GENERAL HISTORY OF COMMERCE

THE "ROYAL GEORGE"

A GENERAL HISTORY OF COMMERCE

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PREFACE

In writing this book I have had constantly in mind the needs of the student. I have tried, therefore, to tell the story of commerce in a systematic manner, in order that the reader may get clear-cut and accurate pictures of the commercial growth and decay of separate nations, and an understanding of the forces, industrial, racial, and climatic, which have contributed to the steady expansion of the world's trade. A history of the world's commerce is a story of much more than international barter and sale. A nation's commerce is born of its industry and is part of its struggle for the necessaries, the comforts, and the luxuries of life. It prospers in peace and is destroyed by war. A historian of the world's commerce, therefore, has no lack of material possessing the greatest human interest. Every war changes the current of his narrative and every period of peace adds to the importance of his subject. If this book is dull, it will be because I have failed to grasp the dramatic elements which the subject presents.

The growth of industrial power in the United States on account of its efficient and enlightened labor, its natural resources, its accumulating capital, and its inventive genius, is making the subject of commerce of present and vital significance in this country. In response to a popular demand it is being given a place in the curricula of our high schools and colleges. It is this demand which I have

specifically sought to satisfy. In order that the needs of different classes of schools may be met, the book is divided into parts corresponding with familiar chronological divisions of the world's history. Teachers who can give sufficient time to the subject can put the student through the entire book; those having too little time for this will find that each part is complete in itself and can, therefore, employ the student upon those parts which may be deemed most important. The book may be used not only as a text-book for schools that have a regular course in commercial history, but it may also be used profitably as a companion book to the text-books used in other schools in their already organized courses in history.

In the study of this subject the importance of collateral reading cannot be too strongly insisted upon. For this reason I have put at the end of each chapter references to the best literature accessible. Teachers will find that the student's interest may often be greatly stimulated by this collateral reading.

The author desires to acknowledge his obligations to Professor Joseph French Johnson, his colleague in New York University, and to Dr. William Fairley, his former colleague in the Brooklyn Commercial High School, for their kindly criticisms made while reading the proof of the following pages. From both of these scholars the author has received many valuable suggestions.

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COMMERCIAL HISTORY

PART I—ANCIENT COMMERCE

CHAPTER I

INTRODUCTION

1. What the history of commerce embraces. The history of commerce is something more than the history of international exchanges; it is really the *history of civilization* from the *commercial point of view*, or, in other words, a *study of commerce in history* in order to see the many reciprocal relations between commerce and the other elements composing various civilizations. The history of commerce will therefore embrace, in the first place, such a general view of the agriculture and manufactures of various peoples as will enable us to understand their commerce. The physiographical basis of commerce must also be carefully studied. We must note the great routes of trade at different periods, the successive marts that have served as commercial centers, and the causes that have shifted these routes and centers. It will be necessary to touch upon the growth of a medium of exchange; the history of colonization; the industrial organization of various peoples and periods; the growth of trading companies; the organization of capital; the influence of slavery; the great geographical discoveries and the great inventions which have increased production and facilitated communication and

transportation; the influences of æsthetic tastes, religious beliefs and rivalries, social customs, and moral teachings upon human demands; the attitude of various religious and church organizations towards commerce as a feeder of these demands; the influence of different economic theories.

2. The relation between commercial and political history is very intimate and must be continually referred to in order to see how commercial considerations have frequently influenced or dictated national policies; how such considerations have been the fundamental motives for forming and breaking political alliances, for engaging in or avoiding wars; how commercial relations have led to closer political relations and the growth of a body of international law; how commerce has even influenced constitutional reforms and revolutions.

3. Sources of information for a history of commerce. Inasmuch as it will be necessary to omit or neglect many important special phases of commercial history in this handbook, the general sources of information for a more detailed study of the subject should be indicated. In the first place, there are the numerous general histories of commerce and the special histories of certain periods and countries. Most of the best histories of this sort, however, are accessible only to those who read German, French, Spanish, Italian, and other foreign languages. Much valuable information pertaining to the commerce of certain periods may be gleaned from political, constitutional, economic, and religious histories, biographies, travels, and periodicals; but one cannot go very deep into any of the special phases of the subject without carefully studying the original sources. The most important of these are: (1) the laws, ordinances, and decrees of various countries, particularly those pertaining to economic subjects; (2) tariff and customhouse reports; (3) commercial treaties and commercial clauses in other treaties and

conventions; (4) parliamentary debates and reports of different countries, petitions sent to these bodies, and reports of government commissions; (5) statistics collected by public or reliable private agencies, and the commentaries of statisticians; (6) reports and proceedings of general and local chambers of commerce and similar institutions; (7) inventories and ledgers of important business houses, when accessible; (8) market and crop reports; (9) trade journals; (10) writings of great economists; (11) pamphlet literature on economic subjects; (12) monuments and inscriptions; (13) museum collections, especially the moneys, utensils, inventions, and ornaments of different peoples and periods.

4. The origin of commerce. Taking an extreme view we might say that commerce originated when a human demand was first supplied by some other person than the one demanding it. In this sense of the word commerce is practically as old as humanity itself. The few traces which primitive peoples have left behind them furnish proofs of very early commercial relations. The rude caverns of primitive men, even of the Rough Stone Age, have frequently revealed to excavators implements for hunting and warfare made of materials which could not have been procured in those respective localities. In fact, in some instances these implements must have been brought from great distances. When we come to the Polished Stone Age we find an increasing number of such tools and implements in many parts of the world. For example, in many parts of the Ohio valley such articles have been found far away from the places where they must have been manufactured. In a similar manner the primitive "workshops" of Hainault supplied the entire population from the Somme valley to Holland. Explorers in western Europe, Switzerland, Italy, Hungary, northern Africa, and elsewhere have thus found many objects of remote production and manufacture.

Of course the commerce implied in such discoveries was of the rudest sort, and the exchanges of these earliest peoples were undoubtedly fitful in the extreme and limited to products of absolute necessity, such as pottery, tools, and weapons that could not be made at home. The very physical surroundings of these primitive people forbade any further trade and made even such exchanges very hazardous; for we must remember that it was an age of glaciers, floods, and constant volcanic eruptions. When, however, the glaciers disappeared, the rains diminished, the river beds became more fixed, and men began to rise superior to their animal enemies, human migrations began, and these inevitably produced important effects upon infant industry and commerce. The primitive aptitudes of various peoples became modified by fusion with other peoples. This brought industrial improvement, better food supply, clothing, and shelter. Fish and game were caught and hunted more frequently and easily, animals were domesticated, and pastoral life began. These changes also made it possible to live together in larger societies, and thus villages arose.

This progress was not uniform among all primitive peoples. Some retained their roving habits and most of their primitive savagery; others continued to progress steadily. The latter peoples found fertile valleys and occupied them; settled abodes and villages were formed, and defenses reared for protection against new arrivals and hostile groups of people. Thus at last tribes and states were formed. Each migrating people carried to its new home its own industrial secrets, the metals which it had learned to use, the cereals, fruits, and domestic animals. Naturally each migrating tribe would try to maintain commercial relations with those left behind, but even yet such intercourse proved very hazardous. Other savage tribes usually held the plateaus, mountains, and pivotal passes, over which trade

would have to go, and brigandage was universally characteristic of these mountain populations. This mountain brigandage, together with river and maritime piracy, remained for a very long time one of the most serious obstacles to the extension of peaceful commerce. In fact, the earlier exchanging expeditions, even in historic times, were usually strange mixtures of war and commerce; slave trading, woman stealing, piracy, and plunder were the forms which they generally assumed. But needs and wants inevitably increased with prosperity, and the more advanced peoples began to build roads and protect themselves against pirates and brigands. Presently a class of intermediaries arose who made commerce a business; peddlers, either singly or in caravans, began to venture back and forth between the districts of production and those of consumption, exchanging the products of different countries. In time these half pirates, half merchants, devised rude media of exchange. Certain races and peoples began to show a singular aptitude for mercantile operations, some on land, some on the sea, some on both. They therefore became the active agents and leaders of commercial progress in the earlier historic periods. It was partly by these intermediaries that the knowledge of copper, bronze, iron, and the other vital necessities of civilization penetrated into the most remote regions. Thus was man brought up from the condition of the brute to that of a civilized human being. At every stage commerce was one of the leading agencies in the transformation.

5. The five great periods of commercial history. The first great period of commercial history began with the entry of important peoples upon the stage of recorded history and extended to the dissolution of the Roman empire, A.D. 476. The second period began with the general and long economic reaction following this catastrophe and extended to the great geographical discoveries of the fifteenth century A.D. The

third, or "Early Modern Period," was ended by the patenting of the first steam engine in 1769. The fourth period, or the "Age of Steam," began with Watt's great invention; and we will try to discriminate a fifth period, beginning with the laying of the great Atlantic submarine cable in 1866, which we will call the "Age of Electricity."

CHAPTER II

COMMERCE OF THE ANCIENT ORIENT

6. The Egyptians. Living in a narrow river valley, hemmed in by deserts and mountains, without harbors or extensive coast line, the Egyptians never overcame their exclusiveness sufficiently to become successful foreign traders. Endowed with an unusually fertile soil and plentiful means of irrigation, they were able to grow an abundance of food and such essential raw materials as flax, cotton, and wool, while copper, gold, and building materials were quite accessible. The Egyptians, therefore, became successful farmers and skillful manufacturers, but felt little need for engaging in foreign commerce. Such articles as they could not themselves produce, as, for example, slaves, furs, hides, gums, fine woods, drugs, spices, and incense, were generally brought by Arabians, Phœnicians, and other foreigners, many of whom gradually formed trading posts within and on the outskirts of the Nile valley. For a time, under the great monarchs of the eighteenth and nineteenth dynasties (1600–1300 B.C.), industrial and commercial expansion followed in the wake of foreign conquest, but even then the Egyptians allowed foreigners to monopolize most of their foreign trade. Long after, Neco II (612–596 B.C.) tried to make Egypt the leading commercial nation of the world. With the aid of Greek naval architects he built two formidable fleets, one on the Mediterranean and one on the Red Sea. The cities of Saïs and Naucratis filled rapidly with Greek merchants. The inland trade of

western Asia, passing through Carchemish and Tyre, came under Egyptian control. An attempt was made to reopen the ancient canal of Sety I and extend it so as to connect the Mediterranean and Red Sea. This undertaking, however, was finally relinquished, and Phœnician sailors were sent out to find another passage between the two seas. Starting down the Red Sea they circumnavigated Africa and, after a voyage of three years, came back to the mouth of the Nile. Unfortunately the practical results of this voyage were not great, and Egypt soon after fell under the yoke of successive foreign conquerors. Nevertheless much of the commerce stimulated by Neco II continued, especially that conducted by the Greeks living in the cities at the mouth of the Nile. It was largely by these Greeks, as well as by the Phœnicians before them, that Egypt's magnificent heritage of art and industrial skill was carried to various parts of the world, there forming an important basis for still greater achievements by later peoples.

7. Ancient commercial cities of the Tigro-Euphrates region. Like the Nile the Tigris and Euphrates rivers were subject to annual overflow; but both rivers, especially the Tigris, were liable to rapid and violent rises, which endangered towns along their banks. A much more thorough system of irrigation canals was necessary for successful cultivation than in the Nile valley; but with such a system the whole valley was splendidly adapted to agriculture, while in the neighboring mountains gold, silver, iron, lead, tin, and copper were found. Consequently agriculture and manufactures thrived in the lower part of this valley in the very earliest historical times. Furthermore, this valley was much more favorably situated for an extensive foreign commerce than the Nile valley, as it was the natural center towards which all the most ancient commercial routes converged. Such cities as Ur, Erech, Eridu,

Larsa, and Sirgalla had commercial connections with Syria, Armenia, the Persian Gulf countries, India, and probably with China, and a banking system had been developed at least as early as 6000 B.C. Under the Assyrian domination Nineveh was for a long time the center of a very large trade, extending in all directions. This city was surrounded by a fertile agricultural region, and numerous manufactures thrived there. Moreover two great international trade routes crossed at that point, one from Armenia to the Persian Gulf, and another running westward from Ecbatana and Media. Babylon, however, finally eclipsed Nineveh and all other cities in this region. She had a better agricultural basis for trade, and the Euphrates, which turned sharply towards the west, was a more international river than the Tigris, thus making the great stream of commerce from east to west flow more naturally through her markets. Susa, Nineveh, Bactra, Thapsacus, Carchemish, Samosata, and many other large industrial and commercial cities finally became her feeders. From India, Bactriana, and China she obtained gold, ivory, jewels, silks, cotton, wool, tapestries, spices, fine woods, and hunting dogs; from Ceylon and the Persian Gulf, pearls; from Arabia, frankincense, myrrh, and other perfumes; from Media, the eastern Mediterranean countries, and elsewhere, lumber, timber, and stone; from Armenia and Asia Minor, wines and oils; from Scythia, hides and furs; from Egypt, flax, grain, cattle, horses, and mules. Nearly all of the maritime trade of Babylon, however, was in the hands of the Phœnicians, and much of her caravan trade was conducted by Arabians, Syrians, and Hebrews. Babylon was not only the leading commercial city in the world for a time, but also the greatest manufacturing center, especially after the fall of Tyre. She manufactured on a large scale many varieties of magnificently colored cottons,

woolens, linens, tapestries, carpets, and coverlets, finely cut gems, fine potteries and porcelains, colored and transparent glassware, perfumed waters, and many other articles. Her industrial products were for many centuries in great demand in every part of the civilized world, and many peoples learned their industrial lessons chiefly from her, either directly or indirectly. Babylon was also for a time the financial center of the world. The records of certain banking firms of that city have been discovered, and they furnish evidence of extensive banking operations.

8. The Persians. Although the Persians were never a commercial people themselves, the conquests of Cyrus, Cambyses, and Darius hastened the commercial fusion of all the peoples brought under their domination. Some important cities like Babylon declined, but others arose rapidly and through the energy of foreign traders became great commercial centers. Susa, in particular, profited greatly by the Persian domination. At the other end of the empire Sardis became a very prosperous industrial and commercial city. Crowds of workmen of all nationalities flocked there, and all the products of the known world were sold in her markets. Cyrus established throughout his empire roads, defenses, relays, stations, and a postal service, all of which were perfected by Darius. Great fairs flourished at all important places, and each halting place on the route from Susa to Sardis became a market. From Sardis three important routes branched to Cyme, Smyrna, and Ephesus. In another direction the canal of Neco was made navigable, and the commercial routes from the Sudan, Libya, and the Red Sea were again active. Scylax of Carianda made a voyage from the Indus to the upper end of the Red Sea, exploring the resources of the countries along the way. Darius, imitating the Lydians, issued gold and silver coins called darics, which were

used throughout the western portion of the empire. Thus under Persian domination commerce profited greatly from the new means of communication and transportation, the greater security established, the knowledge acquired by exploration, the more general use of coined money, and the extension of commercial relations by conquest. The death of Xerxes (465 B.C.) was followed by a period of political disintegration and consequent commercial decline, lasting until the conquests of Alexander the Great (334–323 B.C.). Alexander perceived the importance of commerce and did much to revive it, but died too soon to carry out his plans. Seleucus Nicator (312–280 B.C.), his successor in the Tigro-Euphrates region, also encouraged trade, especially with India. Seleucia was built on the west bank of the Tigris, about forty-five miles north of Babylon, and soon became the greatest center for trade with India and the Far East. The Seleucidæ also founded many other commercial cities. Again, however, the tide of fortune changed. The western portion of the kingdom of the Seleucidæ was incorporated into the Roman republic (63 B.C.), and the eastern portion was gradually absorbed by the Parthians. Under Parthian rule Seleucia, with her neighbor Ctesiphon, just across the river, retained her commercial supremacy in the Tigro-Euphrates valley, and for a time also under the New Persian, or Sassanian, monarchy, established A.D. 226. Finally, Ctesiphon usurped the commercial position of Seleucia, owing chiefly to the terrible devastations of the Romans in the latter city, and retained this position until conquered by the Mohammedans. Farther east, Persepolis was a very important commercial city during the Parthian and Sassanian ascendencies, as was Tadmor or Palmyra farther west.

9. **The Phœnicians** were commercially the most interesting and important people in the ancient Orient. In their

original home along the Persian Gulf, near the Bahrein Islands, they developed at a very remote date a thriving fishing industry and traded with other peoples living along that gulf, in the lower Tigro-Euphrates valley, and farther east. As civilization spread westward they pushed in the same direction, up the Red Sea, through the Nile valley, until they found the valuable fisheries and other resources of the eastern Mediterranean. Their new home was very small, but the land between the rugged coast and the Lebanon mountains yielded grain, while the mountain slopes were suitable for orchards and vineyards. The food supply thus afforded could be supplemented quite easily by importations from Palestine. The mountains in their rear and the rocky coasts protected them from invasion, while the clefts in the latter afforded secure harbors. Furthermore, the mountains yielded copper and large quantities of cedar and pine timber, the shores afforded plentiful materials for glass blowing, and the fisheries furnished both edible fish and the shellfish called murex, from which a valuable purple dye was extracted. Thus nature invited the Phœnicians to become shipbuilders and skillful navigators, and afforded not only food but also the raw materials necessary to start them on their industrial career. What raw materials their manufacturers could not secure at home their merchants and sailors soon found in the neighboring islands, and ultimately brought from every part of the known world. The trading connections already established in the East by the Phœnicians were continued and extended after their navigation to their eastern Mediterranean home. At the same time they then found themselves more favorably situated for playing an important part in the commerce of the rising western countries. Here, along the shores of the Mediterranean, was a new world with rich and unexplored native resources, and

the Phœnicians were to be its first great commercial pioneers. Numerous projecting peninsulas and almost numberless islands, scattered through the entire length of this sea, beckoned the adventurous explorer westward, and the enterprising Phœnician trader gradually pushed his eager search for new sources of supply and demand, not only through this sea to Spain, but even past the Pillars of Hercules, northward along the western coast of Europe and southward along the western coast of Africa.

Sidon was for many centuries the chief city of Phœnicia. Her merchants and sailors took the lead in opening the eastern Mediterranean countries to commerce. They first found their way to Cyprus, attracted thither by the rich veins of copper, as well as by the silver, iron, pine, and cedar found there. From Cyprus they worked their way along the coasts of Asia Minor and among the adjacent islands, founding important trading posts in Rhodes, Lesbos, Crete, Melos, Thera, Cythera, Eubœa, Thasos, and other islands. Although they seem to have preferred the islands as places for stations, they established some on the mainland; as, for example, at Astyra, Corinth, Thebes, and a few places on the Thracian coast. The Sidonians also pushed through the Bosporus into the Black Sea countries, where they found abundant supplies of wool, tin, iron, grain, fish, furs, slaves, and amber, brought thither from central Europe. In the Ægean islands they found a great variety of resources, the most important of which were slaves, gold from the mines of Thrace, Thasos, Thera, Cythera, and Melos, and the volcanic clay of Thera and Melos, which made these islands the greatest pottery centers of the Phœnicians. Gradually the Greeks grew bold and strong enough to resist the Sidonian monopoly of the Black Sea and Ægean countries, and after a long and fierce struggle they remained masters of the field. What

the Sidonians lost in these regions, however, was compensated for by what the Tyrians found in the western Mediterranean and more remote countries. Already the latter, while sailing westward from Crete, had discovered Sicily and found their way thence to Sardinia and Spain. Just as Sidon began to decline, therefore, Tyre began to prosper. In Spain her merchants found rich supplies of silver and tin, and founded Gades (Cadiz), Tarshish (Tartessus), and numerous other trading posts. In the other western Mediterranean countries they were also very active, establishing commercial stations at Utica, Hippo, Carthage, Narbo, and many other places in Sicily, Sardinia, southern France, and northern Africa. In western Africa they established many trading posts, whence they secured the characteristic products of that region. They even pushed northward, probably as far as Cornwall and the Baltic countries, bringing thence tin, grain, wool, hides, furs, fish, copper, and amber. To cap the climax they circumnavigated Africa, while sailing under the authority of Neco II. Tyre not only became the leading commercial city of the world, but she also excelled all others for a time in the extent and quality of her manufactures; in fact, a large part of her extensive commerce served as a feeder for her manufactures. Her traders exploited every known region in their search for raw materials. The tin from Cornwall, Spain, and the Caucasus was brought home to be mixed with the copper of Cyprus and other countries, thus enabling the skillful Tyrian metal workers to supply many oriental cities with their matchless bronze statues and ornaments. The other hardware and metal trades were similarly fed by the gold, silver, and iron brought from various parts of the world. Wool was brought from the Black Sea countries and the river valleys of Asia Minor; the home supply of murex was supplemented by fishing off the coasts of Bœotia and

An Ancient Tyrian Vessel

Cythera; with the wool and dyestuffs thus procured the Tyrian textile industries were able to flourish most brilliantly. Other important home manufactures also thrived upon raw materials secured by Tyrian traders in numerous places. Tyre, however, like her sister Sidon, was doomed to decline and ultimate decay. The numerous internal troubles during the ninth century B.C., together with the wars in western Asia and the subjection of Phœnicia to Assyria, caused an extensive emigration of merchants and manufacturers from Tyre to Carthage, which soon became the chief city of the Phœnicians. Gradually, also, the Tyrians lost their control over their sources of supply for raw materials and became enervated by excessive luxuries and indulgences. Owing to these and other causes Tyre continued to decline and was ultimately conquered by Nebuchadnezzar, and later by Alexander the Great; but even after she lost her industrial and commercial supremacy she continued to be a somewhat important intermediary between the Orient and the West.

10. The Hebrews, especially during the reign of Solomon, became quite an important commercial people. The territories controlled by that monarch were intersected by many of the most important trade routes, and he in many ways encouraged his people to engage in foreign commerce. During his rule the Hebrews even engaged in maritime commerce in conjunction with the Phœnicians, sailing as far as Tarshish in the West, and down the Red Sea to Ophir. The chief commercial work of the ancient Hebrews, however, was to supplement the maritime commerce of the Phœnicians by becoming for a time their most important auxiliary caravan traders.

11. The Far East. Authentic information concerning the earliest trade of India, China, the intervening Asiatic coast, and the East India islands is very meager. We do

know, however, that in very early times many articles from these remote regions were carried to the countries farther west; that some of this merchandise went by water, some by caravan; that Bactra was for many centuries the chief center of the caravan trade with the Far East; that native coast traders brought wares from the Far East and unloaded them into Phœnician and Arabian vessels, probably at some point not far distant from the mouth of the Indus. Fairs and markets existed throughout the Far East at a very early date, and there must have been a quite extensive interchange of commodities between the different sections of that region on account of the great diversity of agricultural, mineral, and manufactured products.

References. — *Gibbins*, History of Commerce in Europe, 6–11; *Yeats*, Growth and Vicissitudes of Commerce, 1–47; *Cunningham*, Western Civilization, I, 10–70; *Morris*, The History of Colonization, I, 31–85; *Marchant*, Commercial History, 1–29; *Economic Journal*, XI, 305–320; *Gilbart*, Lectures and Essays, Works, V, 1–24; *Fyfe*, Merchant Enterprise; *Bourne*, The Romance of Trade.

CHAPTER III

COMMERCE OF THE GREEKS

12. Geographical influences almost compelled the Greeks to engage in commerce and maritime enterprises. The peninsular form of their country and the numerous deep bays and inlets gave them an extensive coast line and numerous harbors; their wooded mountains furnished them ample materials for ships; countless islands tempted them to explore in every direction. When the Greeks obtained control of the Black Sea they were able to establish trade relations with Persia by way of the northern route along the Caspian. They were also well situated for receiving products from Russia and central and northern Europe by the various river-valley routes. Numerous mountain chains afforded them protection from land invasion. These mountains, to be sure, cut Greece into many small states and prevented national unity; but the very fact that land empire was geographically almost impossible hurled some of the Greek cities the more forcibly into commercial and maritime enterprises. The soil and climate of Greece and the adjacent islands favored the growth of grapes and olives, as well as a great diversity of other foods and raw materials, and these were gradually supplemented in the numerous colonies. The Greek world as a whole, therefore, afforded ample natural resources for an extensive commerce. Geography also determined very largely the direction of Greek colonization. The western coasts of the peninsula are mostly rocky, while the eastern coasts abound with harbors. Thus

Greece faced eastward, and Greek colonization consequently first turned in that direction. Then, by a rebound, the Greek settlements in Asia Minor, facing westward, naturally sent out colonies in that direction, far beyond the mother country into the new world growing up in the western Mediterranean.

13. Influence of the Phœnicians. If geographical influences were not strong enough to push the Greeks into commerce and maritime enterprises, they were not left without a further incentive in the form of their Phœnician teachers, who tutored them in industry, commerce, and navigation. Gradually the pupil became the rival of his teacher, and ultimately excelled him in nearly every line of activity, — in agriculture, shipbuilding, colonization, commercial methods, finance, architecture, and art, as well as in all phases of immaterial civilization.

