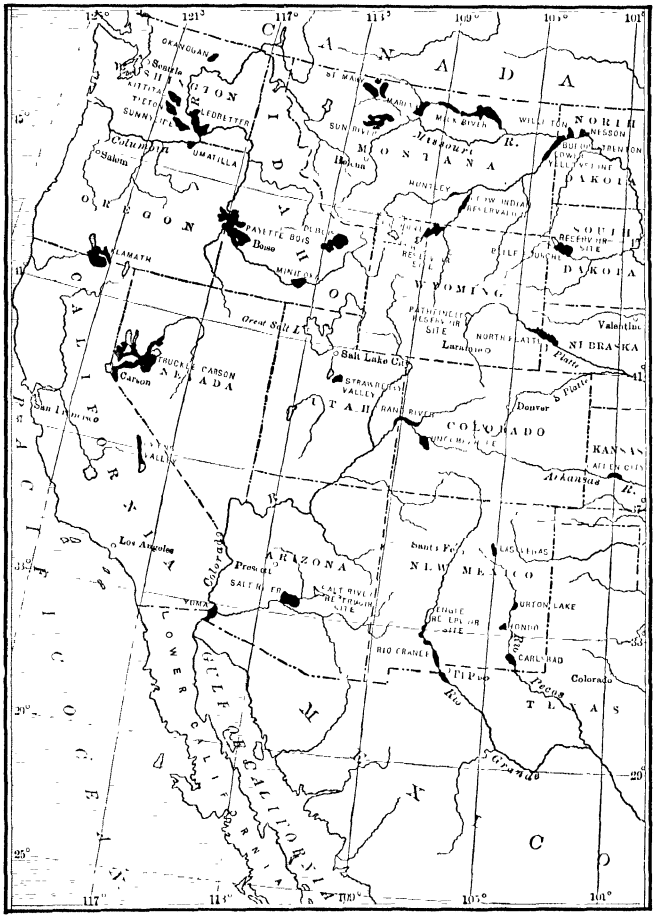
Meade, Irrigation Investigations.

Beneficent as the Reclamation Act has proved, certain difficulties have become apparent in its operation. The annual revenue derived from public land sales is inadequate to all the projects set on foot, the work has been delayed unduly, and some of the settlers who filed in good faith for the five-year residence term are still waiting for water, because money is lacking to complete the canals. The Reclamation Service worked out a plan for meeting this situation, *e.g.* the engineer in charge was authorized to arrange with the homesteaders to build the canals, paying for their labor in certificates of indebtedness, and Secretary Garfield agreed to receive this " water scrip " in payment for the annual water charge as it fell due. The plan seemed justified by its economies. Labor that was running to waste was brought to bear where it was most needed, and the farmers were enabled to forestall their obligations to the government in their one available asset. This method of canal construction was put in operation on six different projects, and some $300,000 had been issued in water scrip when the legality of the procedure was called in question, and Attorney General Wickersham ruled that the device was illegal, since not specifically authorized by the Reclamation Act. Congress has since met the financial difficulties involved by voting an issue of $20,000,000 for the completion of the work already undertaken and in immediate prospect, this issue to be in the form of certificates of indebtedness guaranteed by future revenue from land sales.

The sum total of irrigated lands in the United States to-day is 7,500,000 acres in the arid region, 275,000 in the semi-arid, and 3000 in the humid section east of the one hundredth meridian.

National Conservation Com., III, 361–375.

Drainage of Swamp Lands. — Excess of water is a problem only less difficult to the agriculturist than scanty rainfall. The lands unfitted for agriculture by flooded conditions, more or less permanent, amount to 75,000,000 acres, *e.g.* the " Dismals" of Virginia, the bayous of the Carolinas, Florida, and the Gulf coast, the deltas of the Mississippi River, the swamp areas of the great interior



IRRIGATION OF WESTERN LANDS

valley of California. By an act of 1850, the swamp lands belonging to the United States government were made over to the states in which they lay, on condition that the funds derived from their sale be used to reclaim them. Under this law 65,000,000 acres have been disposed of, to private individuals in the main, although canals, railroads, schools, and other public institutions have to some degree shared in the benefit. Drainage operations have been carried on in rather haphazard fashion by drainage commissions, levee boards, and private companies, and the results are far from satisfactory. The cost of draining arable land by ditches may be anywhere from $15 to $30 an acre, with an annual maintenance charge of from $1 to $3. Levees cost indefinitely more, and pumping machinery, when necessary, adds an expensive item; but overflowed lands are usually rich in nitrogen and well repay the cost of reclamation. Appeal has been made to the Federal government to aid certain large drainage projects, such as are required in northern Minnesota, in the lands overflowed by the Sacramento and San Joaquin rivers, in the Yazoo delta, and along the Tallahatchie. The Inland Waterways Commission (1908) recommended that the government undertake the reclamation of swamp lands on the ground that not only would highly fertile areas be recovered to cultivation and malaria-breeding swamps be rendered sanitary, but that the navigability of the rivers concerned would be greatly enhanced. Such projects should be undertaken on a scale commensurate with Federal enterprise in order that unity of plan and permanent results may be attained. A bill is now before Congress (introduced by Senator Flint of California) proposing that the proceeds of public land sales in the non-arid states be devoted to the reclamation of these drowned areas, the land to be made over to homesteaders in small tracts, and the cost of drainage to constitute a first lien on the land and to be repaid by the farmers in installments, after the precedent of the Reclamation Act.