14. By various waves of migration the Greeks gradually occupied the Ægean islands and the entire Asia Minor coast, and built there many flourishing industrial and commercial cities. Miletus rivaled Tyre in the manufacture of woolens, conducted an extensive caravan trade with Sardis, Susa, and other eastern cities, sent her ships as far as Spain, and founded numerous colonies and trading posts. Smyrna and Ephesus also became great industrial and commercial centers. In the adjacent islands the chief commercial cities were Samos, Mitylene, Chios, and Rhodes.

15. The Greeks also established themselves in Thrace, the Chalcidice, the Thracian Chersonese, and on the shores of the Propontis, the Bosporus, and the Black Sea. Their most important settlements in this region were Potidæa, Amphipolis, Olynthus, Byzantium, Cyzicus, Sinope, Trapezus (Trebizond), Phasis (Poti), Dioskurias (Iskurieh), Pantikopaion (Kertsch), Tanais (Azov), and Odessus (Odessa). From Thrace, the Chalcidice, and Thasos they obtained gold

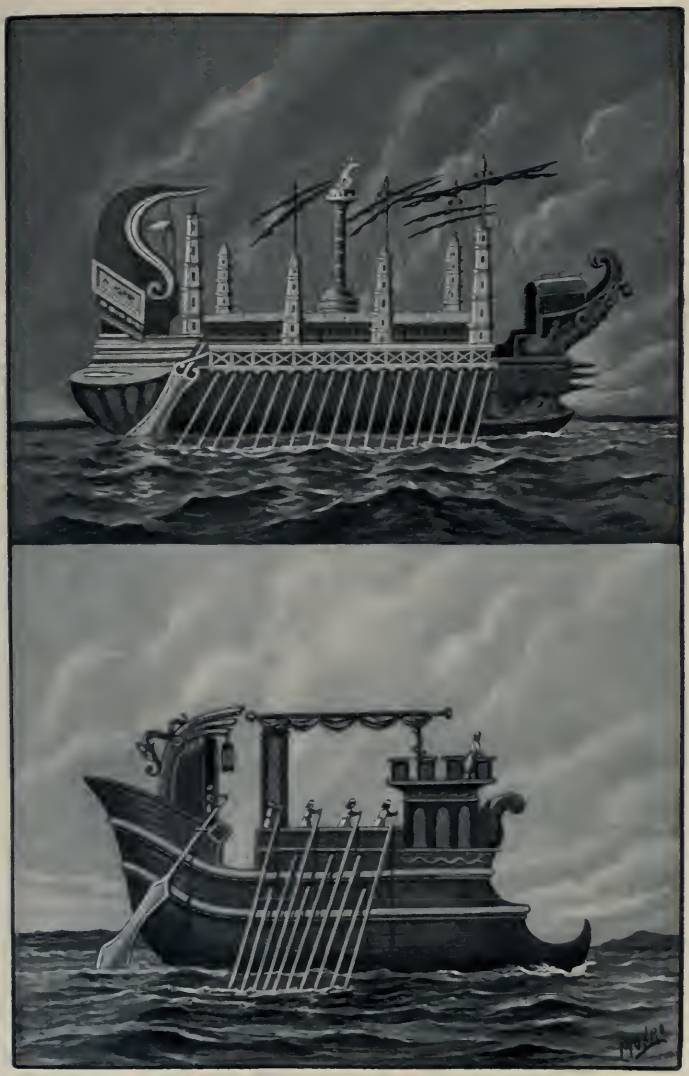
and silver; from the Black Sea countries they secured large quantities of grain, fish, timber, gold, iron, tin, red lead, wool, hides, furs, hair, honey, wax, salt, amber, and slaves, in exchange for wines, cloths, and other manufactured goods.

16. The Greeks in northern Africa. For a long time Greek trade with Egypt was confined to smuggling, but in the seventh century B.C. the Milesians secured a factory at Canopus. During a revolution in 630 B.C. they established themselves forcibly at Naucratis, and subsequently obtained royal protection. This city at the mouth of the Nile rapidly became a great center for maritime trade. Farther west the Greeks planted various colonies, the chief of which was Cyrene. This city, with its port Apollonia and its rich agricultural resources, became very prosperous and founded four others, the entire group being known as the Pentapolis. These five cities carried on a very active land and maritime trade with Egypt, Nubia, the interior of Africa, the Grecian peninsula, Asia Minor, and Italy. From these various colonies in northern Africa the Greeks obtained wool, sheep, horses, grain, oil, saffron, dates, amethysts, onyxes, and sylphium, giving in exchange chiefly wine, wheat, and Greek cloths.

17. The Greeks in the West. Gradually the whole southern coast of Italy was lined with Greek cities, the most important of which were Cumæ, Sybaris, Croton, Tarentum, Rhegium, and Metapontum. These cities grew so wealthy from their prosperous trade and industries that they were collectively called Magna Græcia. The rich resources of Sicily also attracted Greek settlers, and many prosperous cities, such as Syracuse, Agrigentum, Messana, Megara, and Naxos, were founded there. From Italy the Greeks extended their commerce and colonization along the coast to southern France and northeastern Spain, the most

important city in this region being Massilia (Marseilles). It was from Massilia that Pytheas started on his famous voyage to the legendary "land of Thule," sailing through the Pillars of Hercules to northern Europe. In these western Mediterranean countries the Greeks obtained silver, tin, wool, wines, grain, cattle, hides, leather, oils, fruits, beeswax, and pitch in exchange for cloths, hardware, potteries, and bronze, silver, and gold ornaments. In all this western commerce the Greeks had to contend with the power of Carthage and ultimately with that of Rome.

18. Athens and Corinth were the most important commercial cities in the Grecian peninsula. Corinth owed much of her prosperity to her favorable position; with a port on each side of the isthmus she naturally attracted a large amount of Mediterranean trade. In order to avoid the longer and more dangerous voyage around the Peloponnesus, light vessels were hauled from one port to the other, while the cargoes of larger ships were unloaded in one port and reshipped in the other. At the same time Corinth excelled in manufactures of various kinds. During most of the sixth century B.C., therefore, Corinth was the leading commercial city in Greece, and she was able to retain much of her extensive trade long after Athens and other Grecian cities had decayed. In the fifth century, however, Athens eclipsed all the other Grecian cities in manufactures and commerce. The efforts of Solon to attract foreign artisans and merchants and the successful outcome of the Persian wars gave a great impulse to the economic as well as to the political life of this city, which had been most active in the defense of Greece. By the time of Pericles, therefore, Athens was manufacturing for home use and export large quantities of hardware, arms, potteries, woolens, and works of art. On the other hand, she imported gold, silver, copper, tin, precious stones, timber, horses, hides, furs, wool,



Ancient Greek Vessels

papyrus, fish, spices, perfumes, wine, oil, table delicacies, linens, tapestries, fine woods, white and black slaves, and immense quantities of grains. The three principal maritime routes for her commerce were (1) along the Grecian and Thracian coast to the Black Sea countries, (2) across the Ægean to Chios and Lesbos, and (3) to Egypt and Cyrene by way of the Cyclades, Rhodes, Cyprus, and the eastern Mediterranean coast. Athens was also for some time the financial center of the Greek world, and her capitalists and money changers continued to prosper even after she lost her commercial ascendency. The industrial, commercial, and political supremacy of Athens was as brief as it was brilliant. The jealousy of her commercial rival, Corinth, and other causes soon brought on the Peloponnesian War (431–404 B.C.), which destroyed Athenian supremacy. During the fourth century B.C. Athens again became an active industrial and commercial center, but she was no longer supreme. Rival cities like Corinth, Byzantium, Rhodes, Cyzicus, and Heraclea gradually drew away a large part of her trade. The rise of Sparta to supremacy, however, was a distinct check to maritime enterprise, for this city discouraged trade.

19. The Hellenistic period. The conquests of Alexander the Great (332–324 B.C.) gave a new impulse to Greek commerce, producing an effect not unlike the Crusades. They brought the East and the West into contact, substituted the use of money for barter throughout Egypt and a large part of the Orient, and brought into circulation large amounts of Persian specie that had long been hoarded. Alexander seems to have perceived clearly the importance of commerce, for he attempted to foster it in many ways: he founded Alexandria and about sixty Greek colonies, which were intended to be commercial centers as well as military stations, many of which became important cities; he

projected a great commercial city at the mouth of the Euphrates and one at the mouth of the Indus; he planned a canal between the Black Sea and the Caspian; he organized an expedition for circumnavigating Arabia, and reopened the old sea route from Babylon to India. The work begun by Alexander, but cut short by his untimely death, was partly carried out by the Ptolemies and the Seleucidæ. Alexandria became, under the Ptolemies, the greatest center for trade passing from India and Arabia to the Mediterranean countries. Agriculture was revived in the Nile valley, and large quantities of grain were shipped through Alexandria; Lake Copais and the old canal between the Red Sea and the Nile were drained; roads were constructed across the desert from Berenice and Myoshormas to Coptos; efforts were made to clear the Red Sea of pirates; Harpalus discovered, or rediscovered, the courses of the monsoons, and fleets then took advantage of them in crossing the Arabian Sea. The Seleucidæ also, as we have seen, gave a strong impulse to commerce farther east. They founded numerous cities, chief among which were Seleucia and Antioch. Rhodes was, during this period, the most important city of the Ægean and developed a code of maritime law in connection with her extensive trade.

20. Internal trade of Greece. Fairs and markets existed throughout Greece and were regulated and protected by the laws of the states where they were held. The fairs were generally held in connection with religious festivals, and the pilgrimages that were made to the more famous shrines were accompanied with a considerable amount of trade. The interior of Greece was thus intersected by a network of routes running in every direction from the various cities and shrines: from Athens, Corinth, Megara, Chalcis, Dodona, Olympus, Delphi, Argos, Sparta, etc. An officer, called a proxenus, who performed duties similar

to those of our modern consuls, was employed in most of the Greek cities.

21. Greek commerce on the whole exerted a very great influence upon the development of civilization. The attempt to create a Greek empire failed, but many of the Greek colonies and cities remained for a long time great centers of industry and commerce. Unlike the Phœnicians, the Greeks developed the native resources of their colonies and made them great civilizing centers and the prosperous homes of free peoples. The Greeks became better shipbuilders and sailors than the Phœnicians; they were also better financiers. The Greek rose immeasurably above the Phœnician in his ideal of the proper use of wealth. The Phœnician spent his wealth in sensual and sensuous indulgence; the Greek, in giving the world masterpieces in literature, philosophy, sculpture, and architecture. These were the greatest and most characteristic contributions of the Greeks, and we should not forget that these were made possible largely by the wealth derived from commerce.

References. — *Gibbins*, History of Commerce in Europe, 11–19; *Yeats*, Growth and Vicissitudes of Commerce, 48–57; *Cunningham*, Western Civilization, I, 71–139; *Morris*, The History of Colonization, I, 85–126; *Marchant*, Commercial History, 30–42; *Gilbart*, Lectures and Essays, Works, V, 25–53.

CHAPTER IV

COMMERCE OF THE ROMANS

22. The struggle for supremacy in the western Mediterranean. Three important peoples preceded the Romans in the struggle for supremacy in the western Mediterranean, — the Etruscans, Greeks, and Carthaginians.

I. *The Etruscans* founded Adria, Mantua, Bologna, Ravenna, and other cities in the Po valley, and, pressed by the Gauls, they finally crossed the Apennines into Etruria and Campania, where they formed two powerful confederations, subjected a large part of Italy to their rule, and developed a flourishing agriculture, industry, and commerce. Populonia, opposite the iron mines of Elba, became a great center for hardware manufactures and numerous foreign exchanges; Adria and Spina received amber and other northern products through their ports on the Adriatic; Bolsena and Soracte were the great interior markets whither the Latins brought their beasts and slaves. The Etruscans were skillful navigators and shipbuilders, and probably sailed as far as Cornwall for tin. Their principal exports were painted vases, bronze lamps, golden cups, arms, and various copper and bronze articles, which were sent to Sicily, Carthage, and Greece in exchange for the manufactures of Athens, Corinth, Egypt, Miletus, and Babylon. The Etruscans, however, for various reasons, rapidly lost their ascendency over the Gauls, Samnites, Romans, and the Greeks in southern Italy. After their decline the struggle for supremacy was, for a time, between the Carthaginians and Greeks.

Chief Commercial Centers of Roman Empire (Second Century A.D.)

II. *Carthage*, situated in the very heart of the rapidly growing western world, possessing two fine harbors, and inheriting the industrial skill and much of the wealth and trade of Tyre, developed very rapidly after the middle of the ninth century B.C. Her agriculture was probably the best managed and most flourishing known in ancient times, and her manufactures were varied and extensive. Gradually all the Phœnician colonies in the West were brought under her control and many others established. She conquered eastward as far as Cyrene and westward as far as Gibraltar; she established numerous trading posts on the western coast of Africa and in the interior; she exploited the mines and other resources of Sicily, Elba, Sardinia, Corsica, the Balearics, Spain, and far-off Cornwall; her ships carried to the Orient her most valuable manufactures and scattered throughout the West numerous agricultural and industrial products. With the wealth secured from her trade and industry Carthage sought the political domination of the western world, and this ambition brought her into collision with the Greeks and Romans.

III. *The struggle between the Greeks and Carthaginians lasted for several centuries, but the climax came in the war with Pyrrhus* (282–272 B.C.). This king was trying to do in the West what Alexander had done in the East, and he readily championed the Greeks in Italy against the Romans, and those in Sicily against the Carthaginians. In this war the Romans and Carthaginians stood together, but the latter profited most by the defeat of Pyrrhus. For a short time it looked as if Carthage would surely become supreme in the West.

IV. *The struggle between Rome and Carthage.* But, while the war with Pyrrhus gave Carthage control of Sicily, it also gave Rome control of southern Italy. The two rising powers of the West were thus brought face to

face, with only a narrow strait separating them. It did not take them very long, therefore, to discover that they were deadly enemies: in less than ten years the First Punic War, or the "War for Sicily," had begun (264 B.C.). Other grounds for dispute gradually arose, and a long struggle for supremacy ensued — a struggle between two hostile and utterly different civilizations: that of Carthage, backed by enormous wealth; that of Rome, by patriotism and magnificent military discipline. It was very fortunate for the world that Rome triumphed in this struggle; for the Carthaginians could never have spread Greek civilization, while the Romans did this, and benefited the world in many other ways.

23. Geographical position and early economic development of Rome. Rome, the victor over Carthage, was not well fitted by her geographical position to become a great maritime power. The city had been founded about eighteen miles from the coast on the river Tiber, the navigation of which was hindered by its rapid current and the frequent alterations in its course. The early port of Ostia was frequently injured by floods, and the Romans were very tardy in making secure harbor improvements. Ships touched this port with difficulty and were forced to discharge their cargoes into small flatboats, which carried them thence to Rome. On the other hand, Rome was well situated from a military standpoint and as an interior market for a rich and extensive region, and much of her early prosperity was due to her interior and coasting trade, as well as her agriculture; but it was not until after the Punic wars that Rome took a definite position as a maritime power. As late as 306 B.C. she acknowledged by treaty the maritime supremacy of Carthage. Her first commercial fleet was not formed until about sixty years before the First Punic War, and this fleet plied only between Ostia, Sicily, and

Carthage. By 267 B.C. the fleet had become important enough to require the appointment of four quæstors for superintending its operations. One effect of the Punic wars was to reveal to Rome the need of a navy, and from that time her maritime power developed in connection with her further conquests. But it was by conquering and incorporating maritime cities, whose trade was generally left in the hands of those who had already developed it, that Rome became a maritime and commercial city, rather than by the commercial enterprise of her own citizens. From the Punic wars to the establishment of the empire there was nothing like such an industrial and commercial development in the Roman territories as one would naturally expect to find in such a rapidly growing state. Certain conditions, however, inevitably increased the commerce centering in Rome during this period and caused a certain amount of industrial development. For one thing, Rome was becoming more and more dependent upon her provinces and other countries for her supply of grain. Again, although some manufactures had existed in Rome even at a very early date and others were slowly developed after the Punic wars, Rome at the close of the republic was still dependent upon other cities for most of her manufactured goods. These facts, coupled with the rapid growth of the city and the modifications of Roman tastes by conquests and foreign influences, necessitated a larger foreign trade to feed the increasing demand for foreign products; but the actual development during the later republic was not commensurate with the possibilities.

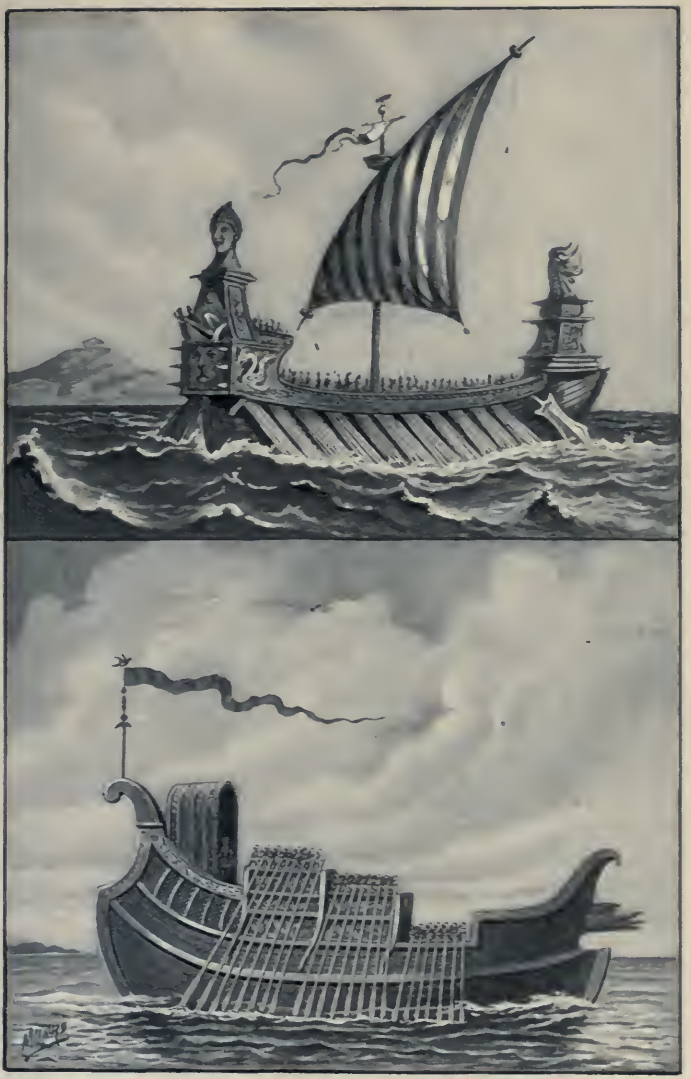
24. The economic conditions at the close of the republic. These had become so bad as to almost stifle industry and seriously check commercial development in the Roman territories. One reason for this was that Roman capitalists found other enterprises more lucrative and attractive

than the development of Roman commerce and manufactures. The senatorial aristocracy, for example, preferred speculative farming. The small farmer class had in various ways been driven to the wall, and in their place had grown up vast estates (latifundia) worked by slaves. The senatorial landlords, who owned these estates, produced large quantities of wines, oils, and wool, and many of them exported their produce in their own ships; but they did not deign to engage in any further trade. They derived ample profits from their large estates, and, like the English landlords of the eighteenth century, they practically governed the state. Far more dangerous to normal industrial and commercial development, however, was the unbridled exploitation of the Roman territories by speculators and contractors, either singly or in associations. Instead of employing their capital legitimately in developing industry and commerce, they loaned money at exorbitant rates of interest,[1] robbed the government through their contracts for supplying the armies and building public works, or, under the guise of collecting taxes, shamelessly exploited the provinces, extorting all they possibly could from their helpless victims. By the close of the republic these speculators and contractors were rapidly exhausting many of the most fertile and resourceful regions under Roman rule. To make matters worse, there were numerous civil wars provoked by rival ambitious generals, and lawlessness in all its worst forms prevailed throughout the Roman territories, reaching its climax in Rome itself. From the standpoint of maritime commerce, one of the worst forms of lawlessness was the extensive practice of piracy. From their headquarters in Cilicia the pirates were able to send out about one thousand strongly equipped galleys, and no merchant fleet nor any of the Mediterranean coasts were

[1] Even the "virtuous" Brutus exacted forty-eight per cent.

free from their terrible ravages. In all parts of the Roman world, therefore, in every line of activity, was felt the need for peace, order, and the restraint of extortionate and greedy capitalists.

25. Industrial and commercial revival under the early empire. Just at the close of the republic the economic conditions had been improved somewhat by the power of Julius Cæsar and Pompey's brilliant victory over the Cilician pirates, but it was reserved for Augustus to inaugurate a new industrial and commercial era in the Roman world. He reëstablished peace and order from the Danube to the deserts of Africa, from the Euphrates to the Atlantic. The sphere of activity of contractors and speculators was curtailed, and nearly all public business that had formerly been conducted by them for private gain was placed in the hands of efficient imperial officers. A careful census was regularly taken as a basis for more rational taxation, and scrupulous accounts were exacted from public officials. Civil wars were repressed; piracy was checked and maritime routes rendered safe; lighthouses and other harbor improvements were made; splendid roads were built to the farthest limits of the provinces; a postal system was established; artisans were protected and the legal status of small farmers was improved; the agricultural, mineral, and industrial resources of the provinces were developed. The natural result of this improved system of administration was an intensely active commercial movement throughout the Roman world and even beyond its limits. The two centuries following the triumph of Augustus at Actium (31 B.C.) may be considered the golden age of Roman industry and commerce. During this period the wants of about one hundred million people were provided for, and many large cities prospered on the industries and commerce necessary to gratify these wants. Rome naturally



Ancient Roman Vessels

was the center of this vast trade; the whole world was ransacked to provide this imperial city with necessaries and all conceivable luxuries. At the same time the luxuries of Rome raised the standard of living and created a taste for luxuries throughout her dominions, and the new tastes stimulated agriculture, manufactures, and commerce. Tertullian wrote: "The world becomes every day better cultivated and richer; everywhere routes, everywhere commerce; former deserts are transformed into pleasant domains; they now work where once were only forests; they sow where there was only sand; they drain marshes; there are to-day more cities than there were houses formerly."

26. Roman manufactures. Rome never became a really great manufacturing city. Her imports vastly exceeded her exports, and only a very small portion of her exports were manufactured articles. Numerous articles for home use, however, were made in Rome in large quantities, chiefly by foreign artisans living there. These homemade articles were mostly such luxuries as fine furniture, carvings, moldings, lace, embroideries, metal work, fine potteries, glass, paper, and books.

27. Sources of Roman imports. Imports poured into the imperial city in vast quantities from all parts of the world. In the West the harbors of Cadiz, Narbo, and Marseilles were continually crowded with vessels laden with goods destined for Rome. From Cadiz and Spain came wool, silver, gold, copper, iron, wheat, wine, fruits, oil, honey, wax, dyes, pitch, salt, oysters, pork, cured hams, and horses. Various towns in Gaul, like Toulouse, Bordeaux, Rheims, Arles, Nîmes, and Lyons collected large quantities of produce and sent it to Narbo and Marseilles by way of the Roman roads or river routes. Into these ports were thus gathered, for shipment to Rome,

cattle, salted pork, honey, millet, wheat, oil, wines, fruits, coarse tunics, and linens from Gaul, and tin, lead, iron, cattle, leather, slaves, pearls, oysters, and hunting dogs from Britain. From northern Italy came pitch, millet, wine, wool, hogs, honey, wax; gold from Aquileia; and carpets, cloaks, and hangings from Padova (Padua). From Germany and the Baltic countries came amber, furs, iron, and slaves, by the route across the eastern Alps. From Sicily came wheat, cattle, wool, and honey. The products of northern Italy and Germany reached Rome through the port of Ariminum; those from Narbo, Marseilles, Cadiz, and Sicily, chiefly through the port of Puteoli, but sometimes through the port of Ostia.

The products which Rome received from the East were many and varied. From Greece came large quantities of horses; from Lesbos and Chios, honey and wine; from Cyprus, copper and figs; from Athens and Corinth, perfumes, bronzes, marbles, and various fine fabrics; from Miletus, Ephesus, and Smyrna, cloths, carpets, rugs, gold embroideries, and works of art; from the Black Sea countries, wool, furs, hides, grain, gold, emeralds, and slaves; from Syria and Phœnicia, purple goods, cedar, cedar oil, and glass; from the Persian Gulf, pearls and fish; from Arabia, India, Persia, Bactria, and China, silks, furs, precious stones, crystals, perfumes, spices, incense, and gold; from Egypt and Numidia, wheat, various kinds of cloth, embroideries, and Alexandrian colored glass; from the northern coasts of Africa and the interior, grain, horses, wild beasts for the arena, hides, furs, slaves, ivory, ostrich feathers, and gold. In many parts of the Roman world fisheries were maintained to supply Roman tables; poultry, game, and vegetables were also brought in large quantities from numerous sources. The chief eastern centers for trade with Rome were Corinth, Antioch, Alexandria,


ANCIENT
TRADE ROUTES
Novgorod
Kiev
Tanais
Astrakhan
Aquileia
Massilia
Roma
Byzantium
Sinope
Colchis
Trapezus
Sardis
Ephesus
Gades
Carthago
Corinth
Athens
Rhodes
Antioch
Nineveh
Teheran
Ecbatana
Ispahan
Susa
Babylon
Persepolis
Sidon
Tyre
Palmyra
Damascus
Petra
Cyrene
Alexandria
Cairo
Coptos
Gerrha
Aden
Khiva
Bokhara
Samarcand
Bactria
Herat
Kabul
Delhi
CHINA
TO CHINA

Ephesus, Smyrna, and Miletus. Most of the products from these cities reached Rome through the port of Puteoli.

28. Economic decline during the later empire. Great as was the revival during the first two centuries of the empire, agriculture, manufactures, and commerce were not even then in a thoroughly healthy condition, and during the later empire there was a steady and appalling economic as well as political decline. We can attempt only a partial enumeration of the causes for this decline. For one thing, there was a steady decrease in available capital. The money supply was inadequate; there was a steady drainage of specie, especially silver, to India, China, and Arabia, to pay for luxuries; vast sums were squandered, not only in personal luxuries, but in unproductive public works. Furthermore, there were frequent governmental depreciations of the currency, which made prices uncertain and hindered commercial transactions. Men, therefore, became unwilling to risk their savings as capital in productive enterprises, and immense quantities of specie were hoarded "for better days which never came." This steady decrease in available capital and the consequent ruinously high rates of interest inevitably caused a decline in agriculture, manufactures, and commerce; large tracts of land were left uncultivated, and laborers of all kinds failed to find employment. Another important factor in this economic decline was the fact that the government checked private enterprise more and more by restrictions and regulations of trade and industry, by governmental monopolies, and by the regulation of prices and wages. The government workshops employed chiefly slaves and criminals, and in this way, as well as in others, free laborers were crowded to the wall. To make matters worse, in proportion as industry, trade, and wealth declined, the burden of taxation became heavier. Alexander Severus, for example, went so far as to impose the *aurum negotiatorum*, a license

tax varying from two to seven per cent, levied every five years upon all persons engaged in business of any kind, except day laborers and those who sold the products of their own lands. Thus, while the provinces under the later republic were exhausted by the unchecked extortions of private capitalists, they were ruined during the later empire by the excessive pressure of public burdens and by the inefficient and expensive administration.

Parallel with the decline in Roman agriculture, manufactures, and commerce was the decline in the vitality and even in the numbers of the Roman population. One of the most important causes of this was the prevalence of such physical vices as drunkenness, gluttony, and licentiousness. Everywhere, especially in the cities, these vices produced their natural effects. The Roman people decreased in numbers, became physically weaker, and lost their energy, will power, self-reliance, and heroism; and these were precisely the qualities that Rome needed most in resisting the barbarians. The decline in population is also explained by the scarcity of employment for free laborers, their competition with slave labor, the poor incentives for reproduction among the slave population, and such natural calamities as plagues, earthquakes, and volcanic eruptions. Another important cause for the economic decline of Rome is found in the practice of feeding the poor from public storehouses and in the policy of supporting public games, both of which were serious drains upon the resources of the state and led directly to a great decrease in production, a pauperization of the people, and a consequent decline in the vitality, public spirit, and numbers of the population.

References. — *Gibbins*, History of Commerce in Europe, 19–26; *Yeats*, Growth and Vicissitudes of Commerce, 58–72; *Cunningham*, Western Civilization, I, 140–209; *Morris*, The History of Colonization, I, 126–143; *Adams*, Law of Civilization and Decay, 1–35; *Gilbart*, Lectures and Essays, Works, V, 88–120; *Marchant*, Commercial History, 43–50.

Part II—Mediæval Commerce

CHAPTER V

WESTERN COMMERCE TO THE TIME OF THE CRUSADES

29. The Middle Age inherited from the ancient world a rich economic legacy which included the knowledge of many mechanical arts and inventions, and much patiently acquired industrial skill; a knowledge of agriculture; vast accumulations of capital, thousands of farmhouses and barns, numerous kinds of implements, money, and many other forms of wealth; much pioneer work already done in the ruder regions of the Roman empire and along its frontiers,—drained swamps, cleared forests, improved lands, etc.; roads and bridges; a knowledge of navigation; an industry and commerce already organized.

30. This legacy, however, was not left intact after the barbarian invasions. The organization of commerce was partly destroyed, many of the old routes becoming insecure and the former business connections partially broken; much capital was wasted by bandits or marching armies; farms were ruined, harvests destroyed, animals driven off by foragers, villages and cities pillaged and burned; the means of internal communication were seriously impaired; large amounts of currency were forced out of circulation; the legal and social condition of the farmers and artisans was lowered. For several centuries some of the finest agricultural regions of Europe were left untilled and desolate, and came under the domination of a new population of

much lower civilization, with few wants, accustomed mostly to barter rather than money, with little knowledge of commercial methods.

31. One may very easily exaggerate, however, the industrial and commercial decline following the barbarian invasions. The so-called "Dark Ages" were by no means as dark as frequently pictured. Commerce and industry were not killed. In all the Mediterranean countries there was a considerable commerce even during the darkest periods. In the fifth century, for example, Syrian and Jewish merchants could be counted in large numbers at Marseilles and Narbo, while merchants from Paris were known in the eastern Mediterranean countries; Greek was spoken fluently in the market at Arles ; Frisians, Saxons, Jews, and Syrians attended the fair of St. Denis. In the sixth century a relay of posts still existed throughout Gaul, and the ports of southern Gaul exported considerable quantities of grain, wine, vinegar, rock salt, wax, honey, and metals, and imported silks, purple goods, spices, ivory, and various other articles from Italy, Byzantium, Asia Minor, and the Orient.

32. Several circumstances favored the continuation of commerce after the dissolution of the Roman empire. In the first place, we must remember that many of the invading tribes were already accustomed to pastoral life, simple forms of agriculture, and frontier traffic, and their savage instincts were held in check by their more civilized brethren who had already settled in the empire. Then, too, the closing of the Roman customhouses along the frontiers was taken advantage of by enterprising traders, and this was a partial offset to the increased risks and dangers from marauders. The risks of the merchant were further compensated by the high prices secured for his wares. The merchant of this period fed a comparatively limited

demand, but it was a very strong one and insured correspondingly large profits. At no time was the period so dark but that the kings, nobles, and wealthy demanded numerous articles of luxury and display. The Church, too, soon found that the surest way to attract and hold in subjection the masses of ignorant and rude communicants was to pamper their fancies with frequent and brilliant services and festivals; consequently, spices, vestments, and other articles had to be purchased in considerable quantities. Another strong demand sprang from the desire of all wealthy people to invest their surplus grain, cattle, and other bulky products, not only in luxuries for their own immediate use, but in such articles as would store great value in small space and thus serve as a means of investment and hoarding. To such people gold and silver ornaments, rare potteries, precious stones, and costly fabrics served as the government bond investments of this insecure period, and the strong demand for this form of investment served as a stimulus to commerce.

33. Justinian's conquests in Italy, Africa, and Spain during the sixth century greatly benefited commerce. The pirate fleets of the Vandals were swept from the Mediterranean, and the conquest of Italy helped to perpetuate commercial relations between the Orient and the Occident. During the next two centuries these western provinces were lost to the Eastern empire, but the commercial connection remained unbroken until the Crusades.

34. The Italian cities profited most by the conquests of Justinian. Amalfi at first took the lead among these commercial cities of Italy. Splendidly situated on the Gulf of Salerno, she soon established factories throughout southern Italy and extended her trade to Egypt, Syria, Greece, Constantinople, and the Far East. The origin and progress of Venice, however, was more remarkable: founded in the

fifth century by refugees fleeing from Attila, on a most unpromising site, the city gradually developed an extensive commerce and finally became the queen of the Adriatic. Taking advantage of their position as the natural outlet for the agricultural and industrial products of the Po valley, and their large supply of fish and salt, for which there was then a very strong demand, the Venetians soon worked up a profitable trade along the Adriatic coasts and up the Po River and its tributaries, exchanging their two staple products for grain, wine, oil, timber, metals, and various manufactures. Gradually they extended their trade into Germany and the eastern Mediterranean countries. The Venetians, however, did not neglect their salt and fish industries even after they became important carriers between the East and the West; in time they secured a monopoly in salt and controlled the salt supplies of Germany, Hungary, Sicily, northern Africa, and the Black Sea countries. Among the other Italian cities which gradually became important commercial and industrial centers during the earlier centuries of the Middle Age were Genoa, Pisa, and Milan, the latter city, however, being noted chiefly for her manufactures.

35. Some of the rulers of western Europe during the centuries immediately following the dissolution of the Roman empire made laudable efforts to encourage industry and commerce. Chief among these were Theodoric, Dagobert, Ebroin, and Queen Brunehaut; more or less important revivals of trade and industry occurred during each of their reigns.

36. The revival under Karl the Great (768–814) was the most important one in the West before the Crusades. Through the activity of such missionaries as Willibrod and St. Boniface much pioneer work had already been done in Germany: forests had been cleared, marshes

drained, agriculture begun, and a rude border trade developed between various tribes. Under Karl the Great this development was vigorously continued in all parts of his empire: agriculture was encouraged in many ways and domestic manufactures were developed. Although Karl desired each estate to be economically self-sufficient and issued several edicts which tended to discourage commerce, his conquests paved the way for an extension of commerce, and many of his measures encouraged trade. Within the empire there was a certain amount of exchanging of the characteristic products of each province, but commerce consisted chiefly of trade between the East and the West. During the reign of Karl important overland routes were developed through the Rhine and Danube valleys, and such commercial centers as Mainz, Magdeburg, Erfurt, Nuremberg, Ratisbon, Passau, and Vienna arose along these routes.

37. The darkest period of commerce during the Middle Age followed the death of Karl the Great (814). When his strong hand was removed his empire broke into feudal fragments; numerous civil wars arose; the Normans invaded the North and East; the Saracen pirates scoured the Mediterranean and many of its coasts; the Hungarians marched through Germany even into Burgundy. Thus the various maritime and land routes to the East were cut off, commercial towns were pillaged, crops and dwellings were burned, the cattle and sometimes even the population were carried off by marauding bands. Frequent plagues, floods, and storms brought crop failures and consequent famines; for example, we read of forty-eight years of famine in central Europe between the years 970 and 1040. These frequent famines not only produced great suffering, but they caused the starving peasants to organize into bands which rendered travel and trade still more insecure. Furthermore,

tolls were rapidly multiplied during this period: there were ten on the River Garonne, sixty on the Rhone and the Saône, seventy-four on the Loire between Nantes and Rouen. At the entrance of every fief, at the passage of every bridge, it was necessary to pay a fee. Woe also to the foreign merchant who happened to tarry too long on one domain! By the *droit d'aubaine*, if he stayed longer than a year and a day he lost his liberty and became a serf. Commerce inevitably suffered a serious decline during such a period.

38. During the eleventh century, however, in spite of all obstacles, commerce began to revive in the West. The agricultural and industrial basis for commerce had greatly improved in many parts of western Europe, and the political basis was beginning to improve. Interior trading was increasing at the various fairs and markets throughout Europe, and cattle, grains, wines, fish, tools, utensils, coarse cloths, and some luxuries were exchanged at them. At the same time maritime and caravan trading were being developed quite rapidly, especially by the Italian cities. Just then occurred the Crusades, which were destined to revolutionize the commerce of Europe.

CHAPTER VI

EASTERN COMMERCE

39. There was a marked contrast between the East and the West during the first half of the Middle Age. While western Europe was falling to pieces politically and being split into infinitesimal feudal fragments; while it was full of ignorance, superstition, and coarseness; while most of its people lived in the rudest kinds of dwellings; while pigs wallowed in mud in the principal streets of many of its leading cities; and while even its kings and queens lived amid material conditions that to-day would be considered filthy even for the middle classes, we find in the East during the same period magnificence, luxury, polish, and refinement. In no respect was the contrast more striking than in the relative condition of agriculture, manufactures, and commerce.

40. The Persians, after many vicissitudes, had inherited a large and rich portion of the ancient empire of Alexander the Great. They had continued and gradually extended the commercial relations which, since the times of the Seleucidæ, had been regularly carried on between India and the Euphrates valley. For about four centuries just preceding the establishment of the Mohammedan empire, the Persians had been the chief caravan intermediaries for the three great empires upon which they bordered, viz., China, India, and the Greek empire. Ctesiphon, their capital, became immensely wealthy and overflowed with luxuries of every conceivable kind, which were produced by her

numerous manufacturers or brought there by her extensive commerce.

41. The Eastern empire. Constantine chose a strategic place for his new capital when he selected the ancient Greek town Byzantium. The surrounding country was full of rich resources, and whatever was produced in Europe, Asia, or Africa could easily be brought by the varying winds to the port of Constantinople. Constantine, during his lifetime, expended enormous sums in his effort to make his new capital equal the ancient glories of Rome, and his successors continued the work until a point of development was reached that makes it difficult to say which of the two was the greater metropolis. Justinian gave a great impetus to the industrial and commercial development of the Eastern empire by the introduction of silkworms. Cyprus and Sicily soon produced large quantities of silk, and the Peloponnesus presently became known as the Morea, because of the large number of its white mulberry trees. Another source of wealth in the earlier days of the Greek empire was the extensive maritime trade of the Greek marine, which continued to dominate the Mediterranean for several centuries. What trade the Greek merchants lost in the West on account of the unsettled conditions prevailing there, was counterbalanced by the rapid growth of Constantinople, whose increased wealth and population created a correspondingly large demand for articles which could only be supplied by an extensive commerce with the Far East. At first this Greek trade with the Indies was conducted over the ancient maritime route by way of Alexandria, but the gradual extension of Mohammedan conquests soon compelled the Greeks to supplement this maritime trade with the caravan trade of the Persians and Arabs. After the capture of Alexandria by the Moslems, the trade between the Eastern empire and

the Far East was conducted chiefly over two caravan routes: (1) the one through Syria, by way of Aleppo, Antioch, and Damascus, (2) the more roundabout one from the Black Sea ports through Tartary. In another direction the Slavs were gradually subdued sufficiently to admit of trade with Russia and the interior of Europe. The tribes along the Danube and the Dnieper rivers furnished Constantinople with large quantities of honey, wax, furs, wool, grains, and slaves. A commercial route passing by Kiev and Novgorod up the Dnieper and down the Oder bound the Bosporus to the Baltic. At the mouth of the Oder a trading post was established where the city of Stettin now stands, and this was made the basis of trade with Scandinavia. From Novgorod and Kiev traders penetrated into Russia, and at Kiev this trade connected with that extending through the Danube and Rhine valleys. After Constantinople, Thessalonica and Trebizond were the most important commercial cities of the Greek empire. Thessalonica possessed extensive manufactures and carried on an extremely active commerce. Trebizond was for a long time the frontier city between the Greek and Mohammedan empires. There, contrary to the usual Christian policy, Mussulman and Christian exchanged numerous products. There were other important manufacturing centers in the Greek empire, such as Salonica, Thebes, Corinth, and Patras.

42. The rapid growth of the Mohammedan empire is one of the greatest marvels in history. In the seventh century Mohammed suddenly transformed the scattered and half-savage Arabian tribes into a nation and sent them forth with blazing enthusiasm upon an unparalleled career of conquest, which did not stop until most of western Asia, all of northern Africa, Spain, and even a part of Gaul were brought under their sway, — in all an empire more than

four thousand miles in length. The Arabs were not only transformed into a conquering nation, but their cities soon became the greatest centers of civilization in the world and remained so for several centuries. The fierce religious fanaticism which they displayed on many battlefields did not render them insensible to the seductions of luxury. Their manufactures therefore led the world in variety and beauty of design and perfection of workmanship; their merchants pursued their search for luxuries more zealously and to more remote regions than any others. The palaces, churches, and gardens of Bagdad and Cordova excelled those on the Tiber and the Bosporus in riches, magnificence, and the accumulation of all that could delight the senses.

43. The Koran, bearing the stamp of its merchant author, far from discouraging and proscribing commerce as did the leaders of the Christian church, declared that it was agreeable to God. In this fact we find one important explanation of the marvelous rapidity and extent of Mohammedan conquest, for Mohammedanism conquered by commerce as well as by the sword. Mohammed certainly displayed remarkable sagacity in appealing to the commercial instinct, for he thus held out one of the most attractive inducements to converts.

44. Damascus, the capital of the Ommiads, was famous for her manufactures of rich fabrics, brocades, tapestries, tent curtains, silks, and tempered blades, and became for a time the greatest market in western Asia.

45. Bagdad, under the Abassids, replaced Damascus as the capital of the empire, and for about three centuries was the richest and most magnificent city in the world. She was better situated for commerce than Damascus, as she commanded important water as well as land routes of trade. In her palmy days she probably had about one

million inhabitants, and abounded with numerous fairylike palaces filled with the choicest tapestries, magnificent furniture, fine stuffs brocaded with gold, silver, and precious stones, silks and other beautiful textiles, bronzes, gold and silver ornaments set with jewels, magnificent potteries and glassware, fine leather ware, and bric-a-brac of every conceivable kind, which were either made by her artisans or imported by her merchants. Her vaults were filled with gold and silver, her schools with wise men from all parts of the world. The chief basis of all this wealth and prosperity was a land and maritime commerce that extended to all parts of the world — to India, China, the East Indies, northern and interior Africa, Armenia, Russia, Spain, and the Baltic countries. Her commerce was fed by numerous manufacturing cities within the empire, as well as by those of other cities, as, for example, Mosul, Shiraz, Balkh, Kabul, Ghazni, Bokhara, Samarkand, Basora, Alexandria, Cairo, Kairowan, Fez, and the Spanish cities.

46. Alexandria, which had been for some time the chief commercial intermediary between the East and the western Christian states, suffered some from a decrease in this trade during the first centuries of Mussulman domination, but she soon made up for this loss by developing quite an extensive commerce with the valley of the upper Nile and the eastern coast and the interior of Africa. From the factories established at Melinde, Mombasa, Kilwa, Sofala, and Mozambique, she received gold dust, ivory, shells, feathers, and black slaves. Even in this direction, however, she was ultimately checked by the growth of Fez and Kairowan.

47. Cairo, under the Moslems, on the other hand, competed in splendor with Bagdad. Caravans arrived there from all parts of Asia and Africa, and transactions were conducted in her bazaars on a truly gigantic scale. Agriculture

and industry prospered and furnished a good basis for her commerce. The ancient canals of the Ptolemies were opened and various industries resurrected. Through Cairo were shipped to the East large quantities of grain, textiles, embroideries, saddlery, harnesses, leather, mantels, goat hair, and slaves.

48. Kairowan scarcely acquired the commercial position held by ancient Carthage, but with her two ports she played a part of considerable importance in the commerce of the Mohammedan empire. Into the interior of Africa she extended her commerce even farther than did Carthage, and was for some time the great center for the prosperous trade of the Mohammedan countries bordering on the western Mediterranean, Tripoli, Algiers, Tunis, Sicily, and Spain.

49. Fez, founded a little way in the interior, finally eclipsed the other cities in northern Africa. Her artisans manufactured large quantities of fine leather, linen, soaps, essences, bronzes, and hardware. Her merchants traded all along the northern coast of Africa and into the interior as far as the river Niger. In her most flourishing days Fez contained six hundred mosques and a population of about five hundred thousand.

50. Mohammedan Spain. It is from the Arab civilization in Spain, the material remains of which are so much better preserved than those of the Orient, that we can now ascertain best what arts and industries the Mohammedan empire possessed, and to what an extent its people employed their fancy and skill in satisfying their devouring appetite for beautiful material surroundings. There, too, was displayed most strikingly the contrast between Mohammedan civilization and the contemporary barbarism existing just across the Pyrenees in Christian Europe. Cordova, the capital of the Spanish caliphate, was a large

and magnificent city with many thriving industries and a very extensive commerce. Other cities, like Granada, Seville, and Toledo, rivaled her in magnificence though not in size. These cities, together with Malaga, Almeria, Cadiz, Murcia, and Cuenca received products from all the remote countries of the world. Arabian Spain, on the other hand, had an abundance of products to exchange for all that she might desire which was not produced by her own industries. There were the leathers of Cordova, the arms of Toledo, the draperies of Murcia and Cuenca, the silks of Granada, to mention only a few of her most famous manufactures; there were the numerous products of her fertile valleys and well irrigated plateaus, her sugar cane, rice, cotton, silk, palms, famous flowers and vegetables; and there were the rich mineral resources of her mountains.

51. The legal basis of Arabic commerce was, on the whole, comparatively liberal. Customs duties and carefully scheduled taxes on merchants were levied in all the Mohammedan countries, but commerce could scarcely have attained such vast proportions as it did in those countries, had it been restrained by really vexatious regulations and restrictions.

52. The Arabs made some very important permanent contributions to the commercial development of the world. In the first place, their splendid agriculture and manufactures gave a great impulse to western Christian industries. In textile fabrics they have never been surpassed; they worked with marvelous skill in all the metals,—gold, silver, copper, bronze, iron, and steel; their leather, glassware, potteries, linen papers, tinctures, essences, sugars, syrups, dyes, etc., were much finer than those made in any other part of the world. In all these industries the Christian manufacturers learned their best lessons from the Mohammedan peoples.

The Mohammedans were scientific farmers; they had excellent systems of irrigation, understood the values of various fertilizers, practiced rotation of crops, and knew how to graft and produce new varieties of fruits and flowers. In agriculture and horticulture also, the western nations learned valuable lessons from the same teachers. The Mohammedans also exerted a permanent influence upon commercial development by their scientific and geographical knowledge; by their development of commercial routes which are not even yet worn out; by their extension of international relations; by their use of a medium of international exchange; by their maintenance of roads, construction of bridges, digging of wells along their caravan routes, and other practical public works. Unfortunately the good features of Arabic civilization were ultimately destroyed by the Turkish peoples, who adopted Mohammedanism and gained political control over the Mohammedan world. The civilization developed by these peoples was undoubtedly such as to check industrial development and stifle commercial enterprise; but we should not let the evils of Turkish Mohammedanism blind us to the many great things accomplished by the Arabian Mohammedans in industry, commerce, art, science, and literature.

CHAPTER VII

THE CRUSADES

53. There were many motives underlying the Crusades, religious, political, and economic, but none were more important than the commercial motives. Before the Crusades began many western pilgrims and adventurers, struck with the eastern fever, had gone to various countries of the East; some had remained, and those who returned incited their neighbors by their liberally embellished stories of eastern wealth and magnificence. The merchant, therefore, was not far behind the pilgrim, and the gains of traffic were already attracting large numbers eastward. During the century preceding the Crusades the commerce between Constantinople and the West increased quite rapidly. The Italian cities, in particular, were profiting by this trade. Venice had obtained special commercial concessions at Constantinople, and had already begun a very lucrative trade with eastern Moslems as well as Christians, especially in western merchandise, Indian products, and slaves captured in both Christian and Mohammedan countries; Amalfi traded extensively with Kairowan, Alexandria, Constantinople, and Syria; Pisa and Genoa were also developing, though more slowly, on account of the Moslem opposition in Sicily, Sardinia, and the Balearics. In short, everything presaged, in spite of religious differences and the papal interdict upon commerce with the infidels, a continuous development of commercial relations between the Orient and the Occident, when the progress of the Turks and the dismemberment of

the caliphate of Bagdad substituted for the mild and tolerant domination of the Arabians a despotic tyranny. The danger of having their commerce stopped by the encroachments of these half-savage fanatics made the western Mediterranean cities very willing to aid and encourage the crusading movement. This danger to commerce gave a solid backbone to the Crusades, and to an increasing extent the commercial motives came to dominate these movements.

From the very beginning Venice, Genoa, Pisa, and Marseilles took a very active part in the conquest of Syria. For all their services these would-be "protectors of the Cross" were rewarded liberally by exemptions from trading dues in many countries, by grants of territories commercially strategic, by cessions of commercial quarters in conquered cities, and frequently by large money payments. Their religious zeal was always more than counterbalanced by their commercial shrewdness and aptitude for driving sharp bargains. Their quarters soon became real cities in themselves, with churches, fine residences, baths, warehouses, markets, and various kinds of mills. Western fortune hunters were very busy in these eastern cities collecting vast quantities of merchandise and plunder to take back to their native countries. Acre became the principal port of the Kingdom of Jerusalem; from this port were secured the products of central Asia, Tibet, India, China, the East India islands, Arabia, and Africa, — musk, camphor, spices, rhubarb, incense, pearls, ivory, etc. Tyre and Beirut were also important ports that were frequently visited; Ascalon and Jaffa had lively markets. An active trade was kept up between all these ports and the great Mohammedan cities of Damascus and Aleppo, whence merchandise was brought either by the Venetians or by the Orientals themselves. Tripoli, in northern Africa, was soon surrounded, as it were, by a wall of merchants of all countries, and in her

warehouses were found rich and varied products. At Constantinople also, the Venetians, Genoese, and Pisans obtained quarters which were made the basis of a valuable trade.