Dry Farming. — Irrigation is restricted to districts

McDonald, Dry Farming.

where water is available and where the topography is such that the lands lie below the river or reservoir from which the supply is drawn. Pumping to higher levels is a physical possibility, but is too expensive for any but the most productive regions. There is a vast extent of fertile country lying west of the one hundredth meridan where these conditions can rarely be found. The Great Plains — western Nebraska and Kansas, eastern Colorado and northern Texas — were long the despair of agriculturists. The rainfall is scant, varying from ten to twenty inches, the rivers are shallow and inconstant, and the land is hilly and broken, yet the soil, a deep alluvial loam, would yield heavy crops if sufficient moisture were available. This region has been brought under cultivation by a special type of agriculture, — dry farming, — a process calculated to conserve in the soil itself whatever precipitation occurs. The field is plowed in the autumn, just before the rainy season, to a depth of twelve or fourteen inches, in order to allow the water to soak through to the subsoil. In the spring when the surface hardens, it is plowed and harrowed into a fine mulch, forming a dust blanket which effectually prevents evaporation. The seed is drilled in deep, and a smaller amount per acre is used in order to economize water and nitrogen and leave each plant adequate nutrition. In all but the best lands, a summer fallow should be allowed every other year. The method was used first on the wheat ranches of California some sixty years ago, and it is now successfully practised in the Columbia River Basin and on the western slopes of the ranges that intersect the desert regions of Utah and Nevada. It is admirably adapted to cereals and to certain forage crops, such as clover and cowpeas, and fruit orchards may be successfully developed if water can be supplied in abundance for the first three years of growth. Dry farming should be properly regarded as supplementary to irrigation, a means of bringing under tillage such portions of the farm as cannot be provided with water. The introduction of drought-resisting plants and trees — durum wheat, kaffir corn, and Persian clover — will doubtless extend

Scofield, Dry Farming in the Great Basin.

the area of its usefulness. The Department of Agriculture has established an office of Dry Land Agriculture which is engaged in making experiments as to the best methods of cultivation, while the states of Utah, Colorado, and Wyoming have provided for model farms as a means of demonstrating its practicability. It seems to be proven that a larger holding than the quarter section of the homestead entry is essential to the best success. The Mondell Act of 1909 increases the homesteader's claim to 320 acres, in case of filings on non-timbered, non-mineral, non-irrigable land in the arid states, and requires no residence term, but evidence of successful cultivation instead.

National Conservation Com., I, 88.

The Conservation Movement

The inception of the movement for conservation of our national resources should be credited to Gifford Pinchot, late Chief Forester of the United States. He it is who induced the National Academy of Science to appoint a committee (1896) to investigate and report on the forest policy of the country. Gifford Pinchot and F. H. Newell, the efficient head of the Reclamation Service, suggested to President Roosevelt the appointment of the Public Lands Commission (1903), which made a thoroughgoing inquiry into the use and abuse of our national domain, especially as regards grazing and agriculture. This in turn led to the appointment of the Inland Waterways Commission, which suggested the Conference of Governors. This conference was convened by President Roosevelt at the White House in May, 1908, and every state and territory in the Union was represented by one or more delegates. The immediate consequence was the appointment of forty state conservation commissions for local work, and a National Conservation Commission to promote the general interest. The great achievement of the Federal commission has been the three-volume report submitted to Congress in January, 1909. In the compilation of this report, the several Federal bureaus were requisitioned, and the

Pinchot, Government Forestry Abroad.

Rept. Conference of Governors

experts of the United States Geological Survey, the Forestry Service, and the Agricultural Department, contributed their accumulated stores of information. The result was the first scientific inventory of the natural resources of the United States ever made, and the interesting exhibit of wastes and latent possibilities forms the groundwork for progressive legislation along sound and rational lines. In his special message transmitting the report to Congress, President Roosevelt said: —

"We know that our population is now adding about one fifth to its numbers in ten years, and that by the middle of the present century perhaps one hundred and fifty million Americans, and by its end very many millions more, must be fed and clothed from the products of our soil. With the steady growth in population and the still more rapid increase in consumption, our people will hereafter make greater and not less demands *per capita* upon all the natural resources for their livelihood, comfort, and convenience. It is high time to realize that our responsibility to the coming millions is like that of parents to their children, and that in wasting our resources we are wronging our descendants."

National Conservation Com., Bulletin 4, p. 12.

The recommendations of the Commission for the land policy of the future follow: —

1. "Every part of the public lands should be devoted to the use which will best subserve the interests of the whole people.

2. "The classification of all public lands is necessary for their administration in the interests of the people.

3. "The timber, the minerals, and the surface of the public lands should be disposed of separately.

4. "Public lands more valuable for conserving water supply, timber, and natural beauties or wonders than for agriculture should be withheld from all . . . except mineral entry.

5 "Title to the surface of the remaining non-mineral public lands should be granted only to actual home makers.

6. "Pending the transfer of title to the remaining public

lands they should be administered by the Government and their use should be allowed in a way to prevent or control waste and monopoly."

Our public land laws as a whole do not subserve the best interests of the nation, and they should be modified so far as may be required to bring them into conformity with the foregoing outline of policy. The Homestead Law, which proved so beneficial to the settlers of the Middle West, is inapplicable to the arid states, because here irrigation is a *sine qua non* and this cannot be achieved without capital. The Reclamation Service wisely recommends that no man undertake to file on a government project without at least $2000 with which to make the necessary improvements. Timber for fuel and for building purposes are costly items, while food and family supplies cannot be so readily provided as on the pioneer farms of the Mississippi Valley. The law has ceased to be advantageous to home seekers, and is being utilized by timber companies and mining syndicates to secure title to large tracts of forest and mineral land. The process is easy; homestead entries are made by the employees of the company and other dummy homesteaders, fraudulent proof of residence is brought, and the title when secured is made over to the company for some small consideration. Under the mineral land laws valuable deposits are being taken up by private persons at mere nominal rates; gold, silver, copper, lead and zinc at the "double minimum" of $2.50 an acre, while coal lands may be had at from $10 to $20 an acre according to distance from market and transportation facilities. On these very liberal terms the mineral resources of the country are being rapidly monopolized. Seventy-five per cent of the iron ore in the Lake Superior and south Appalachian fields belongs to the United States Steel Corporation. The coal lands of the public domain in Utah, New Mexico, and Alaska, are being bought up by the American Smelting Company, in defiance of the limitations on the area that may be held by any one man or group of men. The mining of phosphate rock, so indispensable to the future of agriculture in this country,

Rept. Bureau of Corporations, Lumber Industry.

National Conservation Com., I, 90–95; III, 387–417, 571.

Investigation of Dept. of Interior and Forestry Service.

is not as yet covered by the law. The Eastern deposits have passed from the jurisdiction of the central government, but there are large deposits on the public domain, in Utah, Wyoming, and Colorado where future demand will be great. In the granting of claims to these phosphate lands the surface title should be separated from the mining rights, so that arable areas can be homesteaded, while the mining rights should be leased, not sold, with stipulations as to royalty payment, conservation of waste, and non-exportation of the product. The maximum price of coal lands should be raised in proportion to the royalty that might be derived if they were private property.