54. The ascendency of Venice during the Crusades. After the Fourth Crusade the capture of Constantinople, instigated by the commercial interests of Venice, gave that city an incontestable commercial preponderance in the East. She also received the choicest slices in the partition of the Eastern empire which followed. The curious title taken at this time by the doge accurately describes the Venetian share of this partition, — "Lord of Three-Eighths of the Roman Empire." In this way Venice obtained Peloponnesus, Cyprus, Candia, Durazzo, Corfu, Patræ, Naxos, Andros, Eubœa, and other islands, all of which were of considerable commercial importance. The principal independencies of the Archipelago united with Venice for the suppression of pirates, and her commerce was thus rendered more secure and capable of extension. Candia, in particular, proved very valuable on account of her strategic position and her rich natural resources. The Venetians obtained from this island each year hundreds of shiploads of grain, honey, wax, and wines. From Constantinople the Venetians extended their commercial operations into Asia Minor and the Black Sea countries, building the important town of Tana at the mouth of the Don as a basis for their Russian trade. For some time, therefore, Venice had a practical monopoly of the trade between the West and the Far East, and of that with the Black Sea countries. But she was not destined to be left undisturbed in this monopoly. Her good fortune soon began to excite jealousy and enmity. By a very shrewd stroke of policy, Genoa and Pisa became the chief agents in the restoration of the Eastern empire (1261), and their services were amply rewarded. The restored emperor granted liberal commercial privileges to these

cities, so that they were able to compete successfully with Venice. Genoa also founded Kaffa in opposition to Tana, and the Venetians were soon driven from Constantinople and the Black Sea countries. This was a serious blow to Venice, but she at once entered more zealously into her trade with her eastern Mediterranean ports and developed more extensive commercial relations with the Far East through Alexandria. Neither was her commerce through these ports seriously interrupted by the fall of the Latin kingdom, which was the closing scene in the romantic drama of the Crusades.

55. The results of the Crusades. The Crusades served as a great awakening force in western Europe. Throughout the period an intense excitement prevailed; everybody, those who went to the East and those who stayed at home, was stirred by a deep enthusiasm. Such a ferment of thought and feeling was certain to set all the wheels of progress in motion and lead to achievements in every direction. The Crusades gave to those who took part in them the very great advantage of travel, and to a certain extent these advantages were reproduced among those who stayed at home. Western Europeans learned for the first time that there were people in the world far superior to them in knowledge, government, manners, and in many of the elements of material and immaterial civilization. A corresponding desire to rise to this superior condition of the East was awakened. The crusaders went to the East "to kill horned devils; they returned to imitate the fine gentlemen" whom they found there. Furthermore, the Crusades ultimately produced political results the most momentous. Feudalism was finally undermined and destroyed because the Crusades had ruined or killed thousands of feudal nobles. In the place of the feudal nobility was gradually developed a wealthy and powerful third estate, which was

to become the most important factor in the politics of every European country. Upon this third estate as a foundation were to be erected powerful absolute monarchies, and in time constitutional monarchies and republics. Such results as these are truly magnificent to contemplate, but we must remember that these results were not immediate. Europe had still to wade through oceans of blood before these tendencies set in motion by the Crusades reached their development.

On the other hand, the industrial and commercial effects of the Crusades were more direct and immediate. We have already seen that the Italian cities during this period built up for themselves a large carrying trade in many directions. Other cities in Europe, in a lesser degree, profited in the same way. Consider also that the Mussulman, during the Crusades, taught the western Christian many valuable lessons that were to aid him greatly in extending his commerce. The European learned in the East, and in his trips to and from the East, invaluable lessons in navigation. Western Europe began to imitate many of the Mohammedan manufactures, such as the beautiful cloths of Damascus, the canopies of Bagdad, the muslins of Mosul, the satins and glassware of Tyre, the tapestries of Persia and Syria, the fine leathers of northern Africa, the potteries, enamels, and metal ware of various oriental countries. The cultivation of certain eastern agricultural products had already been introduced into Sicily and southern Italy, and during the Crusades these valuable transplantings were extended throughout all the southern portion of western Europe and even in the north. Such important agricultural products as sugar cane, rice, mulberry trees, Indian wheat, plums, apricots, lemons, pistachios, watermelons, sesame, shallots, and saffron were introduced into various western countries. Windmills and

other inventions were brought from the East and applied to western industry. Europeans also learned valuable geographical lessons from the oriental scholars and in their long journeys to and from the East. The extensive exploration of western Asia in the thirteenth and fourteenth centuries by European travelers, of whom Marco Polo is the most familiar example, was a direct and immediate effect of the Crusades. In one word, the Crusades taught the West the use and production of many new commodities, created new needs and demands, opened new markets, revealed new trade routes, and in numerous other ways quickened and increased the commerce of the West with the East and of the various European countries among themselves.

A Genoese Vessel

CHAPTER VIII

THE ITALIAN CITIES FROM THE CRUSADES TO THE RENAISSANCE

56. The period from the Crusades to the Renaissance was the brightest in the commercial history of the Italian cities. Italian unity was still only a dream of a few enthusiasts and the political condition of many of these cities was deplorable, but they "lived a life all the more intense because it was in conformity with the natural aptitudes of each section." Freed from the task of creating an Italian nation, the enterprising men of this period threw all their energies into the accumulation of wealth by industry and commerce; this wealth brought refinement, culture, and luxury, and made Italy the leader in the development of a higher civilization. Three cities during this period merit our special attention, viz., Genoa, Venice, and Florence. Although there were numerous other cities engaged in trade and manufactures, they were comparatively unimportant, except as feeders of these three.

57. Genoa, as we have seen, became commercially preponderant at Constantinople, in the Archipelago, and on the shores of the Black Sea, at the time of the restoration of the Greek empire (1261). Not only were the Genoese thus freed from the competition of the Venetians in these regions, but their victory over the Pisans at Meloria (1284) freed them from another rival, and the popes also for some time gave their support to the Genoese.

On account of her position and size Constantinople was the most important eastern center of Genoese commerce.

There were exchanged in large quantities the grains of the Crimea, Bulgaria, and Thrace, the wax of Greece, the wines of Greece and Candia, the mastic of Chios, the alum of Phocis, the gallnuts, wool, and goat hair of Asia Minor, the soaps of Cyprus and Rhodes, the linens of Alexandria and Greece, the hides of Russia, the fine buckram cloths of Armenia and Cyprus, the silks, dyestuffs, perfumes, spices, and other products from the Far East brought thither by way of Kaffa, Tana, Trebizond, together with numerous less characteristic products of the various sections of the East. On the other hand, the West sent thither, chiefly in Genoese vessels, various articles in considerable quantities: Flanders and Tuscany, their draperies; Champagne, her linens; Lucca and Genoa, their fine gold and silver ornaments; Genoa, her fine leathers and woolens; Venice and Ancona, their soaps; Spain, her figs; France, her papers; Germany, her linens, leather, and steel; Naples, her nuts; other Italian and French cities, their wines and oils. It thus appears that the West was beginning to offset her imports with exports. In fact the industry and commerce of the West was developing very rapidly, while that of the eastern Mediterranean countries was beginning to wane on account of the disturbed conditions prevailing there and the progress of the Turks in western Asia. Next to Constantinople the most important eastern cities with which the Genoese traded were Kaffa, Trebizond, Tana, Chios, and Rhodes, which, instead of declining, prospered in various ways by the advance of the Turks. Genoese merchants also had a flourishing trade along the northern coasts of Africa, with various islands in the western Mediterranean, with Spain, France, Flanders, and Germany. Thus for a little more than a century Genoa had a monopoly of the Constantinople and Black Sea trade, was supreme in the Mediterranean, and had an important overland trade

with interior and northern Europe; but for various reasons she declined, and in 1381 she was obliged to make a peace which again practically recognized the supremacy of Venice in both the Mediterranean and Black seas. Neither was this the end of her misfortunes; for in 1396 she was obliged to attach herself to France, and after that was the football of rival European powers.

58. The recovery of Venice. While Venice was obliged for a time to submit to the supremacy of Genoa in the Black Sea and in most of the Mediterranean, she was more fortunate in another direction. She opened the old route from India to Alexandria via the Red Sea, which was much more secure and accessible than the other routes after the advance of the Turks. Venice was also better situated in Italy than her rival Genoa, being the most natural outlet for the varied and rich products of the Po valley. Behind her, and in natural contact with her, lay Treviso, Piacenza, Padua, Verona, Bergamo, Brescia, Cremona, Novara, Tortona, Lodi, Milan, Como, and Alessandria, all of which were thriving manufacturing and agricultural centers. Between these towns and Genoa, on the other hand, lay the Apennines, and consequently their products went to Venice. Furthermore, the land routes from Venice to the most rapidly developing portions of northern and central Europe were more direct than those from Genoa. Venice thus seemed predestined to overtake and outstrip her great rival. It is not surprising, therefore, that she recovered her supremacy in 1381, and for some time thereafter reigned again as the queen of Italian commerce.

59. Venetian manufactures. Although essentially a commercial city Venice also manufactured various articles in large quantities. In the fourteenth century the finest linens in Italy were made in Venice, as were also considerable

quantities of silks and some cotton cloths. The Venetian dyeing processes were still unequaled in Europe. The science of chemistry was further advanced there than anywhere else in the world, and the Venetians had almost a monopoly in the manufacture of dyes. Their working and gilding of leather was recognized as superior to that of any other country; their laces were sought far and wide; their glassware was universally noted for its delicacy and beauty. They manufactured on a large scale brass and iron hardware, including firearms, and their sugar refineries were numerous. They still manufactured salt, and cured fish in large quantities.

60. Extent of Venetian commerce. The Venetian merchants traded, directly or indirectly, from China and the East India islands in the one direction to the north of Europe in the other, and with nearly all intervening countries. At the close of the fifteenth century their maritime commerce required three thousand merchant vessels, which were protected by at least three hundred war vessels. They employed about $25,000,000 as mercantile capital, not allowing for the very great difference in the purchasing power of money as compared with the present. A modern writer estimates that there were at least one thousand Venetian merchant princes whose annual income ranged from $10,000 to $18,000 at a time when $8000 would buy a fine palace.

61. Venetian commerce and industry were thoroughly organized by the most minute governmental regulations. All the shipping of the city was conducted by a system of merchant fleets, each attended by a convoy of war vessels. The government specified the exact routes, the duration of the voyage, the ports to be touched at, the times for arrival and departure, the number of sailors and the commanders for each vessel, the mode of armament, the cargoes to be bought

and sold, and, when the fleets arrived at their respective destinations, a governmental commission fixed the prices of all merchandise bought and sold and superintended the whole process of exchange. The three most important fleets and routes were: (1) the Flanders fleet, which coasted along Sicily, northern Africa, Spain, Portugal, western France, England, and Flanders, touching at prescribed ports along the route; (2) the Egyptian fleet, which sailed in a similar manner to Alexandria and Cairo, there meeting the numerous caravans coming from Aden and the Far East and the vessels coming down the Nile; (3) the Black Sea fleet, which visited Kaffa and Tana and sailed thence along the eastern coast of the Black Sea to Trebizond and thence home, touching at numerous ports on the return voyage. The Venetian government also engaged directly in mercantile enterprises, and some articles, like salt, were made the subject of government monopoly. The policy of the government regarding home manufactures was rigidly protective. The importation for sale in Venetian territories of such articles as were grown or manufactured at home was subject to duties which were practically prohibitive. All such goods, however, as were not grown or manufactured at home were allowed to enter subject to much lower duties, as were also all goods for reshipment. This complicated organization of industry and commerce at first glance seems extremely vexatious, but we must remember that it originated in the numerous dangers to commerce from wars, piracy, and other sources. This system furthermore gave Venetian merchants and manufacturers the advantage of expert advice and direction, for the government invariably chose the safest and shrewdest experts to manage this industrial and commercial system.[1]

[1] The industry and commerce of Florence, Genoa, and other great Italian cities were organized in a manner similar to that of Venice.

62. The Venetian consular system was a very important part of this industrial and commercial organization. In each foreign city of importance was stationed a trained and skillful consul, whose business it was to make regular and exhaustive reports concerning the agriculture, manufactures, and commercial opportunities of that city. These reports covered not only industrial and commercial topics, but everything of interest in the social, political, and religious life of the various countries where consuls were stationed, and constitute a very important source of information for historians. The Venetian consuls were also a very important factor in developing friendly international relations and regular codes of maritime law.[1]

63. Florence, before she acquired the port of Livorno in 1421, did not take a really commanding position in maritime commerce, but from that time until the close of the century she became the greatest commercial city on that side of the Apennines, and a great rival of Venice. Florence obtained control of many trading posts in the Levant which had formerly belonged to Genoa and Pisa. She was on much better terms with the Turks than Venice, and even entered into an alliance with them against that city. Under the brilliant leadership of the Medicis and other shrewd merchant princes, Florence gained control of strategic trading posts in all parts of the world and secured a practical monopoly in the trade through Armenia and Rhodes, but her commerce was never as extensive as that of Venice.

64. The manufactures of Florence, especially the silk and woolen industries, for several centuries before she attained a commanding commercial position, had been one of the chief foundations of her wealth. She was not content simply to weave what raw materials she could gather, but also

[1] *Cf.* Part II, chap. ix.

A Venetian Vessel

bought woven fabrics from northern Italy, southern France, Flanders, and England, and worked them over by new processes and dyeing into better imitations of oriental goods. She also manufactured jewelry, golden brocades, artificial flowers, straw hats, soaps, essences, perfumes, lacquered ware, mosaics, alabaster ornaments, glassware, carriages, and musical, mathematical, and philosophical instruments.

65. It was from banking, however, that Florence derived most wealth. For some time her bankers controlled the financial markets of the world. Most of the great loans made by sovereigns during this period, for carrying on wars or for other purposes, or by private undertakers of great industrial and commercial enterprises, were made through the agency of Florentine bankers. Venice preceded Florence in establishing a state banking system, having had one at least as early as 1157. In Siena also there had been powerful banking houses before there were any important ones in Florence. Genoa established the Bank of St. George in 1407. Florence, however, gradually outstripped all her competitors in this field. Even Venetian merchants were frequently glad to appeal to her banks for loans. In the fifteenth century Florence had eighty great banking houses, many of which had branches in every part of the world. These banks practiced all the various banking operations,—deposits, loans, discount, and exchange. They developed a very extensive system of credit through certificates of deposit and bills of exchange, keeping on deposit an abundance of good specie as a basis for security and international confidence. This extensive system of credit was doubly important in those days when so many risks attended the transportation of the precious metals.

66. Florence the birthplace of the Renaissance. In Florence, more than in any other Italian city during the

Middle Age, was displayed the direct influence of commerce upon the development of all the finer elements of material and immaterial civilization. She was the Athens of Italy, and her art, literature, and science was the brightest gleam of intellectual light that was seen in Europe during the Middle Age. It was from Florence, more than from any other single source, that came the awakening known as the Renaissance.

CHAPTER IX

THE NETHERLANDS

67. Early history. Originally the northern Netherlands was one vast half-submerged and sterile swamp, while that portion of the southern Netherlands lying near the ocean was an almost continuous forest, broken here and there by ponds, swamps, and a few low river valleys which were generally flooded. Although the Romans made some modifications in the condition of the country, it was not until long after the Germanic invasions that it was really transformed. As the Franks, Frisians, and Saxons gradually mixed with the original inhabitants, they infused a new energy and vigor into the people of both the northern and southern Netherlands; then the marshes, forests, and even the sea began to give way to fertile territory, which was strongly guarded by their patiently constructed dikes. In the seventh century, in spite of the bad climate and rude population, numerous monasteries seemed to predict something of the future development of the country. The little hamlet Utrecht (*ultra trajectum*), so named because it was located at the last ford of the Rhine, had been built in Roman times. As early as the reign of Dagobert II (A.D. 678) a customhouse was established there, and late in the same century Clement Willibrod, an English priest, converted the Frisians and made Utrecht his headquarters. From the seventh to the ninth centuries new towns were rising near the sea and on the river banks, — Bruges, Ghent, Antwerp, Tournay, Valenciennes, Deventer, and others. When in the

tenth century the southern Netherlands was made the county of Flanders, the towns began to grow rapidly and thrive on their woolen manufactures. The counts, sagaciously or from necessity, allowed the towns considerable self-government and freedom to carry on their industries without molestation, while the burgesses on their part willingly paid tribute both to the counts and to the Church. During the eleventh century the counts chartered numerous fairs and markets, regulated tolls, confirmed rights of self-government, and in other ways encouraged industry and commerce. The Crusades relieved the country of the troublesome petty barons and increased its prosperity. After the wise administrations of Thierry and Philip of Alsace (1128–1191), Flanders was a well organized and governed country, rich, industrious, and enterprising. The communal rights were well established, agriculture and manufactures prospered, and the leading towns were frequented by merchants from many European countries. Hainault was reunited to Flanders for about a century (1191–1280); this fact and the elevation of Count Baldwin to the imperial throne at Constantinople gave an added fame to the country and extended its commercial connections, especially in the East.

68. Condition of Flanders during the later Middle Age. From the thirteenth century to the close of the Middle Age, Flanders together with northeastern France and a few towns in the northern Netherlands, was the greatest manufacturing region in Europe. Woolens of all sorts, flannels, serges, linsey-woolseys, muslins, linens, cambrics, lawns, silks, velvets, laces, tapestries, brocades, curtains, draperies, sailcloth, rope, hardware, potteries, fine and coarse earthenware, beer, and many other articles, were manufactured in large quantities in such thriving cities and towns as Bruges, Ghent, Lille, Ypres, Cambrai, Courtrai, Tournay,

Valenciennes, Liège, Douai, Antwerp, Malines (Mechlin), Louvain, St. Omer, Dendermonde, Oudenarde, Arras, Cassel, Utrecht, Leyden, Harlem, Amsterdam, Rotterdam, Delft, Deventer, and Nimwegen. Of all these manufacturing towns those of Flanders were the wealthiest and most prosperous.

Many of the Flemish towns also established fairs and became great commercial as well as industrial centers. These Flemish fairs, especially those of Bruges, Ghent, Antwerp, Ypres, and Lille, succeeded to the position previously held by the fairs of Champagne and soon surpassed them in the magnitude of their trade. Everything possible was done to attract buyers and sellers. Ample port facilities were created, even in spite of a very hostile ocean, not only in Bruges, but in other cities; several cities which had no ports constructed canals, deepened the rivers leading to the ocean, and provided special canal and river boats for meeting foreign vessels and transporting their merchandise up the rivers to the cities. A commission was even appointed to fix the prices of wines and eatables in the hotels in order to protect visiting merchants against extortion. Money changers were always on hand to facilitate exchanges; international conventions of merchants fixed in detail the rights of creditors and the obligations of debtors; a heavy penalty was imposed for selling any of a long list of goods during the eight days preceding and following each fair, except among the inhabitants of the city where the fair was held; heavy penalties were also imposed when any one was found enticing buyers or sellers away from any fair; the placing on sale of inferior or non-inspected goods was punished by heavy fines and sometimes by confiscation. These regulations not only show the zeal displayed by the enterprising Flemish merchants in developing their commerce, but they also reflect the characteristic monopolistic tyranny of the mediæval gilds and protective system.

69. Bruges, from the thirteenth nearly to the close of the fifteenth century, was the most important commercial city of Flanders, and, most of that time, also the greatest manufacturing city. For some time she was the greatest factory city of the Hanseatic League. The length of the voyage from the Baltic coasts to the Italian cities made it necessary for the Hanseatic merchants to have a stopping place on the way. Bruges was the most convenient place for this purpose and consequently became the great intermediary for the maritime exchanges between the North and South, as well as for those between the East and the West. Not only was she the great northern center for maritime trade, but land routes led thither from France, Italy, Germany, and the Danubian countries. Her fairs were visited by merchants of many nationalities, who exchanged there the characteristic products of England, Scotland, Ireland, Denmark, Norway, Sweden, Germany, Russia, Poland, Hungary, France, Spain, Italy, northern Africa, Egypt, the Sudan, the Levant, Armenia, Tartary, central Asia, Arabia, India, China, and the East India islands for the many products of Flemish industry. The merchants of Bruges, as well as those of some other Flemish cities, were not content with simply exchanging in their own markets the products of their native industries for those brought thither by foreign merchants, but they also became venturesome navigators, and frequented all the leading fairs and markets of the world.

70. The Hundred Years' War was a critical period in the industry and commerce of the Flemish cities. Their dependence upon England for wool induced them, under the lead of James van Artevelde, to make a treaty of alliance with Edward III against France. In the first stages of the war that followed, the army of the faithful Flemish allies, which contained troops from all the most important

cities in the Netherlands, rendered considerable assistance to the English. Later in the struggle, however, when Philip van Artevelde, no less famous than his father James, was leading a revolt against the count of Flanders, who was backed by a powerful French army, the English nobility, prejudiced by their class interests against their burgher allies, failed to support him, and consequently he was defeated at the battle of Roosebek (1382). The ultimate result of this battle was that Flanders passed under the control of the dukes of Burgundy, and the change of rule was far from injurious to her commercial interests. This house exercised a preponderant influence over French affairs at that time and during its rule in Flanders. Flemish workmen took possession of France, and Flemish merchants extended their relations with that country. At the same time the trade between the Orient and the Occident continued to be centered at Bruges. It was under the rule of Charles the Bold, therefore, that the Flemish cities reached the climax of their industrial and commercial prosperity. When he died in 1477 they passed under the control of Austria by the marriage of Mary, the daughter and heiress of Charles, to Maximilian. Subsequently they passed to Charles I of Spain, who became the Emperor Charles V.

71. The decline of Bruges. It was not long after the death of Charles the Bold that Bruges saw her glory vanish. In 1482 the Emperor Maximilian blocked up her harbor at Sluys in revenge for a rebellion in which she and Ghent had taken part. This act, coupled with the jealousies of neighboring cities, the further hostility of the emperor, the decline of the Hanseatic League, whose interests were largely centered in Bruges, and the decreased importance of maritime and land trade with Italy and the eastern Mediterranean cities on account of the great

geographical discoveries made about that time, caused most of the commerce of Bruges to slip quickly away to the neighboring city of Antwerp.

72. The northern Netherlands during the later Middle Age were by no means so important, industrially and commercially, as their southern neighbors. For one thing they did not have such good agricultural resources, and for this and other reasons manufactures took root and developed extensively at a much earlier date in Flanders than in Holland. At the same time nature seemed to intend the Dutch to become great sailors and merchants rather than manufacturers. Their ancestors, the Batavians, had almost lived in the water and had been schooled in the northern Roman navy. Then, too, the mouths of all the rivers of the Netherlands except the Scheldt are in the northern portion of the country, thus plainly pointing the Dutch to a maritime career. They were nearer the great fisheries of this region, and these also tempted them seaward. After long and patient training, therefore, the Dutch were destined to eclipse their southern neighbors as sailors, merchants, and carriers.

Although the fishing industry was at first the chief basis of their wealth, the Dutch, as we have seen, developed some important manufactures during the Middle Age, especially at Leyden, Rotterdam, Amsterdam, Delft, Deventer, and Harlem; and they very persistently fought back the ocean by building dikes, thus paving the way for quite an important agricultural and horticultural development. The Crusades proved a great blessing to the Dutch, as well as to so many other Europeans. "Thousands of ignorant and half-civilized Christians left their cold and wet homes in Holland and Friesland to have their eyes opened in the sunny Levant and the luxurious East. From their huts and rude life they came in contact with great cities,

marble houses, elegant pavements, superb dresses, and refined manners." The use of underclothing, napkins, table and bed linen, carpets, wall paper, bath tubs, soap, perfumes, spices, bricks, tiles, terra-cotta work, and a score of other articles which are now considered necessaries, were unknown to the Dutch before the Crusades, and they returned from the East to imitate in their own industries many of these articles, and inspired with a desire to continue going there to get what they could not themselves reproduce. From the time of the Crusades, therefore, Holland, like many other western countries, began to develop manufactures much more extensively, and by the close of the Middle Age she had some very important industries, especially the linen, lace, thread, and woolen industries.

The Crusades also gave a new impulse to Dutch agriculture and horticulture. From that time dates their greatness and skill as growers of flowers, fruits, and vegetables. It was in the various portions of the East that they first saw the flowers which became the "Dutchman's darlings," such as the tulip, anemone, hyacinth, narcissus, rose, and geranium, as well as many vegetables and fruits which were to delight the palates of future European sovereigns and courtiers. The Dutch, upon their return from the Crusades, began to erect hothouses and study botany and gardening. They were thus able to reproduce in their home land many varieties of exotic flowers, vegetables, and fruits which they had found in all parts of the known world. By the seventeenth century a famous Dutch botanist catalogued over six thousand varieties of exotic plants that were grown in the hothouses of Leyden. By their skill in gardening and botany the Dutch were able for several centuries to supply the leading courts of Europe with rare flowers, fruits, and vegetables. They not only

made this new industry a source of wealth to themselves, but they gradually extended the growth of many flowers, vegetables, and fruits into other countries. As has been said, "Hundreds of our common flowers, trees, and vegetables were once oriental exotics, which the Dutch chaperoned and brought out into occidental society."