The protection of the rights of the people in the public domain is far more important than the immediate exploitation of its wealth. Private enterprise should be encouraged; not so private monopoly. Public ownership and operation of coal lands, water power, etc., find few advocates; but public control and legislative limits on private enterprise are essential to the future well-being of our nation. In the message above quoted, President Roosevelt said truly, "If we allow great industrial organizations to exercise unregulated control of the means of production and the necessaries of life, we deprive the Americans of to-day and of the future of industrial liberty, a right no less precious and vital than political freedom. Industrial liberty was a fruit of political liberty, and in turn has become one of its chief supports; and exactly as we stand for political democracy, so we must stand for industrial democracy."

National Conservation Com., II, 141–179.

The Conservation of Water Power. — In view of the early exhaustion of the coal measures, the utilization of the motor power latent in our rivers becomes a problem of the utmost importance. The direct use of water power through the medium of the water wh el has been practised for a thousand years, but the transformation of this gravity propeller into electrical energy is the achievement of the present generation. By turbine wheels, dynamos, and transformers, the force of falling water is converted into energy which may be transmitted along a cable to distant mines,

factories, transportation and lighting systems, so that remote and inaccessible mountain torrents are made to serve populous cities. The present limit of distance is one hundred and sixty-five miles, but this will soon be extended. Niagara Falls to-day furnishes light and power to Buffalo, Rochester, and Toronto. In the near future this mighty force may be carried five hundred miles, as far as Norfolk, Va., and Detroit, Mich. The generation of hydraulic power has been carried to its highest development on the Pacific coast. The torrential rivers of the Sierras and the Cascades furnish one third the water power of the United States, and this latent source of industrial energy is being utilized to the very best advantage. One miner's inch of water is made to generate energy equivalent to three and a third units of horse power. Since the cost of developing electricity by water power is fifteen per cent less than the cost by steam, this new industrial factor augurs much for the future of the Pacific states.

Hutchinson, Long Distance Electric Power Transmission.

An electric power plant requires little labor, but expensive machinery and a great capital investment. This is not an enterprise therefore with which settlers as individuals or in association can do much, but it offers an attractive field for corporate capital. The tendency toward concentration of ownership in water power plants has been marked in the past decade. The estimate made by the Department of Commerce and Labor in January, 1909, indicated that thirty-three per cent of the developed power (1,827,000 H.P. out of 5,300,000 H.P.) is owned or controlled by thirteen principal syndicates. When one realizes that within one hundred years all the wheels and engines of the United States must be run by electric motors, and that even now the industries of the Cordilleran region are wholly dependent upon this source of power, the folly of intrusting the disposition of hydraulic energy to private hands without restriction becomes evident. We are only just now awaking to the fact that power sites should be leased, not sold or given away, and that the privilege of using this natural source of wealth should be granted on

terms that will conserve the rights of the public to adequate service at a reasonable charge. The Federal government has supervision of interstate waterways, navigable rivers, and streams that flow through the national forests or the public domain, and may therefore determine the conditions under which torrents and cataracts occurring within this jurisdiction may be used. The law of 1906 vested in Congress the disposition of all such water powers, and that these grants might be made conditional on the meeting of certain specifications, as in the case of other franchises, would seem to be a reasonable inference. Acting on this supposition, President Roosevelt vetoed bills conceding rights to construct dams and develop power on the Rainy River, Minn., and the James River, Mo., stating his conviction that every license should be granted for a limited term, fifty years at the utmost, that each grant should be revocable if the intention to utilize possibilities to the full was not made sure, and that fees be imposed, adjusted to the earning capacity of the plant.

Conservation Challenged. — President Roosevelt's administration was pledged heart and soul to the conservation of national resources. The more literal interpretation of the laws under which the Forestry Service, the Reclamation Service, and the Land Office were operating, has given rise to widespread suspicion of lukewarmness in this cause on the part of President Taft's appointees. The cancelling of the water scrip agreement has brought distress upon the homesteaders on the government irrigation projects, the appropriation made for the rangers' schools has been withdrawn, the practice of setting aside rangers' stations in the national forests has been denounced, the James River bill has again been brought forward in the Senate, the good faith of the Secretary of the Interior in clear-listing certain coal claims in Alaska, suspected of being fraudulent, has been questioned, and the President's right to withdraw lands from homestead entry in the public interest has been challenged. The pros and cons have been fully brought out in a Congressional investigation of the

Department of the Interior and the Bureau of Forestry. The result may be regarded as inconclusive, because of the fundamental difference of opinion between the men who believe in allowing the greatest possible freedom to individual enterprise and those who hold that private interests must be regulated where the public well-being needs to be guarded. Congress has gone far toward committing the government to the policy of control by authorizing the President to withdraw public lands from private use, temporarily or permanently, whenever the conservation of forests or grazing lands, water power, irrigation possibilities, or scenic beauty is deemed to be at stake. In accordance with this law, President Taft has withdrawn (1910) from mineral entry 71,500,000 acres of public lands supposed to contain coal, phosphate, or petroleum, or to furnish valuable water power sites. All this land is open to agricultural entry, but the terms on which mining and development rights will be conceded are yet to be determined by Congress.

Suggestions to Teachers

The industrial history of the United States is a large and complex subject and can hardly be rendered both interesting and instructive within the limitations of a textbook. The author cannot do more than furnish a skeleton which the instructor must clothe and vitalize with the means best suited to his students. Their caliber will determine the character of lectures and supplementary reading.

For high-school students, local history and familiar conditions should be made the point of departure for the study of national development. The number of publications treating local history from the economic standpoint is fortunately on the increase. Such material may be culled from the numerous town and state histories, but a more philosophical if more general treatment may be had in such works as Weeden, Economic and Social History of New England; Bolles, History of Pennsylvania; Bruce, Economic History of Virginia; McCrady, History of South Carolina; Raper, History of North Carolina; Ballagh, Economic History of the South (in preparation); Coman, Economic History of the Far West (in preparation); Hittell, History of California; Meany, State of Washington; Schafer, Pacific Northwest. The story of a postroad, a canal, or a railroad may often serve to illustrate transportation problems, and valuable material is afforded by Hurlburt's Historic Highway Series and by such monographs as Ward's Chesapeake and Ohio Canal; Benton's Wabash Trade Route. The history of water transportation is graphically depicted in Ogg, The Opening of the Mississippi; Matthews, Remaking of the Mississippi; Channing, The Great Lakes; Bibbins, The Chesapeake. The new Waterway Series published by Putnam's sets forth the historical and economic significance of our principal rivers, *e.g.* the Connecticut, the Hudson, the St. Lawrence, the Niagara, the Ohio, the Columbia, the Colorado. The evolution of a great railway system may be deduced from special treatises such as Wilson's Pennsylvania Railroad; Smalley's Northern Pacific; Spearman's Strategy of Great Railroads.

If the immediate environment does not offer suggestive material, the thread of personal interest may be followed in the discussion of the economic achievements of such old-time entrepreneurs as Governor Winthrop of Massachusetts, Governor Spotswood of Virginia, such colonizers as Penn and Oglethorpe, such statesmen as Franklin,

Washington, Jefferson, Gallatin, Clay, Benton, Lincoln, Roosevelt, such modern captains of industry as McCormick, McKay, Cyrus Field, Edison, Harriman, Rockefeller, J. J. Hill, J. P. Morgan.

Moreover, the industrial novel is not to be despised, provided it is based on a first-hand knowledge of the conditions depicted. The following are suggested.

BISLAND, A Candle of Understanding (a sugar plantation in Louisiana); CHURCHILL, The Crossing (pioneer days in Kentucky); FOOTE, Cœur d'Alene (the silver miners of Idaho); GLASGOW, The Deliverance (a tobacco plantation in Virginia); KEMP, MATT, Boss Tom (the anthracite coal miners); KINGSLEY, Westward Ho (English buccaneers on the Spanish Main); NORRIS, The Octopus (the wheat ranches of California); The Pit (the wheat market of Chicago); PARKES, The Magnetic North (gold-seekers in Alaska); RICHARDSON, The Long Day (women wage-earners in New York); SINCLAIR, The Jungle (beef packers of Chicago); STIMSON, F. J., King Noanet (indentured servants in colonial Virginia and town lands in Massachusetts); BENTON, On Many Seas (the American sailor's experiences); WINTER, A Prize to the Hardy (wheat farms of Minnesota); WRIGHT, Where Copper was King (copper mining on Lake Superior); COOLIDGE, Hidden Water (cattle and sheep wars in Arizona); GARLAND, The Forest Ranger; The Lion's Paw.

Biography, autobiography, and journals of travel may be even more illuminating, *e.g.* BRUCE, H. A., Daniel Boone and the Wilderness Road; DANA, Two Years before the Mast; DUBOIS, Souls of Black Folk; WASHINGTON, Up from Slavery; WOOLMAN'S Journal; FRANKLIN'S Autobiography; SHERMAN, Recollections of Forty Years; VAN VORST, The Woman Who Toils; TALBOT, Samuel Chapman Armstrong; JAMES FLINT, Letters from America; BIRBECK, Journey in America; TIMOTHY FLINT, Recollections of the Last Ten Years; MARTINEAU, Society in America; CHEVALIER, United States; BOWLES, Across the Continent.

Local interest may render advisable the study of a special industry, agricultural, manufacturing, or commercial, and for this some excellent treatises are available, *e.g.*: —

HAMMOND, The Cotton Culture and the Cotton Trade; BAILEY'S Cyclopedia of Agriculture (for corn, rice, cattle, sheep, etc.); DONDLINGER, Book of Wheat; EDGAR, Story of a Grain of Wheat; CASSON, Romance of the Reaper; DEFEBAUGH, History of the Lumber Industry; BRUNCKEN, North American Forests and Forestry; MCLAURIN, Sketches in Crude Oil; MONTAGUE, Rise and Progress of the Standard Oil Company; TARBELL, History of the Standard Oil Company; SHINN, Story of the Mine; WEED, Copper Mines of the World; SWANK, History of the Manufacture of Iron in all Ages; VIRTUE, Minnesota Iron Ranges; CASSON, Romance of Steel;

BRIDGE, Carnegie Steel Company; GREENE, Coal and the Coal Mines; NICOLLS, Story of American Coals; ROBERTS, The Anthracite Coal Industry; BRISBIN, The Beef Bonanza; HOUGH, Story of the Cowboy; ADAMS, Log of a Cowboy; MARVIN, The American Merchant Marine; INMAN, The Great Salt Lake Trail; The Old Santa Fé Trail; LAUT, The Story of the Trapper; BAGNALL, Textile Industries of the United States; BROCKETT, Silk Industry in America; NORTH, A Century of Wool Manufacture; WRIGHT, Wool Growing and the Tariff; THOMPSON, From the Cotton Field to the Cotton Mill; STUBBS, The Sugar Industry; TAUSSIG, The Iron Industry.

To college students, economic problems may be assigned for individual reading and report. The following topics are suggested for supplementary study.

CHAPTER I.

(1) Advantages of North America as a habitat for European civilization. SHALER, Nature and Man in America, Ch. VI, VII, VIII.

(2) The peculiar physiographic advantages of the region between the Appalachian Range and the Sea. SEMPLE, American History and its Geographic Conditions, Ch. I, III.

(3) To what extent did the various Indian tribes utilize the natural resources of the country? FARRAND, Basis of American History, Ch. XIV, XV.

(4) Account for the failure of the French and Dutch colonies in North America. JOHN FISKE, Dutch and Quaker Colonies, Vol. I; New France and New England; THWAITES, France in America.

(5) Account for the failure of Spain's colonies along the Gulf Coast and in California. SMITH, Wealth of Nations, Bk. IV, Ch. VII, Pt. I; BOURNE, Spain in North America, Ch. XIII–XIX.

(6) Was the success of the English colonies due to advantages of climate, soil, mineral resources, commercial opportunities, or to the superior industrial efficiency of the race? SHALER, Nature and Man in America, Ch. VI.

(7) The powers and functions of the Dutch West India Company. Estimate the part it played in the peopling of North America. OSGOOD, American Colonies, Vol. II, Pt. III, Ch. V.

CHAPTER II.

(1) What use did the government of James I expect to make of England's possessions in America? Compare with the attitude of Lord Salisbury's government toward South Africa. What better motives were proposed? OSGOOD, Vol. I, Pt. I, Ch. II; HAKLUYT,

Western Planting; WHITE, The Planter's Plea; BACON'S Essay on Plantations.

(2) Compare the powers and functions of the London and Plymouth Companies with those of the East India Company. Why did the former fail to develop profitable trade? OSGOOD, Vol. I, Pt. I, Ch. V; HEWINS, Trading Companies, pp. 55–72; CHEYNEY, European Background, Ch. VIII.