One other thing that the Dutch learned the use of in the East deserves special mention, viz., the windmill. This became the "steam engine" of the later mediæval and early modern Holland and produced there effects that were somewhat analogous to those produced later in England by Watt's famous invention. The windmill revolutionized the industries of the Dutch: with it they pumped water, ground grain, sawed wood, loaded and unloaded boats and wagons, and performed many other tasks. The windmill consequently enabled the Dutch to reclaim their land from the ocean more effectively, to develop their agriculture and horticulture by irrigation, and to improve and extend their manufactures.

After the Crusades the Dutch also became greater sailors and merchants. Having laid the foundations of their wealth in the fisheries, and having developed some important industries, they began to venture into remote waters, and in distant markets they sold their own wares and those of their southern neighbors, securing in return the much-prized articles they had first seen during the Crusades which could not otherwise be procured. Then early in the Modern Period, after the ruin of Antwerp by the Spaniard, Amsterdam profited by the misfortunes of her neighbor and became the commercial and financial center of the world. Thus we see that the schooling of the Dutch was severe and their arrival at maturity slow, but their success was at last transplendent.

CHAPTER X

GERMANY AND THE HANSEATIC LEAGUE

73. Early Norse explorations. Although the Scandinavian countries, Norway, Sweden, and Denmark, developed more slowly than those farther south and west, we must not forget that they also made some industrial and commercial progress during the Middle Age. As early as the eighth and ninth centuries the Norsemen wandered to almost every part of the world, sometimes as pirates, sometimes as explorers and colonizers. They left their relics in such widely separated countries as Russia, Greece, Italy, France, England, Iceland, Greenland, and America. While we usually think of these sea rovers from the Baltic as pirates, they really were more than pirates. They made commerce and industry very unsafe for many countries; yet in spite of their piracy they did some genuinely good work as colonizers, and developed industry and commerce in some of the countries where they settled, as, for example, in England, Russia, and Iceland. But on the whole the mother countries, Norway, Sweden, and Denmark, profited very little by these numerous and distant enterprises.

74. The expansion of Denmark. In time, however, the Scandinavians ceased scattering themselves, stayed at home, and developed their native resources. One of these states, Denmark, gradually took the lead. At one moment it looked as if Cnut, the Danish conqueror of England, would succeed in executing his plan for a great northern empire, but his dream was never realized; Denmark remained for

several centuries the leading northern power. Finally, in 1397, her leadership was clearly recognized in the Union of Kalmar, which united Denmark, Norway, and Sweden under Margaret of Denmark. Gradually Danish influence was extended throughout the Baltic countries, until it could truly be said that the Baltic was a Danish lake. During the latter portion of the Middle Age these Scandinavian peoples, under the lead of the Danes, developed quite an extensive commerce among all the Baltic countries and even beyond, in Russia, England, France, Flanders, Greece, Egypt, and the Levant. Some of the Scandinavian towns, like Wisby, Biörkö, Bergen, and Copenhagen, became very prosperous and rich, and Danzig, Elsinore, Aalborg, Tonsberg, Stralsund, Vineta (Wollin), and Truso (Elbing) were also important trading centers, exporting chiefly herring, timber, tar, pitch, iron, copper, hides, tallow, and wheat. But while there was quite an extensive regular trade in these Scandinavian towns, numerous younger sons of the royal and noble families still continued to indulge in what they considered the legitimate practice of piracy.

75. German expansion. The Danes in their expansion had to compete with the very active and aggressive Germans. Nowhere did feudalism prove a greater curse than in Germany, but in colonization the mediæval Germans were very successful. Now if one looks carefully at the map of mediæval Europe, he will see that there were three possible vents for the surplus native energy of the Germans during those centuries when national boundary lines had not yet been clearly drawn: (1) in the direction of Italy; (2) along the French border; and (3) towards the east and northeast. The German emperor-kings, while engaged in their "holy" task of "protecting" the Church, found Italy their most attractive field for action; but there soon arose an exceedingly unholy struggle between these emperors and the

Church, which sowed the seeds of bitter discord not only in Italy but also in Germany. In the West the kings of France soon gained a decided advantage and gradually picked up all the most desirable territorial scraps lying along the frontier. Thus in two directions the surplus energy of the Germans, as embodied in their official leaders, failed completely; but in the third direction German private enterprise was continually reaching out with boundless energy and remarkable success. In all those regions lying towards Russia and along the Baltic, the Middle Age was one long story of plodding industrial conquest and Christianization of the pagan natives by German colonists.

In these regions, however, Germans and Scandinavians met as competitors and for centuries contended for the mastery of the Baltic. German colonists, quickly and with comparatively little opposition, took possession of the region lying south of Denmark and between the Elbe and the Oder, including Mecklenburg. During the Middle Age, however, the Germans were unable to go farther in this direction and wrest anything from Denmark,[1] and in their efforts to extend their colonization farther east along the Baltic, into Pomerania, Prussia, Livonia, Esthonia, and Finland, they had to compete with the Scandinavians every inch of the way. Nevertheless Germany sent hosts of farmer, artisan, and merchant colonists into these countries in the face of all competition. Ultimately Sweden secured Finland and Karelia, and Denmark occupied Esthonia; but the remaining and largest share fell mostly to the German colonists. Farther south and east, in Poland, Bohemia, and Hungary, German enterprise was almost as successful against Slavic competition. In all these countries Germans built new cities or transformed old villages into cities, developed agriculture, manufactures, and commerce, and

[1] Schleswig was not conquered until the nineteenth century.

carried on a continual crusade against the paganism existing there. Thus the enterprising German colonists of the Middle Age found their America on their own borders, and they eagerly took possession of the lion's share of this new world.

76. City confederations in mediæval Germany. The work of the Hanseatic and other German city leagues was closely associated with this eager, restless pioneer competition along the Baltic and in the zone lying between Russia and Germany; they were logical outgrowths of German disorder and active private enterprise. When these leagues originated, all the German highways were beset with numerous bands of freebooting feudal knights, who could not be held in check by the shadowy emperors pursuing their will-o'-the-wisp enterprises in Italy. Added to this constant danger on land was the wholesale practice of piracy on the sea by the Scandinavians, and frequently also by the German nobles. The impotence of the central government left the field clear for all the grossest appetites and disorders. The emperors hurled their puny edicts against lawlessness in vain; "fist law" alone was of any avail. Under such circumstances, if the active private enterprises of the German industrial and commercial classes were to be fruitful, self-protection was necessary. Accordingly we find numerous instances of towns associating together for mutual self-defense against lawless robbers and pirates. Three such leagues became more important and extensive than the rest, viz., the Rhenish, the Suabian, and the Hanseatic.

77. The Rhenish League was formed in 1247 upon the initiative of the city of Mainz. By 1255 over ninety cities had entered this league, the most important being Köln, Coblenz, Basel, Worms, Speyer, Strasburg, Zurich, Frankfurt, Aachen, and Münster. The league finally became

powerful enough to abolish numerous tolls, to destroy many feudal castles, and to support a fleet of six hundred vessels, mostly on the Rhine. The government of the league was vested in a diet, which met four times each year, alternately at Köln, Mainz, Worms, and Speyer. By the end of the fourteenth century, however, the Rhenish League had become divided into two rival leagues, embracing respectively the cities along the upper Rhine which followed the leadership of Worms and those along the lower Rhine under the leadership of Mainz.

78. The Suabian League was formed a little later than the Rhenish League, probably about the beginning of the fourteenth century. It included all the leading towns and cities of the Danubian countries, as well as those of Bavaria, Würtemberg, and Baden, the most important being Augsburg, Ulm, Nürnberg, Ratisbon, Constance, Esslingen, Reutlingen, and Kempfen. These cities were in direct and constant relation with Italy by several routes, but especially by the regular route to Venice, whence they received all the products of the Mediterranean countries and the Orient in exchange for northern products. Nürnberg and Augsburg profited most by this league. Nürnberg, in particular, with a splendid location, attained a universal reputation, both on account of her extensive commerce and manufactures, and also because of her high intellectual development and her luxury. Her fine gold and silver wares, artistic objects in bronze, copper, stone, and wood were eagerly sought after everywhere, and she became the capital of German art and one of the greatest scientific centers that Germany produced during the later Middle Age.

79. Origin of the Hanseatic League. While the above two leagues were becoming powerful in western and southern Germany, the Hanseatic League arose in the north and eventually eclipsed the others. This league probably began

with the alliance of Hamburg and Lübeck about the middle of the twelfth century, and gradually came to include the coast towns of the Baltic and the inland towns of northern Germany. By the beginning of the fifteenth century it embraced nearly one hundred towns in Germany and elsewhere.

80. The Hanseatic cities were grouped into four districts, or quarters. The Wendish Quarter embraced the towns in Pomerania and Mecklenburg; the Westphalian Quarter, those in Westphalia, the Netherlands, and along the Rhine; the Saxon Quarter, those in Saxony between the rivers Weser and Oder; the Prussian Quarter, those in Livonia, Esthonia, Lithuania, and Poland. There were also some allied cities under the protection of the league, which neither sent deputies to the diet nor contributed to its general fund. The primitive center of the league was Wisby, but the preponderance soon passed to Lübeck, which became the capital for the entire league. There was located the treasury, there the archives were kept, and there were debated the common interests of the confederation in yearly diets. Lübeck, moreover, was especially charged with the execution of the diet's decrees, which were compulsory upon all the members of the league.

81. In order to secure its commerce the Hanseatic League became a real military power. Although Lübeck was especially charged with the enforcement of the diet's decrees, yet in every city the more eminent burgesses and the resident nobles were trained for cavalry service, and the citizens of lower rank for infantry service. In addition to these citizen soldiers, mercenary troops were employed by the more important cities. Thus the league was not only able to suppress piracy and robbery, but frequently engaged in war with powerful nations like Denmark, Norway, and Sweden. So great was its military power that it

generally dictated its own terms of peace to the monarchs of those countries, and exacted from them very important trading privileges and exemptions. Frequently also the league secured valuable concessions and monopolies from various sovereigns by large loans of money. Thus the Hansa towns not only obtained commercial security, but also a practical monopoly of all the most important trade of northern Europe. The Baltic for several centuries belonged to the Hansa quite as clearly as the Adriatic belonged to Venice.

82. The merchants of the Hanseatic League, like those of other countries, shrewdly took advantage of the Crusades. Their ships took part in the expeditions to the Holy Land, and they thus learned valuable commercial lessons and established important connections in the East. Furthermore, in alliance with various knightly religious orders like the Teutonic knights, they organized crusades against the heathen living along the eastern Baltic, where they found rich natural resources altogether undeveloped, which they soon were able to control. In a similar manner they gained control of the valuable native products of Poland, Hungary, Bohemia, and parts of Russia, in addition to their monopoly of the fisheries, mines, agriculture, and manufactures of Germany.

83. Hanseatic factories. In developing commerce outside of Germany the league generally established commercial stations, or factories, as a basis for action, four of which became more important than all the rest, viz., those at Bruges, London, Novgorod, and Bergen. In all the countries where such stations were established, the league obtained for its merchants valuable commercial privileges and exemptions, often, however, not without great difficulty. By degrees the Hansa merchants obtained a monopoly of all the trade centering in some of the cities

where they had factories. This was especially true at Novgorod and London, where for several centuries the native merchants were almost completely excluded from the foreign trade of those cities. The factory at Novgorod became the greatest center for Hanseatic trade between western Europe and the countries lying east of Poland; the one at London for the trade between England and all the north of Europe; that at Bergen for the trade with Iceland, Greenland, the Faröes, and the Scottish islands; that at Bruges was the great connecting link between the trade of northern and southern Europe.

84. All these factories of the Hansa were subject to rigid regulations by the diet at Lübeck. Each factory formed a little city within the city where it was located, and possessed a separate government of its own subject to the diet. All the merchants, apprentices, inspectors, and other employees resided within the jurisdiction of the factory. Celibacy was strictly enforced, partly from a semi-religious motive, but more in order to secure attentiveness to business. Employees could not visit, under penalty of death, any part of the city except their own quarter, and a rigid police system was instituted to enforce this regulation. An apprentice had to remain in the service of the factory for at least ten years, and was promoted through various stages of commercial science. At the end of his apprenticeship a Hanseatic clerk generally left the factory where he resided, and returned to some German city to practice commercial pursuits. The Hanseatic factories thus served as an excellent commercial school.

85. The general influence of the Hanseatic League. — In spite of its monopolistic tendencies and excessive application of the protective system, so characteristic of the Middle Age, the Hansa rendered a very valuable service to the industrial and commercial development of the later

Middle Age, and indeed to European civilization as a whole. It is difficult to estimate the vast amount of pioneer work done directly or indirectly through its agency in Russia, Poland, Bohemia, Hungary, Prussia, Pomerania, Finland, Mecklenburg, Saxony, Norway, Sweden, and even in more remote countries. In all these countries, through the active and intelligent enterprise of Hanseatic merchants and colonists, forests, swamps, and barren wastes were for several centuries continually giving way to splendid fields of wheat, flax, and hemp, to large and thriving stock farms, or to well worked and rich copper, iron, gold, and silver mines. Towns and villages were continually springing up in these countries, where before there had been only the rudest dwellings of half-savage peoples. Very many of these towns and villages became large and thriving cities, the centers of an extensive trade, and the seats of numerous industries, like fisheries, shipbuilding, and the manufacture of leather, leather goods, fur goods, woolens, linens, metal wares, and many other articles. Many of the Hanseatic cities grew very rich, and consequently were filled with luxury, culture, and refinement. Fine residences, churches, and public buildings arose under the touch of this wealth. The standard of living was elevated throughout all the northern and central portions of Europe. But this was not all. The wealth and power of the Hansa, and the higher standard of living due partly to its efforts, were telling blows not only against material barbarism, but also against feudalism. The Hansa did much to emancipate the middle classes, not only in Germany and the Baltic countries, but also in England and France. Its representative and elective system also served as a valuable lesson in self-government to many countries and districts, and its plan of confederation was for several centuries a precedent in political organization. By its

vigorous efforts piracy in the North Sea and the Baltic was repressed and navigation greatly improved in various ways. It established throughout wide regions the recognition of many valuable principles of maritime and international law, especially the use of the laws of Oléron and Wisby. The league also greatly extended and improved the use of credit in countries where it had not before existed. For all these reasons, therefore, it would be difficult to overestimate the services rendered to civilization by this commercial league.

86. Decline of the Hansa. After several centuries of usefulness, however, the league began to decline, and finally disappeared. This was due to several causes. In the first place it lacked an executive power sufficiently strong to always compel members to submit to resolutions of the diet. Frequently it happened that the interests of a few of the cities were in real or seeming antagonism to those of the rest, and these divergent interests caused dissensions that weakened the league. Then, too, it might be said that the league outlived the conditions which had originally made it so necessary and successful. As long as all northern Europe was full of barbarism and anarchy, the cities in that region were very glad to join and support the league as the only means of protecting trade, but when the various regular governments grew strong and liberal enough to protect their own trade, there was no longer the same need for the league. Furthermore, the very countries that had allowed the Hansa merchants a monopoly of trade finally began to engage in trade themselves, and became strong competitors. Consequently, city after city withdrew from the league, until Hamburg, Lübeck, and Bremen were the only ones that took any interest in it; the discovery of the cape route to India, the disastrous Thirty Years' War, and other causes completed its ruin.

CHAPTER XI

MEDIÆVAL FRENCH COMMERCE

87. Until the thirteenth century the condition of southern France was much superior to that of northern France. The Roman civilization was better preserved in the former section, and it felt more strongly the civilizing influence of Arabian, Spanish, Italian, Jewish, Syrian, and other foreign traders; it was rich and had a very prosperous agriculture, commerce, and system of manufactures; a greater degree of religious toleration prevailed there than elsewhere in Christendom, and merchants of all religions and nationalities enjoyed liberal commercial privileges. The twelfth century was for this section a period of exceptional prosperity; its industries were successfully developed and its commerce was scarcely second to that of the Italian cities. Montpelier was one of the chief centers for trade between the East and the West; her markets were frequented by Arabian, Jewish, Egyptian, Greek, Syrian, Italian, Spanish, English, Flemish, and German merchants; her own merchants and manufacturers had agents at all the fairs of Italy, Champagne, and Flanders, in Tripoli, Rhodes, Constantinople, Cyprus, and many other places; she had commercial treaties with most of the Mediterranean states and cities; her commercial and industrial policy was very liberal. Marseilles and Narbonne were almost on a par with Montpelier, while along the Rhone were other thriving commercial towns such as Beaucaire, Avignon, and Tarascon. Southern France in

the twelfth century, therefore, seemed destined for almost unlimited progress. Early in the thirteenth century, however, the Albigensian crusade seriously crippled the commerce and industry of this section; other calamities during the thirteenth and fourteenth centuries injured still further many of its towns and cities.

88. From the beginning of the thirteenth century the kingdom of France in the north increased in commercial and industrial importance much more rapidly than the other territories in the French peninsula. Paris, the capital, had already become an important city with quite an extensive trade along the Seine and the Marne in grain, hay, wood, wine, wool, hemp, and flax, while her position at the juncture of the routes from Aquitaine and the Mediterranean opened to her still greater commercial opportunities. Under Philip Augustus (1180–1223) the royal domain was doubled; St. Louis (Louis IX, 1226–1270) and his son Philip III (1270–1285) extended it still farther by the annexation of Toulouse and some adjacent territories after the terrible crusade against the Albigenses. The commercial importance of these territorial extensions was greatly increased by the shrewd foundation of the seaport of Aigues-Mortes, the first one possessed by the kingdom. Much of the commerce of the other cities in the south was diverted to this new port, which thus became the great entrepôt for goods passing from the Mediterranean countries to central and northern France and to Flanders. St. Louis also stimulated the commerce of his kingdom by establishing law and order more securely, by issuing a good money, which was legal tender throughout the territories of the crown, by limiting the use of feudal money to the fief where it was coined, by regulating feudal tolls and duties, by building the famous bridge St. Esprit across the Rhone, by encouraging various industries at Paris, Arras,

Amiens, Limoges, Metz, and other towns. On the other hand St. Louis undoubtedly fettered industry and commerce somewhat by an excessive application of the mediæval protective system.

89. Unfortunately, there was an industrial and commercial reaction under the last four Capetian kings. Philip the Fair (1285–1314) engaged in wars that were disastrous to French industry and commerce; he persecuted the Jews and Italians, who were then the chief agents of French commerce; he frequently debased the currency; he decreed maximum prices on a good many staple articles; he charged heavily for trading licenses; he prohibited the exportation of numerous articles and imposed excessive duties on imports; and in other ways he tightened the thumbscrews of the mediæval protective system. One of the most serious blows which he inflicted on industry and commerce was the destruction of the Order of Templars. This order held in its own right, or in trust for safe-keeping, a very large portion of the capital of Europe, was universally trusted and respected in business circles, and at that time did the most extensive banking business in Europe. The confiscation of the property of the order in France naturally caused a serious panic; the effects were similar to those following the destruction of the monasteries by Henry VIII of England. The policy thus inaugurated by Philip the Fair was continued by his three successors, Louis X (1314–1316), Philip V (1316–1322), and Charles IV (1322–1328). It is not surprising, therefore, that French industry and commerce steadily declined during these reigns.

90. Under Philip of Valois (1328–1350) France enjoyed another brief period of industrial and commercial prosperity. The French court became the most brilliant and luxurious in western Europe; the middle classes began to

imitate the court and raise their standard of living. The unwonted activity of home manufacturers and foreign merchants was scarcely sufficient to fill the demands for silks, vestments, furs, embroideries, precious stones, and many other luxuries. There was also a perceptible improvement in French agriculture.

91. The Hundred Years' War began just when French industry and commerce were branching out into new fields and enterprises. This war was undertaken for the double purpose of driving the English from the French peninsula and of controlling the Flemish trade. Although the French ultimately succeeded in accomplishing the first and more patriotic purpose, it was not without a serious check to the development of their industry and trade, especially during the earlier stages of the war. Crops were destroyed; manufactures were injured; ruinous financial measures were resorted to by the government, such as the "gabel" tax, frequent depreciations of the currency, numerous imposts, and other commercial restrictions; the revolt of the Jacquerie was aroused; French exploration along the western coast of Africa was checked.

92. Occasionally, however, during the intervals when the war was not vigorously prosecuted, industry and trade revived. Charles V (1364–1380) favored commerce in various ways. During the reign of Charles VI (1380–1422), in spite of the civil and foreign wars, the foreign and domestic commerce of France increased quite rapidly, her merchants began to take possession of the sea, and her sailors were again exploring western Africa. This was the time of the great French merchant prince, Jacques Cœur, who carried on an extensive land and maritime trade with all Christian countries, and with many Mohammedan countries under special privileges granted by the sultan.

93. The close of the Hundred Years' War favored a further development of French commerce and industry. Charles VII (1422–1461) reformed the laws regulating the gilds, abolished or reduced tolls and, in certain provinces, the local customs duties, created numerous markets and fairs, and signed commercial treaties with Aragon and Denmark. He also tried to revive the fairs of Champagne, but they had already declined too much, and the natural forces working against them were too strong for them to recover their former importance. Louis XI (1461–1483) did even more to stimulate trade and industry. By the treaty of Pecquigny (1475) he extended to England the same commercial privileges that were already accorded to Flanders, Brabant, Holland, Lombardy, Castile, and Portugal. He also made a commercial treaty with the Hanseatic League. Like his predecessor, he abolished many feudal tolls and restrictions. He created altogether ten markets and sixty-six fairs, and greatly strengthened the fairs of Lyons. Lyons, in fact, under his stimulation, became a city of international commercial importance. He fostered manufactures, especially the silk manufactures at Tours, and imported workmen from Italy. He improved roads and rivers, encouraged navigation, and did his utmost to establish a real unity of weights and measures. A grand council of merchants was formed for advising him on industrial and commercial questions, and prominent merchants were placed in responsible administrative positions. Under such varied stimulations, French industry and commerce developed quite rapidly during the reign of Louis IX.

CHAPTER XII

MEDIÆVAL ENGLISH COMMERCE

94. Roman Britain. Long before the Roman conquest, the Phœnicians, Carthaginians, Greeks, and probably the Etruscans had traded with Britain. The wealth to be derived from trade with the island was one of the chief motives leading to its conquest by the Romans. When they took possession, the few Celtic roads that existed were improved, and new ones were built on a grand scale; along these roads, towns like London, York, Bath, Colchester, Chester, Gloucester, Lincoln, and Richborough were built; in these towns were barracks, temples, baths, public buildings, residences, gardens, and rows of shops; marshes were drained, forests cleared, and agriculture improved. These improvements naturally tended to develop commerce; the southern and southeastern harbors conducted quite a busy trade with Gallic merchants, who served as the most important commercial intermediaries between Britain and the rest of the Roman world. Tin, lead, iron, wheat, cattle, sheep, wool, skins, furs, hunting dogs, slaves, and wild animals for the arena were exported from the island in exchange for fine cloths, potteries, and wines for the resident Romans, and weapons, bracelets, and all sorts of ivory, glass, and gaudy-colored trinkets and ornaments for the natives. Bricks, tiles, coarse potteries, and coarse cloths were made in the island itself for domestic use. England during the Roman occupation, therefore, was far more prosperous than for several centuries thereafter.

95. The Saxon conquest produced great changes in the island, but was not so destructive of industry and commerce as frequently represented. It is true that there was a serious reaction in art, religion, and political institutions. The Roman roads were not kept repaired, and pirates infested the coasts. Moreover, each community tended to become economically self-sufficient, weaving its own rough woolens and linens, cutting its own wood and timber, having its own blacksmith, carpenter, butcher, baker, bricklayer, saddler, helmet maker, plumber, etc. These and other conditions no doubt tended to check the development of foreign and domestic trade, but it is easy to exaggerate the destructive effects of the conquest. Relying on the exaggerated and prejudiced statements of the early ecclesiastical historians like Bede and Gildas, it has been maintained by some modern writers that the Romans and Britons, together with their industries and institutions, were almost completely wiped out by the Saxon invaders. It is coming to be recognized, however, that most of the Britons probably continued to work their farms and carry on many of the rude industries which they had already developed, while the Saxons for some time resided among them as a military aristocracy, ultimately engaging in farming and other industries themselves. The monasteries also remained agricultural centers and developed certain manufactures. Furthermore, the various communities did not become completely self-sufficient. A certain amount of foreign and domestic trade, chiefly in luxuries which were not bulky but valuable, was conducted in the face of all difficulties and dangers. When the Danes came to the island, they greatly improved its agriculture and manufactures, and gave a new impulse to commerce. Although many of these invaders were pirates, some of them were enterprising traders with distant countries. An increasing quantity of

precious metals, vestments and embroideries for the monasteries, weapons, tools, furs, skins, and some other articles were now imported in exchange for wool, cattle, horses, tin, lead, and large numbers of slaves. In the ninth century English traders went as far as Marseilles, and frequented the fairs of Rouen and St. Denis. In 796 the king of Mercia made a treaty with Karl the Great, which granted protection to English traders in the Frankish empire. Alfred the Great encouraged commerce by founding a navy, by cultivating friendly relations with distant countries, and by publishing the accounts of the voyages of Othere to the north seas and Russia, and of Wulfstan to the eastern coasts of the Baltic. Athelstan (925–940) rewarded traders by conferring nobility upon those who "fared thrice over the sea with a ship and a cargo of his own." In the reign of Ethelred (976–1016) we read of trading vessels coming from Flanders, Normandy, and Germany.