(3) Why did the associations of adventurers succeed in establishing permanent colonies? TYLER, England in America, Ch. XI, XII, XIV, XV.

(4) Was the communism of the initial stages of a colonial enterprise based on theory or on practical necessity? ADAMS, Village Communities; BRADFORD, Plimouth Plantations, pp. 56–58, 162–168, 176–178.

(5) Indicate the feudal features of the proprietary grant. What were its advantages to the proprietor? to the colonist? Why did this form of colonial undertaking fail? OSGOOD, Vol. II, Pt. III, Ch. II.

(6) The several forms of land tenure prevailing in the colonial period, communal, feudal, and fee simple. What were the gains, social and economic, in acquisition by "head right"? by "cabin right"? Compare the acquisition of title under the Virginia law of 1705 with the right of homestead entry. BEVERLEY, History of Virginia, Ch. XII; BRUCE, Economic History of Virginia, Vol. I, Ch. VIII; OSGOOD, Vol. I, Pt. II, Ch. XI; Vol. II, Pt. III, Ch. II.

(7) Was the Cavalier, the Roundhead, or the Leveler the most successful type of colonist? BRADFORD, pp. 111, 121, 137–161, 178–184, 283–292.

(8) What were the sources of labor supply open to the colonial entrepreneur? Compare the economic status of the indentured servant with that of the slave, the free immigrant. EDDIS, Letters from America, pp. 63–89; KALM, Travels into North America, Vol. I, pp. 387–397; WELD, Travels, Vol. I, pp. 120–124; BRUCE, Vol. I, Ch. IX, X; GEISER, Redemptioners and Indentured Servants.

(9) How far was the prevalence of slave labor in the South due to climate, staple crops, aristocratic form of land tenure? BANKS, Land Tenure in Georgia, pp. 11–29; MICHAUX, Travels, pp. 290–306.

CHAPTER III.

(1) Compare the opportunities of a farmer in eighteenth-century America with those he had in England. American Husbandry, Vol. I, pp. 61–73, 86–93, 115–123, 184–215, 249–255, 327–329, 429–433; Vol. II, pp. 14–20.

(2) Compare the opportunities offered by the several colonies (*a*) to the emancipated servant; (*b*) to the man of capital. DOYLE, English Colonies, Vol. I, pp. 381–395; Vol. III, pp. 1–52; Vol. IV,

pp. 380–388; Vol. V, pp. 153–165, 322–347; FRANKLIN'S Works, Vol. III, pp. 398–409; WINTERBOTHAM, United States, Vol. III, pp. 281–339.

Illustrate the business enterprise of New England. WEEDEN, Social and Economic History, Vol. I, pp. 120–124, 248–252, 365–368, 437–438; Vol. II, pp. 466–472, 565–572, 607–612, 624–635.

(3) Indicate the sources and distribution of immigration to the English colonies during the eighteenth century. GREENE, Provincial America, Ch. XIV; COMMONS, Races and Immigrants in America, Ch. II.

(4) Nature of legislation concerning immigration. PROPER, Colonial Immigration Laws.

(5) Summarize England's colonial policy. How far was it furthered by the natural resources of the several colonies? With what colonial interests did it come into conflict? ADAM SMITH, Wealth of Nations, Bk. IV, Ch. VII, Pt. II; HOWARD, Preliminaries of the Revolution, Ch. III; American Husbandry, Vol. I, pp. 58–60, 124–125, 256–276, 289–329, 352–358, 434–446; Vol. II, pp. 34–41; ASHLEY, England's Commercial Policy, Vol. II, pp. 34–41.

(6) Estimate the effect of restraints imposed on the manufacture of woolens, hats, iron goods, on the exportation of tobacco. Were these disadvantages offset by remission of import duties and bounties on exportation? BEERS, Commercial Policy of England, Ch. IV, V; OSGOOD, Vol. III, pp. 197–204.

(7) How far does the Navigation Act as supplemented in 1663 conform to the commercial policy suggested in HAKLUYT'S Western Planting? Weigh the advantage and disadvantage to the colonies of the exclusion of Dutch ships from American ports. ADAM SMITH, Wealth of Nations, Bk. IV, Ch. VII, Pt. III; ANDREWS, Colonial Self-Government, Ch. I; OSGOOD, Vol. III, Pt. IV, Ch. VII.

(8) What considerable exports were not enumerated? and what market did they find? WEEDEN, Vol. I, pp. 142–164.

(9) What was the bearing of the Molasses Act? BEER, Commercial Policy, Ch. VI. What colonies were most seriously affected by England's monopoly of the export trade? BEERS, British Colonial Policy, Ch. XI.

(10) Compare the specie currency experience of colonial Virginia with that of Massachusetts. RIPLEY, Financial History of Virginia, pp. 153–162; SUMNER, History of American Currency, pp. 14–43.

(11) The inherent defects of the paper money issued in Massachusetts (*a*) by the government, (*b*) by the land banks. DAVIS, Currency and Banking in Massachusetts Bay Colony, Pt. I, II.

CHAPTER IV.

(1) Was the secession of the American colonies due primarily

to the commercial restrictions imposed by the British government, taxation without representation, or to maladministration on the part of the English officials? Address to the People of Great Britain, PITKIN, History of United States, Vol. I, pp. 473–482; FRANKLIN'S Works, Vol. III, pp. 407–450; RAMSAY, History of South Carolina, Vol. I, Ch. VI; RAMSAY, History of American Revolution, Vol. I, Ch. I, II; BASSETT, Regulators of North Carolina; BEERS, Colonial Policy, Ch. XIV.

(2) Effect of the seven years of nonintercourse on manufactures in the colonies, on commerce. CALLENDER, Selections, pp. 439–445; TENCH COXE, View of United States of America.

(3) What did the Americans gain and what did they lose by independence? Public Papers of JOHN JAY, Vol. I, p. 230; MCLAUGHLIN, Confederation and Constitution, Ch. V.

(4) Was the repudiation of the bills of credit inevitable? SHUCKER, Revolutionary Finances; MCLAUGHLIN, Confederation and Constitution, Ch. IV, IX; BULLOCK, Finances of the Revolution; SUMNER, Finances and Financiers of the Revolution, Vol. I, Ch. IV.

(5) Account for the failure of the first anti-slavery movement. TUCKER, Dissertation on Slavery; DUBOIS, Suppression of the Slave Trade, Ch. II, III, IV; LOCKE, Anti-Slavery in America; BRISSOT DE WARVILLE, Travels in United States, pp. 274–300.

Legislation against the Slave Trade; COLLINS, Domestic Slave Trade, Ch. I.

(6) Compare the opportunities of the pioneer farmer in Kentucky with those of the colonist on the Atlantic Coast. IMLAY, Western Territory, p. 130; American Husbandry, Vol. I, Ch. XVIII.

(7) Illustrate the economic foresight of George Washington; of Thomas Jefferson. Index to Works of WASHINGTON, JEFFERSON, under titles *land*, *roads*, *farming*, *slavery*, *emigration*, etc.

(8) Trace the democratization of land tenure consequent on the Revolution. RANDALL, Life of Jefferson, Vol. I, pp. 194–229, 397–400; HAMILTON'S Report on Public Lands; CHENEY, Land Tenure.

CHAPTER V.

(1) Franklin's views on the rights of neutral trade. Works, Vol. VIII, p. 246; Vol. X, p. 60. How far have they been vindicated? SCHUYLER, American Diplomacy, Ch. V.

(2) Hamilton's views on banking, on manufactures, on the place of agriculture in national economy, on the sources from which a labor supply would be derived. How far do they correspond with modern opinion? HAMILTON'S reports on Manufactures, on Banking.

(3) Show that the dominant purpose of our commercial policy before the War of 1812 was the promotion of the shipping interest. What was the result for (*a*) the mercantile marine; (*b*) the develop-

ment of our foreign trade; (*c*) the foreign market for agricultural products, timber, cotton, wheat; (*d*) the exploitation of our natural resources, *e.g.* of the Mississippi Valley? PITKIN, History of the United States.

(4) What was the effect of the protection accorded to manufactures on (*a*) the Federal revenues, DEWEY, Financial History of United States; (*b*) the invention of machinery, BISHOP, Vol. I, 383–423; (*c*) utilization of the waste labor of women and children, ABBOTT, Women in Industry, Ch. II; TENCH COXE, View of the United States.

(5) What were the conditions in England that induced emigration to the United States? BIRBECK, Notes on a Journey to America, pp. 8–10, 42, 56–62, 155–157; CHICKERING, Foreign Emigration (footnotes on English conditions).

(6) The movement of population to Ohio, Indiana, and Illinois; how far was its direction influenced by the policy of the Federal government as to (*a*) slavery, BIRBECK, pp. 6, 7; (*b*) disposition of public lands, pp. 70–71; (*c*) transportation facilities, pp. 31–42; FLINT, Letters, pp. 64–82. How far by geographic conditions? SEMPLE, Ch. IV, V.

(7) Compare the conditions prevailing in and character of migration to the Mississippi Territory. HASKINS, Yazoo Land Companies.

(8) Estimate the influence of cotton culture in fastening slave labor on the Gulf states. HAMMOND, Cotton Culture, Ch. II, III; COLLINS, Slave Trade, Ch. II.

(9) The effect of the liberal public land policy on the scarcity of hired labor. SMITH, Wealth of Nations, Bk. IV, Ch. VII, Pt. II; BIRBECK, pp. 93–94, 156–158; CHEVALIER, p. 144.

CHAPTER VI.

(1) Contrast the effects of the embargo in New England and Virginia; MARVIN, American Merchant Marine, Ch. VII; PITKIN, History of the United States; CHANNING, Jeffersonian System, Ch. XVI, XVII.

(2) Compare the immediate consequences of the War of 1812 with its ultimate consequences, commercial, industrial, and diplomatic. SCHUYLER, American Diplomacy, Ch. V, IX.

(3) Discuss the advisability of substituting reciprocity of trade for the differential advantages hitherto accorded to United States shipping. MARVIN, Ch. IX; PITKIN, Statistical View, Ch. IV, VIII.

(4) Compare the War of 1812 with the Revolutionary War in effect on manufactures. BAGNALL, Textile Industries, Vol. I, Ch. VIII, X, XI; SWANK, Iron in all Ages, Vol. XIX, XX.

(5) Conflict of interests in our first epoch of protection. TAUSSIG,

Tariff History of the United States, Ch. II; AMERICAN STATE PAPERS, Finance, Vol. II, pp. 367, 465; Vol. III, pp. 32, 52, 56, 85-95, 168, 440-444, 447, 452, 454, 458, 460-463, 484, 518, 522. FLINT, Letters, Vol. XX;

Representative views, CALLENDER, Ch. X.

(6) Compare the duties imposed on cottons, woolens, iron manufactures, cordage, and the raw materials thereof, in the tariffs of 1812, 1816, 1820, 1824, 1828, 1832. Official Tariff Compilation.

(7) Estimate the failures and successes of the second National Bank. DEWEY, Second National Bank; CONANT, Banks of Issue, pp. 340-357; CATTERALL, Second National Bank.

(8) Causes and effects of the Crisis of 1819. CAREY, The Crisis; DWIGHT, Travels, Vol. I, pp. 218-222; TURNER, Rise of the New West, Ch. IX.

(9) Compare banking methods east and west of the Alleghenies; CONANT, Banks of Issue, Ch. XIV; FLINT, Letters from America, pp. 130-136, 225, 238, 274, 297.

(10) Estimate the speculative element in the westward movement. MICHAUX, Travels to the Westward of the Allegheny Mountains, pp. 188-194; FLINT, Letters, pp. 64-82, 97, 287; BIRBECK, Journey, pp. 120-126, 154-155, 232-236; TURNER, The New West, Ch. V, VI, VII. Was this fostered by the land policy of the government?

(11) Compare the New Englander and the Virginian as pioneers. CHEVALIER, United States, pp. 109-120.

CHAPTER VII.

(1) Effect of machinery on manufactures, on growth of towns, on conditions of labor. MONTGOMERY, Cotton Manufacture; CHEVALIER, pp. 128-133, 137-144; WRIGHT, Factory System; Census 1880, Manufactures.

(2) Exhaustion of the farms of New England and New York; resort to improved agriculture. BUELL, American Husbandry; MARTINEAU, Society in America, Vol. I, pp. 290-307; STUART, Three Years in North America, Vol. I, Ch. XII.