96. For some time after the Norman Conquest (1066) English agriculture and manufactures developed quite slowly. This was due chiefly to the heavy taxation, the feud between Norman and Saxon, the anarchy under Stephen and Matilda, the numerous checks upon individual enterprise, and the frequent regulation of prices by the government. The Domesday census revealed a population of about one million eight hundred thousand, about ninety per cent of whom were agricultural. Only about eighty of the manors included enough other people than farmers to be called towns, and only ten per cent of the total population lived in these towns. Neither the total population nor the percentage of town population increased much for several centuries. For a long time each manor remained practically self-sufficient, growing not only its own food stuffs, but manufacturing most of the other articles required. There was

some tin mining in Cornwall and the Scilly Islands and some lead mining in Derbyshire, but the methods employed were so primitive that these industries were relatively unimportant. Fishing and lumbering were also carried on by many persons, but chiefly in connection with farming and for the supply of local demands.

97. On the other hand, the Norman Conquest established a closer connection with the continent and gave an impulse to trade in that direction, particularly with Flanders. The standard of living in the few towns was gradually raised so that they began to require more luxuries which they could not produce themselves, while the more well to do among the rural population also increased their demands upon the foreign merchant. Gradually, also, the English, especially those living in the towns, began to produce more for export. The trading class therefore became more important, but it consisted chiefly of foreigners.

98. After the accession of Henry II (1154), a considerable trade was developed between England and her possessions in France. From Hastings, Dover, Southampton, Sandwich, and other ports in southern England was exported an increasing quantity of tin, lead, wheat, wool, salted fish, meat, cattle, gold and silver ornaments made in the monasteries, to various English ports in the French peninsula. Rouen in Normandy traded with England, Flanders, Paris, southern France, and Spain. Bordeaux, the chief English port in France after the loss of Normandy, exported her wines to England and Flanders, and also carried on a quite active trade with Toulouse along the River Garonne. Tin and copper from England were shipped up that river as far as navigation would permit, and were thence carried overland on the backs of animals to Narbonne, where they were embarked on French or Italian vessels to Alexandria. La Rochelle also sold her wines in England and Flanders;

Nantes sent thither wines, fruits, and salt collected in the marshes of Brittany. Bayonne devoted herself chiefly to the fishing trade. These Atlantic ports of France under English control remained quite important commercially until the fourteenth century.

99. The Crusades gave quite an impulse to English commerce. William Fitzstephen wrote in 1174 that foreign merchants brought to London gold, spices, and frankincense from Arabia; precious stones from Egypt; purple cloths from India; palm oil from Bagdad; and weapons from the Black Sea countries. Some clauses in Magna Charta also indicate the growth of industry and commerce. In that instrument towns were guaranteed the right of regulating their own trade; the amercement of a merchant, even upon conviction of felony, was never to include his wares; foreign merchants were secured in their right of trading throughout the realm; uniformity of weights and measures was to be enforced; the exaction of forced labor, provisions, and chattels, without payment by the royal officers, was forbidden; restrictions were imposed upon the Jews which were calculated to check their exorbitant interest charges. These clauses, like all the others in Magna Charta, were but feebly and fitfully enforced, but they nevertheless show that the merchant class had already become important.

100. For several centuries after Magna Charta, England developed her agriculture far more than her manufactures and commerce, and wool was her staple product. England in fact was already the greatest wool-producing country in Europe, owing partly to her climatic and natural advantages, but more to the fact that her sheep were safer from the ravages of war and robbers than those on the continent. She was also better situated than any other country for shipping wool to Flanders, the greatest center of the woolen

industry. Wool was also produced in large quantities in Spain, but it was inferior to English and Scotch wool and could not be shipped to Flanders so easily as from England. England therefore had a practical monopoly of the wool trade of Europe for several centuries. More and more capital was invested in this industry, and there was a steady tendency to turn agricultural lands into sheep walks on account of the greater profits accruing from this industry. The Black Death in the fourteenth century accelerated this tendency by creating a scarcity of farm laborers and raising wages, thereby rendering it necessary for landowners to turn large tracts of agricultural lands into pastures. The large profits derived from sheep raising also led the more powerful landowners to inclose many common lands and even to evict tenants from their holdings, so as to secure more lands for pasturage. It was this policy of the landlords that was chiefly responsible for Wat Tyler's Rebellion in 1381; but the peasants failed to secure their demands, and the evictions and inclosures continued, with a corresponding increase in the output of wool. So great were the profits and so complete was England's monopoly of the wool trade, that the government was able for some time to derive the largest part of its revenue from an export duty on wool, and really to get this tax out of the foreign manufacturers by making them pay just so much more for their wool. Thus England's wool not only brought enormous profits to her farmers, but paid for many of her wars and other expenses.

101. We must not conclude, however, because England shipped so much raw wool, that she did not manufacture any of it. On the contrary, as we have seen, nearly all the manors of England had for centuries supplied themselves with coarse woolens made at home, while some, especially in Norfolk and Suffolk, were beginning to make

finer grades of woolens and more than enough to supply themselves. During the reign of Edward III (1327–1377) this industry began to receive serious attention from capitalists. This sagacious monarch, profiting by the rivalries of the Flemish towns, invited many of their weavers to settle in the eastern counties of England, and protected them in the development of the woolen industry in that section. Thereafter England manufactured more and more of the finer grades of woolens which she required, exported a correspondingly smaller quantity of raw wool, and soon began to export her cloths. During the latter part of the fourteenth and all of the fifteenth century, manufactured woolens, instead of raw wool, were becoming the chief basis of England's wealth. We find during this period a strong effort on the part of the government to enforce higher and higher export duties on raw wool, and even some efforts to prohibit its exportation altogether. Tin, lead, and iron mining, the fisheries, lumbering, and shipbuilding were also becoming increasingly important during the later Middle Age. There were some interruptions to this industrial growth; as, for example, during the latter part of the fifteenth century, when some of the old corporate manufacturing towns declined considerably, owing to the heavy taxation under Henry VI and Henry VII and the excessive regulation of industry in these towns. This decline, however, was largely offset by the growth of new manufacturing towns in the north, such as Manchester, Birmingham, Sheffield, Leeds, and Wakefield, late in the fifteenth and early in the sixteenth century. On the whole, there was quite a steady development of manufactures during the later Middle Age, even during the Wars of the Roses, which affected the middle classes very slightly.

102. English commerce during the fifteenth century. Corresponding to the industrial development during and

after the reign of Edward III there was, especially during the fifteenth century, a growing tendency for English merchants to conduct their own foreign commerce, instead of leaving it to foreign traders. Up to that time the foreign trade of England had been monopolized by Venetian, Genoese, Florentine, Flemish, Hanseatic, French, Spanish, Swedish, and Jewish merchants, who had regularly visited the greatest English fairs like Stourbridge, Winchester, and Smithfield, and often also the lesser fairs and markets. English merchants had kept a good deal of the domestic trade in their own hands, but the foreigner had even intruded in that. During the fifteenth century, however, and to a greater extent during the sixteenth, the situation was being reversed in favor of the native trader.

CHAPTER XIII

GENERAL SUMMARY OF MEDIÆVAL COMMERCE

103. The world commerce of the Middle Age embraced three great fields, each with its own characteristic agricultural and industrial products: (1) northern and central Europe, (2) the western Mediterranean countries, and (3) the Orient, including the eastern Mediterranean and Black Sea countries and the Far East.

104. The most important raw materials circulated through the three fields of mediæval commerce were wool, flax, and silk; the first came chiefly from England, Spain, Asia Minor, and the Black Sea countries; the second from Germany, Russia, the Netherlands, Ireland, Spain, Scandinavia, and various Asiatic countries; the third from Greece, the Ægean islands, the Far East, Italy, and France. Other characteristic raw materials and agricultural products furnished to commerce by the leading countries were as follows: the Orient, spices, herbs and drugs, dyestuffs, fine woods, pearls, coral, precious stones, ivory, gold, and silver; Russia, hides, furs, tallow, wax, honey, hemp, and grain; Greece and the Ægean islands, grain, fruits, and nuts; Italy, salt, fish, nuts, fruits; Spain, silver, copper, lead, zinc, fruits, wax, and hemp; France, salt, fruits, and madder; England, tin, lead, grain, horses, cattle, and hides; Scandinavia, hides, furs, fish, blubber, timber, resin, hemp, copper, and iron; Denmark, fish, horses, cattle, and grain; Germany and central Europe, grain, amber, timber, salt, hemp, hops, and fruits.

105. The chief manufacturing centers during the first half of the Middle Age were in the Orient, but during the second half two great manufacturing regions were developed in western Europe, first in the south and later in the north. The first of these western regions embraced such industrial cities as Milan, Florence, Genoa, Venice, Pisa, Lucca, Naples, Siena, Ancona, Bologna, Verona, Marseilles, Montpelier, Narbonne, Nîmes, Toulouse, and Barcelona; the second embraced numerous towns and cities in Flanders, northeastern France, and, late in the Middle Age, the eastern counties of

England and certain Dutch cities. During the latter portion of the Middle Age the cities of Flanders and Italy were the most thriving industrial centers of the world.

106. The commercial routes of the Middle Age may be grouped into two classes: (1) those from the Orient to the West, and (2) those from the Mediterranean countries to northern Europe. Of the former class there were, first, the several routes from the Far East to the eastern Mediterranean and Black Sea ports; second, the maritime routes from the eastern Mediterranean and Black Sea ports to the western Mediterranean ports, where they merged into the various routes running to central and northern Europe; third, the overland routes from Constantinople and southern Russia running directly to central and northern Europe along the Danube, Dnieper, Oder, Rhine, and other river systems. The exact course followed by these various routes and the leading commercial centers lying along them will appear clearly on the accompanying map.

107. Many obstacles impeded the development of commerce during the Middle Age. First, there were many physical obstructions along the various routes, especially those in the West, — many uncleared forests, unfordable streams that were poorly bridged, badly constructed and poorly repaired highways; the primitive means of transportation generally magnified the distances traveled. To these obstacles in the way of land traffic must be added the never ending system of tolls and customs duties, laws restricting and even prohibiting migration and travel, numerous wars, and the constant dangers from robbers. On the sea there were the difficulties arising from storms, in a period when navigation was very imperfect, and the constant danger of war and piracy. Then, too, it was a very common practice for the innumerable petty feudal governments to grant letters of marque to privateers, who thus virtually became licensed pirates, and equivalent letters licensing reprisals on land. This law of reprisal was a continual menace to foreign merchants traveling through or dwelling in the territories where such laws existed, for their goods were at any moment liable to be confiscated under the guise of regular legal procedure. So extensive was this practice of privateering and reprisal, that frequently it became war in disguise. We must also notice the general prejudice against the merchant and his traffic that existed throughout the Middle Age, a prejudice which extended to every class except the merchants themselves. No doubt there was some foundation for this prejudice in the many petty tricks of trade resorted to by merchants, especially

the wandering peddlers and hucksters; but the real cause for this prejudice lay deeper in the false economic ideals of the age. One important source of these false ideals was the Church, whose attitude towards commerce will be noted in the next paragraph, and another important source was the feudal system. The feudal ideal was for each district, and even each estate, to be economically self-sufficient. Only a very low standard of living could be maintained under such a system, and we accordingly find the feudal nobility of Europe, with very few exceptions, arrayed against commerce. They looked upon commerce simply as a fruitful object of plunder, except as they happened to have, in unusually fortunate years, a surplus of crops to be sold. Another great hindrance to mediæval commerce was the general scarcity and the almost infinite diversity of money, for both of which the feudal system was largely responsible. Most of the money was bad, and it had to be changed as many times as there were fiefs, and always at a loss to the merchant. The *droit d'aubaine* also impeded commerce, as it rendered the property of merchants dying outside their own country liable to confiscation, and the merchants themselves liable to become serfs if they tarried more than a year and a day in a foreign fief. The general backward condition of agriculture, the slow growth of manufactures in most sections, and the exaggerated protective system, which will presently be described, were other important causes of the slow growth of commerce during the Middle Age.

108. The influence of the mediæval Christian Church upon the development of commerce is somewhat difficult to estimate. On the one hand, she did many things which, directly or indirectly, tended to encourage commerce; and yet she clearly condemned many forms of commerce and did many things which seriously impeded commercial progress. Let us, therefore, first enumerate the most important ways in which the Church aided industrial and commercial development during the Middle Age. For one thing, the Church was democratic, encouraged labor, and in many ways used her influence to protect the laborer; she preached "good faith," emphasized human brotherhood and equality, and advocated other principles that indirectly aided traffic; she decreed the "Peace of God" or the "Truce of God," which was very effective at certain times in securing at least a measure of law and order; she founded many hospitals and almshouses, which were very helpful to foreign merchants, and in other ways protected them; she granted many concessions of market rights in her territories, and secured many exemptions from tolls and


20
10
60
0
10
ATLANTIC OCEAN
NORTH SEA
To Iceland
Bergen
Stockholm
Wisby
Lubeck
Hamburg
Bremen
Dantzig
Stettin
Stralsund
Brunswicko
Magdeburg
Leipzig
Bristol
London
Dover
Southampton
Antwerp
Ghent
Boulogne
Cologne
Mayence
Paris
Seine
Orleans
Tours
Strasburg
Rhine
Nuremberg
Basle
Munich
Vienna
Chalons
Lyons
Bordeaux
Milan
Verona
Venice
Genoa
Bologna
Narbonne
Barcelona
Marseilles
Florence
Lisbon
Rome
Naples
Amalfi
MEDITERRANEAN
Messina
Tunis
Syracuse
Venetian Galleys in the 14th Century
COMMERCIAL TOWNS
AND TRADE ROUTES
of the 13th and 14th Centuries
Land Routes
Water Routes
Venetian
Genoese
Hanse
0 100 200 300 400 500 600
Scale of Miles
50
40
30
0
10
Longitude East


30
40
50
60
Novgorod
Riga
Konigsberg
Tana
CASPIAN SEA
Caffa
Danube
BLACK SEA
Amisus
Trapezus
Constantinople
Cyprus
Rhodes
Canea
Crete
Beyrout
Jaffa
Alexandria
E A N SEA
50
40
30
from Greenwich
30
10

market dues; she hurled excommunications against destroyers of highways; she expended large sums for costly imports; her monasteries did an immense amount of pioneer work in every part of western and central Europe and greatly aided the growth of scientific farming, all of which directly aided commerce. On the other hand, the Church discouraged and barely tolerated commercial profit, because it seemed too much like interest, which was also forbidden. Like the physiocrats of the eighteenth century, the mediæval Church considered commerce non-productive, on the ground that the merchant was not a manual laborer and did not add anything to the value of the object which he sold. The merchant, therefore, did not merit the enormous profits which he received; the really valuable service rendered in transporting objects from the producer to the consumer was quite forgotten in the commercial theory of the Church. Then, too, the churchly ascetic ideal of continuous self-denial was partly responsible for the exceedingly low standard of living in most of the Christian world during the Middle Age. The marked contrast between the material and intellectual condition of western Christendom and that of contemporary Mohammedan Spain should be held in mind in order to appreciate this repressive influence of the Christian Church. Even after the Crusades this ascetic ideal was but slowly overcome, some influential religious orders still continuing to preach vehemently against luxuries of all sorts. The Church persistently refused to sanction trade with the Moslems, the very ones from whom the greatest commercial advantages could be derived; and yet these restrictions were frequently evaded, especially towards the close of the Middle Age, and the Church, under pressure, even granted licenses for such trade. Again, the Church passed frequent sentences of excommunication against merchants, especially Jews, and this meant the confiscation of their goods. Wherever, also, a sentence of interdict rested upon any district or country, it meant the confiscation of any merchandise that happened to be passing through it or stored there.

109. The mediæval "protective system." By this term is meant the universal tendency of the mediæval governments to regulate, under the guise of "protection," every minute detail of industry and commerce. Everywhere we find duties on nearly all imports and exports, many of which were absolutely prohibitive. These restrictions were the more obnoxious because of the large number of fiefs into which western and central Europe was divided, each one of which had its own duties. Each petty fief also imposed bridge

and highway tolls as an indemnity for repairs, which were seldom made; market and boating dues were universal and often excessive. The various governments frequently excluded foreign merchants from their territories, and prohibited certain trades and mercantile ventures altogether. Almost everywhere governments made the most minute regulations concerning trade and industry, defining with absurd precision what could or could not be done in each trade, who could engage in each trade, and often prescribing the exact industrial processes. Even the routes of trade, the times of departure of vessels, the ports to be touched at, the methods of shipping, the amount of freight to be charged, and the articles to be bought or sold on each voyage were often fixed by law, and the actual process of buying and selling was frequently strictly regulated and directly supervised by government officials. It was a very common practice for governments to fix arbitrarily the maximum prices of staple necessaries. The apprentice laws of most countries were so severe as to almost create a caste system. Governments also frequently owned the instruments of labor and the vessels which transported merchandise, charging rental upon them. Certain industries and articles of trade were frequently made exclusive governmental monopolies, and governments invariably tried to monopolize commercial routes.

It is somewhat difficult to determine whether this all-pervading protective system worked, on the whole, more harm or good to industry and commerce. Looking at the question purely from the modern standpoint, forgetful of the mediæval conditions, one might utterly condemn the whole system. Bearing in mind, however, the many crude conditions prevailing, the many dangers from which industry and commerce had to be protected, we can see that, in spite of its defects, the system was an outgrowth of necessity and actually produced some good results. For example, the many dangers attending maritime commerce during the Middle Age seemed to justify rigid governmental supervision, and even governmental ownership of shipping; the frequent famines arising, the scarcity of food, and other conditions were plausible excuses for "maximum prices" and the prohibition of certain exports; the infancy of industry was the fundamental basis for its protection by import duties; security and facility of travel and transportation were the pretexts for various kinds of tolls. Many of the mediæval restrictions are still regarded as legitimate by many governments; as, for example, import duties, license fees, tonnage dues, and a certain amount of

regulation of markets, shipping, and manufactures. Furthermore, the whole tendency of the Middle Age towards industrial and commercial monopoly is perhaps excusable on the ground of the comparatively narrow limits of trade and industry during that period; the field was so narrow that it could be easily controlled artificially, and was therefore regarded as a perfectly legitimate one for the exercise of monopoly. What was not clearly seen was that the field of profitable industry and trade was not necessarily to remain permanently narrow, but was capable of limitless expansion, and that therefore exclusive monopolies and minute regulations only checked this expansion. While it is easy to justify many features of the mediæval protective system on the ground of necessity, and even to point out certain important temporary advantages which it produced, it is none the less true that the system was extended too far, sought to regulate too minutely and rigidly all the details of commerce and industry, and thus not only aggravated many of the very evils which it sought to remedy, but practically destroyed economic freedom, and in this way proved a serious barrier to commercial and industrial development. Furthermore, although many of the protective restrictions were originally imposed from the best of motives, the system undoubtedly degenerated in many countries into a monstrous machine worked largely for money-making purposes by the governments and their interested backers. It was gradually found to be such a lucrative source of revenue both to the governments and to the unscrupulous "lords of industry," who arose everywhere, that they generally supported each other most heartily, and readily played into each other's hands. This, therefore, is another explanation of the fact that for so long a time both industry and commerce were obliged to pay so heavily for every ounce of privilege and every inch of progress.

110. The merchant and craft gilds in the mediæval cities were a logical outgrowth, and, in fact, a part of the protective system just outlined. They generally started as good fellowship clubs, more or less religious in their nature, and always had attached to them very commendable relief features. In various countries at different periods there grew up four different kinds of gilds: (1) *religious gilds:* (2) *frith gilds*, or police and legal protection gilds; (3) *merchant gilds;* and (4) *craft gilds*. It is the last two kinds of gilds that concern us. Of these two the merchant gilds generally ranked higher and had a greater influence. They were combinations of the merchants of a town for purposes of mutual protection in their trade.

They frequently involved great accumulations of capital under one management for carrying on trade in foreign and domestic wares, and would to-day be called monopolies and trusts. While such combinations were necessitated by mediæval conditions, and while mercantile frauds were greatly checked by them, their constant tendency was towards a monopoly of trade. As already noted, the narrow limits of mediæval trade and the difficulties involved in carrying it on made it comparatively easy to form such monopolies, while the great profits afforded abundant inducements to the merchant princes of the period. Frequently these merchant gilds became specialized: there were silk gilds, woolen gilds, spice gilds, glass gilds, just as there are to-day a sugar trust and an oil trust. These specialized merchant gilds controlled exclusively the trade in their respective articles in one or more cities, and sometimes throughout Europe. Gradually, also, they gained enormous political power and practically controlled the town governments; frequently, indeed, they were the towns, the gild government being identical with the town government. No doubt these gilds accomplished great good in developing the growth and freedom of the towns and of the third estate, and this led indirectly to the more democratic free governments of to-day; but, on the other hand, they were frequently very tyrannical, and were instrumental in developing some of the worst despotisms that the world has ever seen, and almost universally they finally tended to dwarf and cripple commercial enterprise. The craft gilds were not generally as important as the merchant gilds, but they were none the less active in their sphere. They, too, had their origin in necessity. All sorts of industrial frauds and shoddy workmanship were practiced by the more irresponsible artisans who did not belong to these organizations, and these gilds originally were formed primarily to secure good workmanship and to protect their members against unskilled labor. Undoubtedly they did much to develop skillful manufacturing during the earlier stages of their existence, and they, like the merchant gilds, added very commendable insurance and relief features to their work; but more and more, by discouraging competition, they checked the growth of an extensive system of manufactures.

111. Mediæval fairs and markets. We have thus far referred many times to "markets" and "fairs" without explaining these terms. Throughout the ancient and mediæval world trade was mostly "periodic," that is, it was carried on at markets and fairs held on special days or seasons; while in the modern world it is chiefly "permanent," that is, conducted by merchants and shopkeepers

permanently located in one place. In the ancient and mediæval world permanent trade was confined almost entirely to the largest cities, and was much less common even there than in the modern city. In mediæval Europe the population lived mostly in villages too small to support a permanent trading class, and their wants had to be provided for chiefly at fairs and markets held periodically. Such fairs and markets were very general throughout the ancient and mediæval world, and traces of their existence among many primitive peoples have been found in all parts of the world. There was a distinction between a fair and a market. In the first place a market was more local than a fair, and usually supplied only one community, while the fair always supplied a larger territory; secondly, markets were usually held only for one day, either monthly, weekly, or more rarely semiweekly, while fairs were generally held yearly for a longer time, varying from one to seven or eight weeks according to custom and the amount of trade to be carried on; thirdly, the fair was chiefly for wholesale trade, and the market for retail trade. Originally fairs were generally established at central places where religious festivals were held, or where tribes were accustomed to assemble for their primitive political and judicial proceedings. Later, fairs were established in or near every important town and city. Generally each market or fair held a special charter conferring on its governing body of leading merchants rights of government quite distinct from those of the town or city where it was located. In the case of the fair, this separate legal existence was very important because it protected, to a certain extent, foreign traders. The larger fairs developed quite a complete system of self-government, with courts separate from the ordinary local courts, where merchants of all nationalities could defend their rights with a special body of mercantile law or custom as a basis. Generally, however, the various local and general governments reserved the right of regulating and supervising fairs and markets, and this right was frequently exercised to great excess. There is scarcely an important town or city in Europe to-day where at one time or another there was not held some famous fair. In England the most famous mediæval fairs were held at Stourbridge, Winchester, Westminster Abbey, Stamford, Portsmouth, St. Edmonds, Boston, St. Ives, Abingdon, and Northampton; in France, at Montpelier, Marseilles, Beaucaire, Lyons, Paris, Troyes, Nîmes, Besançon, Beauvais, Arras, and Calais; in Germany, at Leipzig, Ratisbon, Frankfurt-am-Main, Frankfurt-am-Oder, and Hamburg. During the twelfth and

thirteenth centuries the fairs of Champagne in northeastern France were the most important trading centers north of Italy. These fairs were organized into a system of trading approaching the permanent type; the different fairs in this group were held in succession, so that they filled the whole year. In the fourteenth century the Flemish fairs became the most important in Europe and held this position for several centuries. There are still existing some very interesting survivals of mediæval fairs, of which the best example, perhaps, is the great fair at Nijni-Novgorod, in Russia.