(3) Exhaustion of the plantations of the southern seaboard states; persistence of one crop agriculture. PHILLIPS, Plantation and Frontier, Vol. I, pp. 55-57; OLMSTEAD, Cotton Kingdom, Vol. I, Ch. IV.

(4) Relation of cotton culture to (*a*) the westward movement of population, *cf.* population charts in United States Census, 1870; (*b*) prosecution of the slave trade. DUBOIS, Suppression of the Slave Trade.

Reflex influence on the development of the upper Mississippi Valley. FLINT, Recollections of the Last Ten Years, pp. 13-37, 101-111; BIRBECK, pp. 102-105.

(5) Quadrilateral commerce arising out of the territorial division of labor between the Old South, the New South, New England and the West. CALLENDER, Selections, Ch. VII; LAMBERT, Travels, Vol. II, pp. 146–151, 346–348.

(6) The transportation system of the United States, natural and artificial. The adequacy of water transportation. CHEVALIER, Letter XXI; CALLENDER, Ch. VIII.

(7) Effect of steam navigation on transportation in the West. CHEVALIER, pp. 212–224; BIRBECK, pp. 150–153.

(8) Note limitations on charges for transportation and use incorporated in charters granted to postroad and canal companies. TANNER, Internal Improvements. Compare in this respect early railway charters; MEYER, Railway Legislation, Pt. II, Ch. I, Appendix I.

(9) Financing of internal improvements. MACDONALD, Jacksonian Democracy, Ch. VIII; CALLENDER, Early Transportation and Banking Enterprises; MORRIS, Internal Improvements in Ohio; WEAVER, Internal Improvements in North Carolina; PUTNAM, Economic History of Illinois and Michigan Canal.

(10) The advantages of the railroad over water transportation. LARDNER, Railway Economy.

(11) Economic Influence of the Erie Canal. HULBURT, Great American Canals, Vol. I; HILL, Waterways and Canal Construction in New York State; STUART, Three Years in North America, Vol. I, Ch. IV, V.

CHAPTER VIII.

(1) Character of immigration between 1820 and 1860, and attitude of the American public regarding it. CHICKERING, Foreign Immigration; SMITH, Emigration and Immigration, Ch. II, III; FRANKLIN, Legislative History of Naturalization.

(2) Economic effects of slavery on (*a*) immigration; (*b*) agriculture; (*c*) manufactures; (*d*) commerce. CALLENDER, Selections, Ch. XV; INGLE, Southern Sidelights; RUSSELL, North America, Ch. VIII, X.

(3) The movement represented in the American Colonization Society. Speeches of HENRY CLAY, January 20, 1827, December 17, 1829; DEBOW, Southern and Western States, Vol. II, pp. 234, 267, 309–310, 342; MARTINEAU, Society in America, Vol. I, pp. 345–395.

(4) Account for the opposition of Southern statesmen to (*a*) protective tariffs; (*b*) ship subsidies; (*c*) internal improvements at national expense. DEBOW'S Review, see Index; BALLAGH, Tariff and Public Lands in the South; TAUSSIG, State Papers and Speeches on the Tariff, pp. 108–213; PHILLIPS, Plantation and Frontier, II, 330–343.

(5) Animus of the political battle over the annexation of Texas? was it anti-slavery or anti-expansion? Compare division of parties over the Oregon boundary. BENTON, Thirty Years' View; WEBSTER'S Speeches.

(6) The Mormon Church as an experiment in coöperation. BANCROFT, History of Utah.

(7) New goals of the westward migration. (*a*) Missouri, FLINT, Recollections; (*b*) Oregon, SCHAFER, Pacific Northwest. Why were the resources of the Great Plains ignored? PARRISH, Great Plains; TURNER, Rise of the New West, Ch. VIII.

(8) Financing of the western railroads. Reasons for state and national aid? SANBORN, Congressional Land Grants, Ch. I, II.

(9) Advantages of a scientific classification of tariff schedules? Walker's argument in behalf of the consumer? TAUSSIG, State Papers and Speeches, pp. 214–257.

How far were the low duties responsible for the prosperity of agriculture? commerce? manufactures? How much is it to be attributed to the coincident repeal of the English Corn Laws? LEVI, British Commerce, Pt. IV, Ch. IV; THOMPSON, Protective Tariff Laws, Ch. XXXIX, XL.

(10) Arguments for and against the subsidizing of steamship lines. CONGRESSIONAL GLOBE, *1847–1848*, *1852*; JOHNSON, Water Transportation, Ch. III, IX.

(11) Rise and fall of traffic on the Mississippi River. DIXON, Tariff History of the Mississippi River System; OGG, Opening of the Mississippi; Rept. INTERNAL COMMERCE, 1887.

(12) Animus of Jackson's war on the National Bank. CHEVALIER, United States, Letters III, IV, V, XIII, XIV; DEWEY, Second National Bank.

(13) Compare the crisis of 1857 with those of 1819 and 1837 as to cause, effect, intensity, duration. BURTON, Crises; CONANT, Banks of Issue, pp. 617–618, 624–628, 636–640; TURNER, Rise of New West, Ch. IX; HART, Slavery and Abolition, Ch. XX; SMITH, Parties and Slavery, Ch. XIII.

CHAPTER IX.

(1) Comparison between condition of slaves and wage laborers. DEBOW, Southern and Western States, Vol. II, pp. 223–235; OLMSTED, Cotton Kingdom, Vol. II, pp. 184–212, 236–271.

(2) Efforts to restrain the domestic slave trade. COLLINS, Ch. VII, VIII; HART, Slavery and Abolition, Ch. IX.

(3) Status of the freedmen. WASHINGTON, Story of the Negro; COLLINS, Ch. V; HART, Slavery and Abolition, Ch. VI.

(4) Aims and methods of the Abolitionists. HART, Slavery and Abolition, Ch. XII, XIII, XIV, XV, XVI.

(5) Evolution in the ideals of wage-earners' organizations. COMMONS AND SUMNER, Labor Movement, 1820–1840; COMMONS, Labor Movement, 1840–1860.

(6) Elements that went to the making of the Free Soil Democracy. SMITH, Parties and Slavery, Ch. IV, VI, VII, VIII, IX.

(7) Significance to the slave interest of the control of the territories. INGLE, Ch. IX; BROWN, Lower South, pp. 83–112.

(8) What influence had the tariff controversy in provoking the Civil War? BALLAGH, Tariff and Public Lands, pp. 221–263.

(9) Difficulties of the Confederacy, financial and economic. SCHWAB, Confederate States of America.

(10) Compare the national banking system organized in 1864 with the first National Bank as to integrity and elasticity of the currency. BOLLES, Financial History of the United States, Vol. III, Bk. I, Ch. XI; Bk. II, Ch. IV; CONANT, Banks of Issue, Ch. XV.

(11) Compare the greenbacks with the Continental currency as to limits on issue and guarantee of redemption. BOLLES, Vol. III, Bk. II, Ch. I, II; BULLOCK, Monetary History of the United States, pp. 60–78.

(12) Influences making for increase of customs duties during the Civil War. The industrial effect of the war tariffs. TAUSSIG, Tariff History, pp. 155–193; STANWOOD, Vol. II, pp. 126–138.

(13) New influences making for concentration of industry. MYER, History of Great American Fortunes; YOUNGMAN, Causes of Great Fortunes.

(14) Cause of decline of our merchant marine after the Civil War. MARVIN, Ch. IV; SPEARS, Story of American Merchant Marine.

(15) Account for contemporary expansion of commerce on the Great Lakes. For the decline of river commerce. Rept. INLAND WATERWAYS COMMISSION, 1908; Rept. BUREAU OF CORPORATIONS on Transportation by Water in the United States, 1910; DIXON, Tariff History of Mississippi River System.

(16) Trace the evolution of the Homestead Act. Compare with the head right as to effect on land tenure. What was the effect on wages? HART, Disposition of Public Lands; CONGRESSIONAL GLOBE, 1849, 1850, 1854, 1861–1862.

(17) Compare Whitney's idea of a transcontinental railroad with the accomplished fact. WHITNEY, Project for a Railroad to the Pacific; DAVIS, Union Pacific Railroad; FLINT, Railroads of United States.

(18) The Grange movement as a preparation for the Interstate Commerce Act. Rept. CULLOM COMMITTEE, 1886; DETRICK, Effect of the Granger Acts; MARTIN, Grange Movement.

(19) Effect of emancipation on land tenure. BANK's Land Tenure in Georgia, pp. 30–116.

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(20) Causes of the industrial revival in the South. Symposium, AM. ECON. ASS. Pubs., 1904; HART, The Southern South.

CHAPTER X.

(1) Attitude of the Republican and Democratic parties in the tariff controversy. Account for the conversion of the South and the Far West, for the protest from the Middle West. STANWOOD, Tariff Controversies, Vol. II, Ch. XV, XVI, XVII, XVIII; WILLIS, Tariff of 1909.

(2) Compare conditions determining the tariff legislation of 1897 and 1909. TARIFF HEARINGS, 1897, 1909; WILLIS, Tariff of 1909; TAUSSIG, Tariff of 1909.

(3) Influence of business combinations on tariff legislation. BOLEN, Trusts and the Tariff; TARBELL, Tariff in Our Own Times.

(4) Contemporary arguments for and against the subsidizing of steamship lines. MCVEY, The Frye Subsidy Bill; SPRING, Ship Subsidies; GRIFFIN, References on Mercantile Marine Subsidies.

(5) History of the bimetallic standard in the United States. What has been the effect of the alternating standards in actual use? The economic argument underlying the free silver agitation? DEWEY, Financial History of the United States; DEWEY, National Problems, Ch. XIV, XX; LAUGHLIN, Bimetallism; HEPBURN, Contest for Sound Money.

(6) Account for the rise of prices from 1890 to 1909. U.S. COMMISSIONER OF LABOR, Bulletins 51, 53, 59; LAUGHLIN, Gold and Prices; Rept. MASS. COMMISSION on the Cost of Living, 1910.

(7) Is our currency system deficient in volume? elasticity? security for redemption? SPRAGUE, Proposals for Strengthening the National Bank System.

(8) Argument for and against a central bank. SPRAGUE, Central Bank, *vs.* WARBURG, Central Reserve Bank. The state guarantee of bank deposits, WEBSTER, Guarantee Law of Oklahoma, *vs.* COOKE, Insurance of Bank Deposits.

(9) Show that a railway corporation is a legitimate subject for government regulation. Argument for Federal rather than state control. MYER, Northern Securities Case; DEWEY, National Problems, Ch. VI.

(10) Indicate the evolution of public control represented in the Interstate Commerce Act, the Esch and Hepburn amendments, and the legislation of 1910. RIPLEY, Railway Problems; HADLEY, Interstate Commerce Commission.

(11) Financial and political dominance of the great business combinations. MOODY, Truth about the Trusts; YOUNGMAN, Economic Causes of Great Fortunes.

(12) Is the animus of the anti-trust movement with the laborer? the consumer? the independent producer? Argument for Federal control? for Federal incorporation? JENKS, Trust Problem, Ch. XII, XIII; WHITNEY, Addystone Pipe Company; Rept. BUREAU OF CORPORATIONS on the Beef Combination, Standard Oil Company, etc.

(13) Compare the crises of 1873, 1884, 1893, 1907, as to dominant cause, severity, and interests especially affected. SPRAGUE, History of Crises under the National Banking System.

(14) Compare the Knights of Labor with the American Federation of Labor as to aims and organization. KIRK, Knights of Labor and the American Federation; Rept. INDUSTRIAL COMMISSION, Vol. VII.

(15) Tendencies indicated by strike statistics as to chances of success, as to cost to employer, employees, community concerned. Repts. U.S. COMMISSIONER OF LABOR, 1886, 1900, 1905. Illustrate by a particular strike. Rept. COM. ON ANTHRACITE COAL STRIKE; Rept. COM. ON CHICAGO STRIKE; GEORGE, Coal Miners' Strike.

(16) What hope of peaceful settlement of labor disputes offered by the employers' association? ANDREWS, Development of the Employers' Association.

(17) Discuss adequacy of the present restrictions on immigration. HALL, Immigration; Rept. INDUSTRIAL COMMISSION, Vol. XV.

(18) Persistence of contract labor, peonage. Advantages and disadvantages to employer? to the immigrant? COMAN, Contract Labor in the Hawaiian Islands; Rept. of FORD COMMITTEE on Contract Labor; Italians in Chicago; Repts. COMMISSIONER OF IMMIGRATION. Forthcoming government report on peonage.

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