112. Mediæval currency, banking, and credit. From the beginning of the Christian era to the tenth century there seems to have been a steady decrease in the European supply of specie, owing chiefly to its movement from the West to the East to pay for luxury. One authority estimates that the amount decreased from about $1,800,000,000 to $165,000,000 during this period. We must link this decrease in the specie with the fact that the feudal lords of Europe were generally opposed to its introduction into their fiefs; for as long as there was no money it was easy to exact payments in kind from their vassals. There was thus a natural warfare between commerce and money, on the one hand, and the feudal lord on the other. Scarcity of money and its poor circulation in Europe was therefore at once one of the principal economic causes of feudalism and at the same time the necessary effect of the continuation of the system. Another important cause for the scarcity of specie in circulation was the fact that for many centuries a large portion of it was either hoarded or used in the splendid services of the Church. A very large part of the specie used for monetary purposes during the Middle Age was circulated without being coined, and when thus used was weighed by the pound, half pound, or mark, the most generally recognized standards of weight being those of Troyes and Cologne. Gradually, however, the coinage of money increased, and we find a perplexing variety of coins, owing to the fact that each feudal prince, for a long time at least, generally controlled the coinage in his own domain. We also find continual fluctuations in the values of these coins, on account of the frequent alterations of the currency by the kings and feudal nobles. For some time after the overthrow of the Roman empire, silver was the principal metal used for coins in the West, but Karl the Great was a bimetallist and tried to establish a ratio of one to sixteen between gold and silver, taking as the unit of value in his currency the value of a pound of

silver.[1] His system of coinage was introduced into most of the western countries, and his *pound*, or *libra*, gave its name to the English *pound sterling* and the French *livre*. Unfortunately, the division of his empire after his death prevented this system from continuing uniform.

The most important silver coins in general use during the Middle Age were the silver *bezant*, worth from 25 to 50 cents; the *denarius*, or *pfennig*, as it was known among the older Teutonic peoples, worth at first about 8 cents, but finally decreasing to about 2½ cents; the silver *florin*, struck at Florence, and worth about 8 cents; the *metapane*, struck at Venice, and worth about 10 cents. Of these coins the one most widely used was the denarius, or denier. In the fourteenth century a large denarius, or *groat* (*grossus denarius*), was struck, which was worth about 26 cents. Up to the time of the Crusades the only gold coins known in Europe were the Byzantine *solidi*, or gold bezants, the Italian *tari*, and the Moorish *maurabotmi*. The solidus was originally worth about $3.25, but subsequently deteriorated in value, owing to frequent debasing. From the ninth century onwards the solidi passed current throughout Europe, including England, under varying names, such as *solde*, *sol*, *sou*, *solthing* (in Livonia), and *zololink* (in Russia). The *tari*, or *tarentini*, named after the Italian city where it was first struck, was less generally used than the solidus, and was worth about 80 cents. The maurabotmi, or *sarazens*, was made of 15-carat gold; the name survives in the modern Spanish copper coin, the *maravedi*. After the Crusades we find other gold coins in circulation. In Italy were coined, in the thirteenth century, *augustals*, *ducats*, or *sequins*, and *florentines* or *florins*. The augustals were named in honor of the emperor, Frederick II, and weighed half an ounce. The florin contained fifty-four grains of gold, and was worth about $2.50. The ducat, named after the duca, or doge, was coined by Venice in imitation of the florin and the value was about the same. Genoa, the Holy Roman Empire, and other states also imitated the gold florin; Hungary and the Rhine countries, in the fourteenth century, coined gold *guilders* that were nearly equivalent to the Italian florin. Smaller gold coins were struck in those countries where trade was most active, under the names of *gold pennies*, *gold denars*, and *oboli*. In addition to the above more generally used gold coins, there were many others

[1] The ratio between gold and silver fluctuated between one to nine and one to sixteen during the Middle Age, and differed considerably in the different countries.

in local use ; as, for example, the French *franc*, the English *noble*, and the Flemish *reals*. After the discovery of the silver mines in South America the Spanish coins naturally became the most important in Europe and partly or wholly supplanted many of the former coins. It must of course be remembered that the values here given do not give a true idea of the purchasing powers of these coins during the Middle Age; on account of the scarcity of money these coins then represented a much greater relative purchasing power than to-day.

The great diversity of coins in general use gave rise quite early to an extensive business of money changing, which soon became quite lucrative. This business remained for a long time chiefly in the hands of Jews and Italians, especially Florentines, who had representatives stationed in every important mercantile center of the world. Gradually they originated a system of exchange by which specie was kept on deposit, and letters or bills of exchange were issued to balance international debts, instead of transporting specie. Various other banking functions were performed by these money changers, and finally, as we have seen, several state banks were created which practiced most of the modern banking operations.

In spite of the strong sentiment existing against the charging of interest on loans, this practice gradually became quite common during the Middle Age. The zealous opposition of the Church and the more tardy interference of civil tribunals only had the effect of creating numerous ingenious expedients for evading the law. Even in Italy during the thirteenth century the common rate of interest was from twelve to twenty per cent. The same rate prevailed at that time in the Rhine countries, but at Zurich the town council declared forty-three and one third per cent the legal rate, and numerous instances are on record of much higher rates being charged.

113. The general influences of mediæval commerce upon the development of civilization may now be briefly summarized. It is almost too evident for mention that Europe owes most of her towns and cities to the impulse given by mediæval commerce. In these towns great wealth was accumulated by commerce and industry, which was gradually turned into magnificent public and private buildings filled with many luxuries. By commerce chiefly was the mediæval ascetic ideal overcome and the general standard of living raised. It was the wealth afforded by commerce that gave the greatest men of the Renaissance the leisure and opportunity to create their masterpieces in art and literature. It was the contact brought about by commerce between the culture and refinement of

the East and the ignorance of the West which lifted the Europeans to a point where they could appreciate this art and literature. Furthermore, it was largely through commerce that Europe outgrew the feudal system, for the commercial towns and the third estate in them were the strongest supporters of the rising national governments in their final struggles against the feudal nobility. Commerce also undermined the economic foundation of feudalism by destroying the economic self-sufficiency of the individual fiefs and by extending the use of money, which made the peasants unwilling to submit longer to feudal exactions. While helping to destroy feudalism, commerce was creating in the third estate an intense desire to become the political and civic equal of the other estates, and by so doing helped to bring about the ultimate constitutional recognition of the principle of political equality. Mediæval commerce also hastened the recognition of the principle of religious toleration; the mutual commercial intercourse of Jew and Gentile, of Christian and Moslem, could not fail to have this effect. Neither should we forget the great influence upon all the subsequent development of civilization exerted by such codes of maritime law as the "Consolato del Mare," the "Judgments of Oléron," the "Guidon de la Mer," the "Laws of Wisby," the "Customs of Amsterdam," the "Laws of Antwerp," and the "Constitutions of the Hanseatic League," all of which were outgrowths of commercial intercourse. The tendency of all these codes was to break down commercial monopolies and proclaim the liberty of the seas, a tendency, however, which was not consummated during the Middle Age. These codes required all vessels to carry a flag, imposed penalties for piracy, regulated prizes, guaranteed the persons and property of neutrals, and established special tribunals for deciding commercial questions. Taken in connection with the well-organized consular systems of Venice and some other mediæval commercial states, they furnished a splendid foundation for the modern system of international law. Finally, we must note the influence of mediæval commerce upon the explorations and discoveries that mark the beginning of the Modern Age. It was commerce that furnished the motives for these great undertakings and the pluck to execute them.

References. — *Gibbins*, History of Commerce in Europe, 29–101; *Ibid.*, Industry in England, 1–196; *Yeats*, Growth and Vicissitudes of Commerce, 73–108; *Cunningham*, Western Civilization, II, 1–157; *Ibid.*, Growth of English Industry and Commerce, I; *Morris*, The History of Colonization, I, 143–199; *Adams*, Law of Civilization and Decay,

35–149; *Warner*, Landmarks in English Industrial History, 1–116; *Cheyney*, Introduction to the Industrial and Social History of England, 1–135; *Rogers*, The Economic Interpretation of History; *Ibid.*, Six Centuries of Work and Wages; *Ibid.*, History of Agriculture and Prices; *Ashley*, Economic History of England; *Price*, A Short History of English Commerce and Industry; *Thurston*, Economics and Industrial History; *Adams*, Civilization during the Middle Ages; *Thatcher and Schwill*, Europe in the Middle Age; *Emerton*, Mediæval Europe; *Robinson*, Introduction to the History of Western Europe; *Myers*, Middle Ages; *Duruy*, History of the Middle Ages; *Gross*, The Gild Merchant; *Bourne*, Romance of Trade; *Fyfe*, Merchant Enterprise.

Part III—Early Modern Commerce

CHAPTER XIV

THE BEGINNING OF THE MODERN PERIOD

114. Some fundamental political characteristics of the early modern period must be noted in order to understand clearly its commercial development. In the first place, one notices in passing from the mediæval to the modern world a very significant shifting of the political center of gravity. The politics of the Middle Age was made chiefly by three personages, — the pope, the emperor of the West, and the emperor of the East. Their places were taken in the early modern period by the rulers of numerous national states: in the front rank, Spain, France, and England; in the second rank, Portugal, Sweden, Denmark, Bohemia, Hungary, and Russia, — not yet a Germany or an Italy. In the second place, we notice that these numerous coexisting states, with their conflicting interests and passions, were bound to engage in long and bitter wars. In fact, it does not take one long to discover that war is the normal condition during at least the first three centuries of the modern period. Abundant causes for conflict appear on the very surface: all these nations would struggle desperately to secure their natural geographical boundaries; commercial and maritime rivalries would bring their fleets into hostile collision on all the seas and oceans of the world; royal intermarriages and inheritances would frequently cause long and bitter wars. At the very beginning of the modern

period the Protestant Reformation, by creating rival religious parties in nearly all European countries and rival international alliances, added another fruitful cause which was destined to deluge Europe in blood for several centuries. The discovery of America and the cape route, together with the monopolistic colonial policies applied to the new possessions, served as added fuel to the all-consuming flame of war.

115. Certain economic and intellectual characteristics also separate quite clearly the early modern from the mediæval period. Most of these characteristic differences were outgrowths, directly or indirectly, of the Renaissance and the Protestant Reformation.

116. The Renaissance, in its broadest meaning, was a general awakening of the European mind, by which the whole ideal of life existing during the Middle Age was completely revolutionized. Symonds, one of the great historians of this movement, says: "During the Middle Ages man had lived enveloped in a cowl. He had not seen the beauty of the world, or had seen it only to cross himself and turn aside and tell his beads and pray." The ideal set before the mediæval man had led him to regard "beauty as a snare, pleasure a sin." The Renaissance shattered this ascetic ideal, and this fact had a profound significance in the history of commerce. The shattering of the ascetic ideal of the Middle Age caused a great increase in the use of luxuries and a general elevation of the standard of living, notably in Italy, France, and Flanders. It is evident, therefore, that the Renaissance gave a great stimulus to commerce and manufactures as the two means for supplying the newly craved luxuries.

117. Three great inventions, introduced into Europe during the Crusades and the Renaissance, had an important influence upon commercial development, viz., gunpowder,

the compass, and the printing press. The first of these inventions was one of the principal causes of the overthrow of feudalism, a thing which had to be accomplished before any great commercial progress could be made. The influence of the second invention upon the growth of commerce was even greater and more direct, because it was a necessary antecedent of the epoch-making geographical discoveries of the fifteenth century. The third invention cheapened books and made possible the diffusion and popularization of the new geographical knowledge, thus stimulating further discoveries and explorations.

118. Three great geographical discoveries made about the close of the fifteenth century were destined to revolutionize the commerce of the world: the discovery of America, the rounding of the Cape of Good Hope, and the circumnavigation of the earth.

I. *Commercial significance of the discovery of America.* For one thing, this discovery, together with that of the cape route, caused a sudden and complete shifting of maritime power. The Mediterranean, on whose shores had risen and fallen so many mighty states, suddenly became of only secondary importance; so also the Baltic became much less important. The place of these two seas was soon usurped by the ocean, and the commerce of the world was henceforth to pass over all the great waters of the world. Consequently, Spain and Portugal, and later Holland, England, France, and other countries, took the place of Venice, Genoa, and Alexandria, and the fleets of all these countries were to contend for the maritime supremacy of the world. Furthermore, the discovery of the cape route reopened to Europeans an extensive field of commerce in the East, which had been nearly closed by the conquests of the Turks, while the discovery of America gradually opened an extensive new field in the West. American products, some of which

were indigenous, and others, the cultivation of which was introduced into America by Europeans, now entered into European consumption: maize, rice, other cereals, tobacco, cocoa, potatoes, Peruvian bark, coffee, pepper, sugar cane, cotton, indigo, and certain medicinal and dyeing products. Again, the influx of the precious metals from America into Europe, by bringing about a general increase of prices, wrought an important economic revolution in every European country. Unfortunately, the Spaniards in the West and the Portuguese in the East laid the foundations of vicious colonial policies, which were not much improved upon for a long time by their successors. In nearly every case, for several centuries, the colonies were regarded only as feeders and sources of plunder for the mother country. Thus the commercial development of both the East and the West was long retarded and the real commercial interests of Europe sacrificed.

II. *Rounding of the Cape of Good Hope.* As early as the close of the thirteenth century, a Frenchman, Lancelot Maloisel, resumed the old route along the west coast of Africa, which had been long abandoned, and went as far as the Canaries. It is also claimed that some residents of Dieppe, in the fourteenth century, pushed as far as the Gulf of Guinea, founding in northern Guinea, Little Dieppe, Little Paris, and Elmina. At the beginning of the fifteenth century, Jean de Bethencourt conquered the Canaries. The Hundred Years' War and civil wars, however, prevented France from following up these early explorations, and consequently it was left to the Portuguese, under the direction of Prince Henry the Navigator, to resume and extend this work. In 1434 they passed Cape Bojador; in 1441, Cape Blanco; in 1445, Cape Verde. In 1460 Prince Henry died, but his work was carried on by his successors; in 1462 Cape Sierra Leone was passed; in 1471

The Known and Unknown World just before Columbus sailed; the Voyages of Columbus, Vasco da Gama, Magellan, and Drake

the gold coast was reached; in 1474 the equator was crossed; in 1484 Diego Cam discovered the mouth of the Congo. In 1486 Bartholomew Diaz passed a little way around the southern extremity of Africa, and named the promontory the Cape of Storms and Torments. Lest this name might frighten future navigators, King Emanuel the Fortunate changed it to the Cape of Good Hope. In 1497 Vasco da Gama rounded the cape, and, after touching at Mozambique, Mombasa, and Melinde, this venturesome navigator, guided by some Moorish sailors, struck across the Indian Ocean, reaching Calicut May 19, 1498. Thus was discovered a new route to the Indies, an event fraught with the greatest consequences in the history of commerce.

III. *The circumnavigation of the earth* originated in a dispute between Spain and Portugal concerning the Moluccas, whence were obtained certain rare spices, like nutmegs, cloves, and mace. Under the papal bull of Alexander VI, which granted Portugal all new territories lying east of a line running north and south midway in the Atlantic, Spain's title to these islands was not recognized. Magellan, who had left the service of the king of Portugal through disappointed ambition, persuaded the king of Spain that these islands could be reached by a western route and that thus the Spanish title could be made clear. Accordingly, he was sent out Aug. 10, 1519, to find such a route. He crossed the Atlantic in a southeasterly direction, sailed through the strait which bears his name, and thence, steering northwest, reached the Ladrones early in the spring of 1521, after meeting with many delays and dangers. Soon after, the brave navigator was killed in the island of Zebu, one of the Philippines; but one of his ships, the *Victoria*, continued the voyage to Borneo, the Moluccas, Timor, and Sumatra, and, returning round the Cape of Good Hope, reached Spain, Sept. 7, 1522. This circumnavigation of

the earth removed all doubt concerning its rotundity, cleared men's geographical conceptions in many ways, and thus paved the way for many great commercial undertakings. This expedition also led to the Spanish annexation of the Philippines, an agreement being made with Portugal whereby this was allowed and the Spanish claim to the Moluccas bought off by Portugal.

119. The economic effects of the Reformation. The prolonged and bitter wars and persecutions provoked by this movement produced their natural economic results: loss of property, loss of laborers by death and emigration, decline of agriculture, manufactures, and commerce, and a shifting of industrial and commercial centers. Nearly all European countries felt these effects, but Germany, France, the Netherlands, and England felt them most, — Germany the most keenly of all. On the other hand, some countries like England, Prussia, and Switzerland profited greatly by the emigrations resulting from the Reformation. This movement also produced other very important economic effects. Of these, the most evident and important one in those countries that threw off allegiance to the pope was the secularization of vast amounts of church property. This sudden changing of hands of a very large part of the lands and other property of Europe had a very great influence upon agriculture, manufactures, and commerce. Again, the Reformation led to serious social revolts in various countries, all of which tended to derange industry and commerce. Another economic effect of the Reformation was the lessening of the number of holy days and a consequent increase in the productive power of the Protestant countries thus affected. Furthermore, the decrease in the number of fast days led to a perceptible relative decrease in the consumption of fish and a corresponding increase in the consumption of meat, the displaced fishermen generally

becoming farmers. Not the least important effect of the Reformation upon industry and commerce was the fact that it led to stricter morals, a stronger inclination to labor, and more progressive industrial habits. There was also a greater simplicity of worship and dress in the Protestant countries, which led to more thrifty habits and the accumulation of wealth; but at the same time this removed one important feeder of industry and commerce.

References.— *Cunningham*, Western Civilization, II, 138–177; *Thatcher and Schwill*, General History of Europe, 260–296; *Van Dyke*, Age of the Renaissance; *Burckhardt*, Civilization of the Renaissance; *Symonds*, Renaissance in Italy; *Rogers*, The Economic Interpretation of History; *Adams*, Civilization during the Middle Ages; *Emerton*, Mediæval Europe.

Portuguese Vessels

CHAPTER XV

THE PORTUGUESE ASCENDENCY IN THE EAST

120. The Portuguese conquest of the East was rapidly accomplished after Vasco da Gama discovered the cape route. Alvarez Cabral, who landed on the Malabar coast in 1499, was at first favorably received by the natives and allowed to establish a factory there, but the factor soon got into trouble and was killed. Cabral then sailed farther up the Malabar coast, where more friendly native chiefs allowed him to establish factories at Cochin and Cananore. For several years, however, these advance guards of the Portuguese encountered much opposition from the natives. Fortunately, reinforcements arrived in 1504, and Calicut was successfully bombarded. Just at this juncture Venice, fearing the loss of her commerce with the Indies, secured aid from Egypt, and in 1508 the combined fleet of the two states defeated the Portuguese in a great naval battle. The Portuguese viceroy, Francesco d'Almeida, however, quickly rallied all his forces, suddenly fell upon the allies, and almost annihilated them, thus establishing the Portuguese power in India. Alfonso d'Albuquerque, the successor of Almeida, completed the conquest of the East so brilliantly begun. In 1510 he captured Goa and made it the capital of his Indian empire; in 1511 he captured Malacca, occupied the Moluccas, and subjected the neighboring states; in 1515 he took possession of Ormuz, the key to the Persian Gulf; in 1518 the Chinese emperor granted him Macao, which became the base of trade with the

Celestial Empire; in 1542 Japan was accidentally discovered. Thus the Portuguese very quickly acquired a complete ascendency throughout southern Asia and the adjacent islands from the Persian Gulf to Japan, and in the meantime their power had been riveted along most of the eastern and western coasts of Africa.

121. The new world in the East thus conquered by the Portuguese was really a very old world possessing boundless riches and an already organized commerce. For centuries the Arabs had traded all along the eastern coast of Africa and the southern coast of Asia. They had regular commercial relations with merchants in India, China, Japan, and many of the East India islands. Mozambique, Ormuz, Calicut, Malacca, and Canton were all very important commercial centers. The Portuguese did not, like the pioneers of America, have to subdue and develop a virgin continent. They simply had to prove the superiority of their arms over the effete Eastern peoples, and the rich resources and profitable trade of this old world in the East fell into their hands. Few changes were made in the organization of this commerce: the articles traded in, the sources of supply, and the ultimate consumers remained practically the same. At the same time a few changes occurred; Goa replaced Calicut, and Macao was substituted for Canton. The greatest change, however, was the shifting of the route to Europe from the Red Sea and Mediterranean to that by way of the Cape of Good Hope.

122. The Portuguese route to the East was usually from Lisbon along the western coast of Africa, around the Cape of Good Hope without stopping (on account of the precipitous shores), up the eastern coast to Mozambique, thence across the Indian Ocean to Goa. Sometimes, instead of going to Mozambique, the Portuguese vessels took a more direct route from the Cape, coursing outside the island of

Madagascar and thence crossing to Goa. This latter route, however, was rarely followed, because the other one was more certain, better known, and added the advantage of trafficking in eastern African ports. The return voyage took the same course from Goa to the Cape; thence the Portuguese generally launched into the open Atlantic as far as St. Helena, thence running to Senegal, the Azores, and back to Lisbon. The schedule duration of the voyage, going and returning, counting the time at Goa for unloading and loading, was eighteen months and sometimes two years. The dangers from pirates and other sources necessitated sailing in fleets attended by convoys of war vessels.

123. The Portuguese commercial policy was what one might expect from the illiberal ideas then prevailing. Commercial liberty was unknown, and consequently the discoverers of the cape route sought to monopolize the benefits of their discovery. Portuguese merchants were of course the only ones allowed to bring goods from the Indies to Europe by this route. But this was not all: the Portuguese government reserved to itself a monopoly of certain spices; finally, the government also monopolized the intermediate commerce between different sections of the East. The traders from some countries were allowed to participate in this intermediate trade, but only within certain limits and upon definite conditions. For example, Hindoo boats were allowed to trade only along the coasts on the permits of the viceroy, good only for one year and revocable if they carried certain prohibited articles reserved to the Portuguese. Military stations were established in every part of the commercial empire — at Goa, Malacca, Mozambique, Ternate, and elsewhere — to guard against infractions of the rigid monopoly. Portuguese flotillas operated in every direction, with Goa as the leading center of this intermediate trade. As the Portuguese merchants

were not numerous enough to penetrate far into the interior, the interior trade was generally left to the Arabs, Moors, and Hindoos; but in nearly every case treaties were exacted from the native princes rigorously regulating this trade. Only Portuguese merchants could receive certain articles from these inland peoples or furnish certain others to them, and the prices of such articles were fixed in the treaties or by the Portuguese government. No one could engage even in this interior trade except on a permit from the Portuguese authorities.

124. Chief centers of Portuguese trade. Each important city and factory throughout the Portuguese empire had its special articles of exchange, its own clients, and its special regions for supplying. *Mozambique*, with a good harbor dominating a number of interior trading posts, exported negroes, ebony, gold, and ivory, receiving in exchange wine, oil, silks, linens, cottons, and glassware. *Socotra*, situated on an island at the entrance to the Gulf of Aden, furnished aloes, dates, mats, and perfumes brought from Arabia, which country had escaped Portuguese conquest. *Ormuz*, at the entrance to the Persian Gulf, exported medicinal drugs, spices, and horses brought by caravans from Syria and the Euphrates countries; tapestries, raw and woven silk, horses, and silver brought from Persia and Khorassan; salt from her own vicinity, and pearls from the neighboring Bahrein Islands. In exchange for these articles the Portuguese gave the fine stuffs of India and precious stones. *Diu*, on the Gulf of Cambay, was a very important center for inland trade in northwestern India. Here were secured such natural products as indigo, iron, copper, opium, grain, wax, and some valuable manufactured articles like silks, cottons, oils, and fine incrustations. The neighboring town of *Damaun* was the chief rice market. *Cochin* furnished pepper, sending annually more than one

hundred and fifty shiploads to Goa. *Ceylon* exported cinnamon, tobacco, ivory, pearls, cotton, silk, and precious stones. *Negapatam*, on the more neglected Coromandel Coast, delivered chiefly opium and printed calicoes for shipment to Pegu and Siam. *Malacca* was the great center where were exchanged in large quantities many articles from Siam, Burma, Cochin China, China, Japan, and some of the East India islands: aloe wood, sandalwood, dyewoods, camphor, gold, tin, lead, copper, and precious stones. *Ternate*, the chief city of the Moluccas, exported nutmegs, cloves, and other spices, the trade in which was exclusively monopolized by the Portuguese. From *western African ports* the Portuguese secured ivory, gold dust, gums, cotton, and large quantities of negroes; from the *Canaries*, sugar; from *Madeira*, wines. The papal bull of demarcation (1493) and other causes checked the Portuguese in America, and they accomplished very little in that field. For a time, however, their fishing vessels were more numerous in the *Newfoundland fisheries* than those of any other nation, but they were soon driven away by the Dutch, English, and French. Some fitful attempts were also made to colonize *Brazil*, but the Dutch West India Company obtained control of that country. Although Brazil was recaptured in 1654, it profited Portugal very little.

125. Lisbon and the European carrying trade. After the discovery of the cape route, Lisbon was the natural center for the European trade with the East Indies. Furthermore, this city was halfway between Bruges, the great market of northern Europe, and Venice, the great Mediterranean market. The beautiful mouth of the Tagus afforded far better natural port facilities for maritime commerce than existed at either Bruges or Venice. These facts should have made Lisbon for a long time the great center of the European carrying trade, had the Portuguese

availed themselves of their opportunities. They might not only have brought colonial products as far as Lisbon, but might also have distributed them to all parts of Europe and thus have derived large profits from the additional freights. Instead of pursuing this policy, however, the Portuguese generally unloaded their colonial products upon Italian, Hanseatic, Dutch, or English vessels, and it was partly this mistake that soon made the rising city of Antwerp the great center of the European carrying trade.

126. The devotion of the Portuguese to the African slave trade was undoubtedly one of the chief reasons why they thus let the European carrying trade slip through their fingers. Lisbon enjoys the unenviable distinction of having been the first and, for a long time, the greatest European market for African slaves, and she jealously guarded her monopoly of this iniquitous traffic, which was developed rapidly and with hideous zeal all along the African coast.

127. The shipbuilding industry of Lisbon was another source of wealth of such importance as to help blind the Portuguese to the advantage of securing and retaining the European carrying trade. This city was for some time the greatest shipbuilder in Europe. An almost exhaustless supply of excellent timber was easily secured by floating logs down the Tagus from the forests along the river. The position of Lisbon in this industry may be judged from the fact that most of the vessels composing the famous Spanish Armada were built in her shipyards.

128. The decline of the Portuguese commercial empire was even more rapid than its rise. Among the causes for this may be noted (1) the neglect of agriculture and manufactures (except shipbuilding), (2) a poor colonial policy which hindered colonial development and antagonized the natives of the East, (3) the neglect of the military defenses of the colonies, (4) the rivalries among the viceroys,

(5) the enervation of the Portuguese colonists by luxuries and climatic influences. As a result of these and other causes, the Portuguese empire in the East had greatly declined by 1580, when the crown of Portugal was united to that of Spain in the person of Philip II. After that the wars with the Dutch and English soon resulted in the loss of nearly all the Portuguese colonies, and when Portugal again became an independent kingdom, in 1640, she was far too weak to regain what she had lost.

References. — *Cunningham*, Western Civilization, II, 129–138, 183–190; *Gibbins*, History of Commerce in Europe, 105–109; *Morris*, The History of Colonization, I, 199–230; *Yeats*, Growth and Vicissitudes of Commerce, 179–185; *Amer. Histor. Assoc.*, Annual Report, 1893, 113–121.

CHAPTER XVI

THE SPANISH ASCENDENCY IN THE WEST

129. Spain at the beginning of the Modern Period seemed predestined to commercial leadership. Nature had endowed her with a splendid geographical position and rich resources. After having made steady progress for several centuries, her leading states were finally united by the marriage of Ferdinand and Isabella (1469), and this consummation was followed by a period of unparalleled territorial expansion. Her long struggle with the Moors was successfully terminated in 1492 by the capture of Granada, while the great discovery of Columbus, in the same year, threw a new world into her lap. A series of conquests and intermarriages soon brought under her control, in rapid succession, the kingdom of Naples, Spanish Navarre, the archduchy of Austria, and the Netherlands. The Spanish merchants had also felt the impulse resulting from political unification and geographical exploration; thriving commercial cities like Barcelona, Seville, and Bilbao traded quite extensively with Italy, the Netherlands, the Canaries, England, and more remote countries. On the other hand, the Italian and Hanseatic cities, which had for several centuries been the commercial leaders of Europe, were now declining; Germany was hopelessly divided; Portugal was fully occupied in the East; England, for various reasons, was not yet ready to enter into competition for the prizes to be won on the other side of the Atlantic. Everything, therefore, seemed to point to Spain as the leader in the New World.

130. The progress of Spanish exploration and conquest in the New World was at first remarkably rapid. Columbus, during his four famous voyages (1492–1504), explored Cuba, San Domingo, Jamaica, Porto Rico, and other islands, the northern coast of South America westward from the mouth of the Orinoco, the eastern coasts of Honduras and Central America. Yucatan was discovered in 1517; Florida, in 1512; the Isthmus of Darien and the Pacific, in 1513; the Rio de la Plata, in 1515. Then began the work of conquest: Cuba was conquered by Velasquez (1511); Mexico, by Cortez (1519–1521); Peru, by Pizarro (1524); Chile, by Almagro (1535). The silver mines of Zacatecas, in Mexico, were discovered in 1532; those of Potosi, in Peru, in 1545. Magellan crossed the Pacific from Cape Horn to the Philippines (1521); Urdaneta crossed it from Japan to Acapulco (1565). These are a few of the most important stages in the brilliant early progress of Spanish exploration and conquest.

131. The Spaniard, however, failed to properly improve his opportunities in the West and to become the commercial leader of the world. A few colonies were planted in Cuba, Porto Rico, Jamaica, and on both the North and South American continents; many convents were established and some bishoprics created; some cities were built, — Vera Cruz, Porto Bello, Caracas, Acapulco, Lima, Buenos Ayres, Valencia, Cumaná, and Panama; some trading posts were established and commercial relations begun. But generally the Spaniard proved himself more a conqueror, adventurer, a seeker of gold, and a religious proselyter, than a colonizer and successful merchant. While we must guard against forming an exalted concept of the stage of civilization attained by the natives encountered by the Spaniards, it is undoubtedly true that a fairly good system of agriculture already existed among them; they did some good

weaving, embroidering, and metal work; they carried on interior commerce at various fairs and markets, and some of them had a coasting trade; their towns were well chosen for commerce and defense. A wise policy of encouragement and development would have enabled Spain to build, on these industrial and commercial foundations already existing in the New World, a brilliant and permanent commercial empire.

132. The colonial policy of Spain. From the first the Spaniard in America blinded himself to almost everything except the silver mines. Little attention was given to the cultivation of the soil or the planting of any industry. The colonists exported only such products as could be obtained with little labor, and devoted all their energies to mining; hence they were almost entirely dependent upon the mother country for manufactured goods, and in many places even for grains and other foods. Ferdinand and Isabella introduced the olive and vine into South America and the West Indies, but eventually their cultivation was discouraged, except in Peru and Chile, for purely local use, so that the inhabitants would have to buy them from Spain. The manufacture of many articles was forbidden in the colonies, so that the whole laboring strength of the natives might be applied to the mines, and in order to give Spanish manufacturers and merchants an opportunity to extort monopolistic prices for their wares.

The Spaniards not only devoted themselves exclusively to the silver mines, but they also subjected all commerce with their colonies to very illiberal and vexatious restrictions. In 1503 the Chamber of Commerce was created, to act as the sole medium of exchange for merchandise going to or from the colonies, directly or indirectly. In 1511 the Superior Council of the Indies was organized and located at Madrid. After its reorganization by

Charles V, that body became the chief administrative authority over all colonial affairs, military and ecclesiastical as well as civil and commercial. The council was represented in the New World by two viceroys, one stationed in Mexico and one in Peru, and by numerous local governors and tribunals. The entire administration of the colonies was carefully kept in the hands of Spanish-born officials, to the exclusion not only of natives, but even of Spaniards born in the colonies of Spanish parents. The regulations of colonial commerce and industry were exceedingly minute. Heavy customs duties were imposed upon all imports and exports; foreigners were forbidden to settle in, or conduct any trade with, the colonies. Each kind of merchandise had its special warehouse, in which was a government factor, treasurer, and secretary, who registered everything brought there and superintended everything pertaining to the loading and unloading of vessels. All goods had to be carried to and from the colonies in royal ships, which sailed in fleets. Under the rule of Charles V a fleet of fifteen galleons left Seville twice each year for Vera Cruz, and one of twelve galleons left at the same intervals for Porto Bello. Under Philip II these fleets were increased to sixty and forty vessels respectively. Government agents stationed in these ports were charged with the duty of distributing imports to the places of consumption and of collecting metals for export. The Mexican market was not held at Vera Cruz, the place of shipment, on account of its unhealthful location, but at Jalapa; the market for Peru and Chile was held at Porto Bello, in spite of the pestilential surroundings. At the annual fairs of forty days duration, held in these places, the commanders of the galleons sold their cargoes to the local governors and their subordinate officials. The prices were generally so regulated that the commanders of the

vessels made a profit ranging from one hundred to three hundred per cent. There was practically no limit to the profits which the local governors and their subordinates could wring from their customers.

In his treatment of the natives, the Spaniard has been grossly misrepresented by many writers. While it is true that mining on a large scale was necessarily detrimental to the native population, the loss of life attributable to this cause has been greatly exaggerated. When it was found that the Indians could not endure the hard work in the mines, the more stalwart negroes were procured from Africa. At the first the Spaniards contracted with the Portuguese and Genoese for their supplies of negro slaves, but later they procured them chiefly from the English, who outbid the French. Outside the mining districts the Spaniards seem to have treated the native population with a considerable degree of kindness. Spain alone among the European nations endeavored to protect by law the natives in America.

133. The influx of precious metals and its effects. By centering most of her efforts upon the American mines, Spain was able to procure enormous quantities of the precious metals, especially silver. From 1492 to 1500 the average annual importation of precious metals into Spain was about $350,000; from 1500 to 1545, $3,000,000; after the discovery of the Potosi mines (1545) and the application of more skillful methods to the Mexican mines, the annual yield increased to $11,000,000. The first effect of this influx of silver and gold was to stimulate commerce by increasing the demand for and the ability to pay for costly imports. Spain began to import more woolens, linens, laces, velvets, hardware, works of art, etc., from the Levant, Italy, the Netherlands, England, and France. Spanish manufacturers and farmers were also stimulated

to supply part of the new wants created by the influx of metals and other causes. At the same time the colonial demand for goods served as an additional stimulus to Spanish producers. For a time Spanish woolen, silk, velvet, armor, leather, and other industries thrived; under Philip II, Seville employed 16,000 looms and 130,000 hands for textiles. For a time also foreigners, especially Germans and Italians, settled in Spain and tried to develop manufactures. Unfortunately, however, the revival was spasmodic and temporary. In time the influx of precious metals was so great as to raise the general level of prices much higher than it was before.[1] As the causes for this increase of prices were not understood at the time, the Spanish government, legislating in the interests of consumers, fixed maximum prices for numerous articles, prohibited the exportation of certain products, and otherwise restricted Spanish industry. The Mesta, a great organization of sheep farmers with large privileges, seriously injured Spanish agriculture. The wars of Philip II were also very disastrous to Spanish agriculture, manufactures, and commerce. Furthermore, the "silver fever" was contagious and spread to all classes of society, making them more indifferent than ever to the development of those home industries that were so essential to their permanent prosperity. Other causes also, such as the incessant persecution of the Moors, who were Spain's best artisans and farmers, the bad financial policy of the government, and the Inquisition, conspired to produce speedy economic decline. Finally, the industrial spirit of Spain decayed so completely that her agriculture, mining, and manufactures

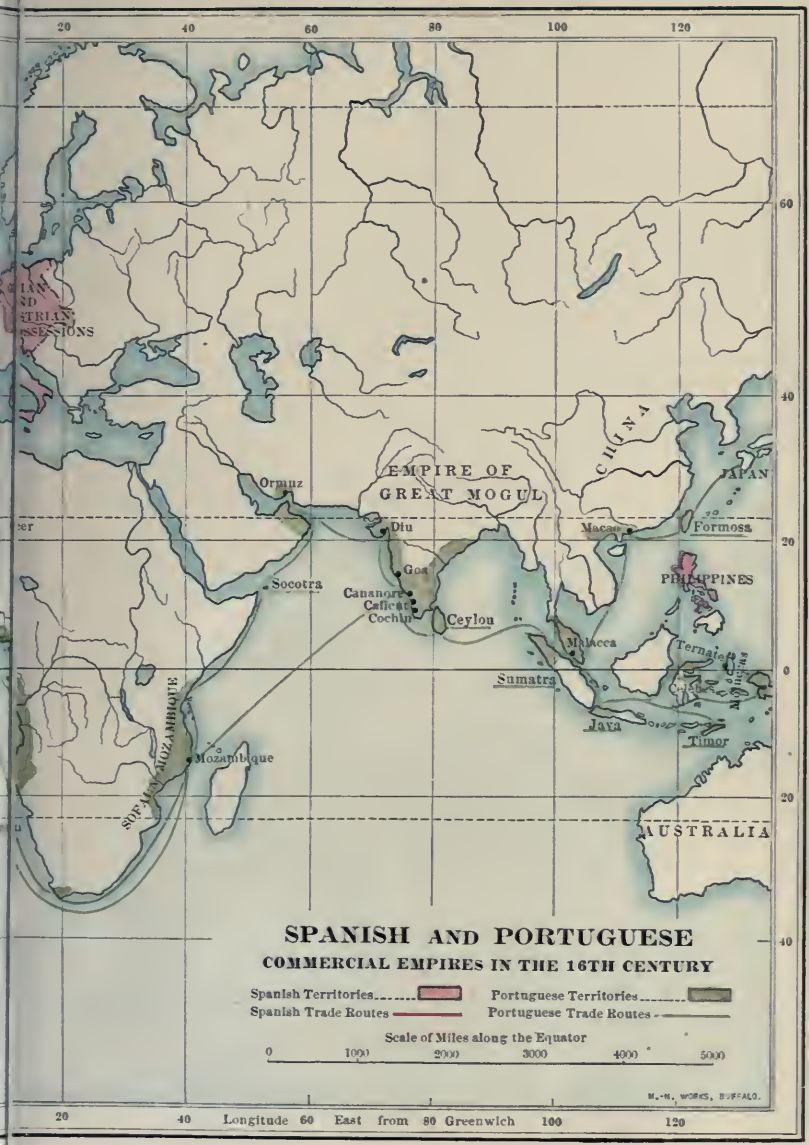
[1] It has been estimated that from the discovery of America to the end of the sixteenth century $743,000,000 of specie were imported into Europe, chiefly through Spain. This more than quintupled the supply existing in 1492.

were nearly ruined, leaving her dependent upon other countries for nearly everything, even a large part of her food supply. Thus most of the precious metals procured from the colonies had to go to other countries to pay for imports and expensive wars, and enriched them rather than Spain. This was the penalty she incurred for her mistaken economic policy.

134. The decline of Spain's commerce and maritime power followed in the wake of her agricultural and industrial decline. The monopolistic prices prevailing in the Spanish colonies soon tempted Dutch and English smugglers to venture thither for the sake of the enormous commercial profits, while the industrial decline of Spain finally rendered her unable to supply her colonies with the very articles she had sought to monopolize. In the East Indies also Spain neglected her commercial opportunities when she obtained control of that region by the conquest of Portugal (1580). Her commercial and maritime decline was especially rapid after the beginning of the Dutch revolt (1579) and the defeat of the Armada (1588). Henceforth both England and Holland conspired to destroy her power completely. Thousands of privateering vessels were fitted out in those countries, and they eagerly watched for every poorly defended Spanish galleon laden with silver, while smugglers continued to swarm on every coast of Spanish America. So rapid was Spain's decline that by the time of the Peace of Westphalia (1648) her colonial and foreign commerce had been almost completely destroyed.

References. — *Cunningham*, Western Civilization, II, 190–196; *Morris*, The History of Colonization, I, 230–300; *Gibbins*, History of Commerce in Europe, 121–126; *Yeats*, Growth and Vicissitudes of Commerce, 186–201; *Amer. Hist. Assoc.*, Annual Report, 1893, 125–133.


100
80
60
40
20
0
60
40
20
0
40
Antwerp
PORTUGAL
Madrid
SPAIN
Azores
Lisbon
Seville
Madeira
Florida
Bahamas
California
MEXICO
Vera Cruz
Cuba
Porto Rico
Hispaniola
Tropic of
C. Verde Is.
Porto Bello
TERRA FIRMA
GUIANA
Equator
PERU
BRAZIL
Pernambuco
Bahia
Tropic of
CHILE
100 Longitude 80 West from 60 Greenwich 40 20 0


20
40
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EMPIRE OF
GREAT MOGUL
CHINA
JAPAN
Ormuz
Diu
Goa
Socotra
Cananore
Calicut
Cochin
Ceylon
Macao
Formosa
PHILIPPINES
Malacca
Ternate
Sumatra
Java
Timor
Mozambique
SOFALA
MOZAMBIQUE
AUSTRALIA
SPANISH AND PORTUGUESE
COMMERCIAL EMPIRES IN THE 16TH CENTURY
Spanish Territories
Portuguese Territories
Spanish Trade Routes
Portuguese Trade Routes
Scale of Miles along the Equator
0
1000
2000
3000
4000
5000
M.-N. WORKS, BUFFALO.
20
40
Longitude 60 East from 80 Greenwich
100
120

CHAPTER XVII

THE REMAINDER OF EUROPE DURING THE SIXTEENTH CENTURY

135. France emerged from the Middle Age with a strong absolute monarchy. The successful conclusion of the Hundred Years' War had inspired the nation and exalted the power of the crown. The new power of the monarch was then riveted by important financial and administrative reforms, and especially by the creation of a permanent standing army. With this new engine of power Louis XI, the unscrupulous apostle of Machiavelli, was able to overcome the strong array of feudal opposition led by Charles the Bold of Burgundy, and at his death the French monarchy was far on the road towards an ascendency that was to astonish Europe. Not only did Louis XI render great services to French industrial and commercial development by inflicting serious blows upon French feudalism, but, as we have seen, he directly encouraged it in various ways with good results. Under Charles VIII (1483–1498) there was a slight industrial reaction, owing to feudal revolts and his foolish Italian wars. These wars, however, were not as destructive to French industry and commerce as one might at first suppose, because they were fought mostly in Italy, and industrial development was resumed under Louis XII (1498–1515), who followed closely in the steps of Louis XI so far as concerned the encouragement of agriculture, manufactures, and commerce.

136. Still further industrial and commercial progress was made during the reign of Francis I (1515–1547). In spite of all his wars and his despotic exercise of power, this monarch rendered important services to French industry and commerce. He fostered agriculture, enlarged the silk industry, established carpet manufactories at Fontainebleau, placed post horses at the disposal of private individuals, made the Paris system of weights and measures uniform throughout the kingdom, revised the customs duties, reformed the taxes, and instituted consular tribunals at Lyons and Toulouse, which in 1565 were extended to all important cities in the realm. Francis I also increased the merchant marine and maintained a navy, so that the French flag was respected in many waters. By his order, Verrazano explored North America and Cartier entered the St. Lawrence. Furthermore, he concluded one of the most important treaties in the history of French commerce, viz., the Capitulations of 1536, signed with Solyman II of Turkey. By this treaty the French obtained not only the right of trading with the Ottoman empire, but they were also made amenable only to French law and French consuls in all civil and commercial cases arising in the sultan's dominions. The protection of France over all oriental Catholics was recognized, and the French flag was the only one from Christendom besides those of Venice and Hungary admitted into Mohammedan waters, and this flag was to protect all merchants who would invoke its aid and accept the jurisdiction of the French consuls.

137. The influx of precious metals from America and the religious wars served as two serious checks to the steady development of French industry and commerce. The government, ignorant of the true cause of the general rise of prices produced by the increase of gold and silver, applied the wrong remedy, prohibiting the export of many articles

THE "GREAT HARRY"

and fixing maximum prices. The protracted religious wars inevitably depressed manufactures and agriculture and checked commerce. A memorial in 1597 stated that the French artisans made four times as many woolen goods before these wars as they made in that year. The memorial also stated that more than a thousand English vessels laden with woolens, stockings, thread, boots, shoes, and other merchandise were then coming to France annually. The Dutch took even a greater advantage of the religious wars, and not only flooded France with their manufactures, but preyed upon French commerce. Thus the closing years of the sixteenth century found French commerce and industry between two sharp fires of Dutch and English competition, and suffering a serious decline on account of domestic troubles and the monetary crisis.

138. By the beginning of the sixteenth century English merchants were going in their own vessels to the Netherlands, France, Denmark, Germany, Spain, Portugal, and Italy. Henry VII (1485–1509) built the *Great Harry*, which was the beginning of the navy that defeated the Spanish Armada. This reign was also marked by several commercial treaties, giving greater commercial privileges to English merchants in various foreign countries, especially Denmark (1490) and Flanders (1496). A humble beginning was made in the English exploration of the New World by the voyages of the Cabots, but England was not yet ready to use her opportunities. The decline of the Hansa enabled the native English merchants to form stronger trading companies and secure a monopoly of much valuable foreign trade. For example, the Merchants Adventurers' Company, an outgrowth of an earlier company, was rechartered in 1505 and soon became quite powerful. Other trading companies also, which had grown up during the latter part of the Middle Age, were now quite flourishing, and profited by the decline of the Hansa.

139. During the reigns of Henry VIII (1509–1547), Edward VI (1547–1553), and Mary (1553–1558) there was a strange mixture of opposite economic tendencies in England. On the one hand, industry and commerce were deranged and checked by various wars and consequent high taxes, the religious troubles, and the bad economic policy of these rulers. The confiscation of the monastery and gild lands, and the turning of most of them into large sheep walks, threw nearly all of the former tenants out of employment, and the rents of such lands as were not thus converted were raised to a ruinously high pitch. In either case, pauperization was the result. The influx of precious metals from America and the frequent debasements of the currency, especially by Henry VIII, brought about a much higher general level of prices, which increased the sufferings of the laboring classes and helped to enlarge the army of paupers. On the other hand, the increased amount of wool grown on the confiscated lands, together with the much higher prices received for this and other products, gave a stimulus to English industry and foreign trade. The continued decline of the Hanseatic and Italian cities also enabled English merchants to play a more important part in foreign commerce.

140. The reign of Elizabeth (1558–1603) witnessed a rapid industrial and commercial development brought about by a combination of fortunate circumstances and wise policy. Never did a sovereign ascend a throne amid greater difficulties: dangerous political and religious divisions, social discontent, and an army of paupers. Elizabeth, however, managed to steer through these difficulties with admirable skill and diplomacy, keeping the various political, religious, and social factions under her control and, most of all, giving the country almost uninterrupted peace throughout her long reign. Under such conditions agriculture, manufactures, and commerce were bound to thrive, but a series of other

fortunate circumstances accelerated this development. For one thing, the power of Spain declined during this reign, and English sea captains and smugglers were not slow in gathering the fruits of this decadence. In the New World especially, England profited by the semipiratical expeditions of Drake, Hawkins, Frobisher, Cavendish, Davis, and Raleigh. Their voyages and those of numberless privateers increased England's wealth and opened the way for a more regular commerce with America. Bristol fishermen, profiting by Tudor bounties and Tudor laws designed to increase the consumption of fish,[1] began to compete quite actively with other Europeans in the cod fisheries of Newfoundland; by the middle of Elizabeth's reign as many as fifty English ships were making annual voyages to the Grand Banks. Other branches of trade were also opened with the Spanish American colonies. Unfortunately, Sir John Hawkins set an example in African slave trading that was followed all too readily by other Englishmen; but, iniquitous as was the traffic, it helped very greatly to increase England's wealth.

These early voyages to America stimulated many expeditions in other directions, and Elizabeth encouraged them by depriving foreign merchants of trading privileges in English ports and by granting monopolies to native merchants. English merchants now began to visit quite regularly the coast of Guinea for gold dust and ivory as well as slaves, thus undermining to a certain extent the trade of the Portuguese. The English also began to rival the Portuguese and others in the polar whale fisheries. Of greater import, however, were certain other ventures. Already an attempt had been made by the Willoughby expedition (1553) to find a northeast passage to the land of spices.

[1] For example, the law requiring all Englishmen to eat fish two days each week the whole year.

The expedition failed in its immediate object, but Chancellor, the commander of one of the ships, reached Archangel, where he took sledges to Moscow and obtained from Ivan IV permission for the English to trade freely in Russia. Thus was opened to the English the great market of Moscow, whither came, by way of the Volga and the eastern plains, the blue fox, ermine, and sable furs of northern Asia, the hemp, tallow, flax, cordage, tar, pitch, timber, skins, furs, and leather from various parts of Russia, and the products of central Asia. The Russian Company was organized in 1554 expressly for the purpose of carrying on this new trade, and during the rule of Elizabeth it became very active. A few years after its formation, Anthony Jenkinson, one of its leading directors, sailed down the Volga, passed through Astrakhan, and finally reached Bokhara. On his return he recommended that the company should not open this route on account of its length and the many obstacles to traffic along it; but the failure of this effort to establish direct overland trade with the Orient did not stop English trade with Russia, for, in spite of Dutch and Italian rivalry, England continued to make profitable exchanges there. The prosperity of Archangel, to be sure, was ephemeral, because the route from Russia to the West by way of the German markets was safer and more direct, but what England lost by the decline of Archangel was compensated for by pouring her goods into the German markets in exchange for the products of Russia, Germany, and the Orient. The rapid growth about this time of such English towns as Hull and Boston was due chiefly to the profits derived from this source. Another trading company that prospered during Elizabeth's reign was the Levant Company founded in 1581. This company exported considerable quantities of English cloths and metals to Turkey, Syria, and Asia Minor, and imported cotton, mohair, drugs, currants, and coffee. It

was reorganized in 1605, and lasted until the middle of the nineteenth century.

Another fortunate circumstance for English commerce during the reign of Elizabeth was the decay of Antwerp. Although Amsterdam inherited a large part of Antwerp's trade, London also secured a share. Stimulated by Elizabeth's liberal encouragement, Flemish merchants flocked across the Channel and helped to swell the trade of London. But England profited even more by the immigration of foreign manufacturers and workmen than by that of foreign merchants. Elizabeth sagaciously encouraged such immigration, and throughout her reign there was a steady influx of skilled workmen who fled from the civil and religious persecutions in Germany, France, and the Netherlands. These foreign artisans settled in Kent, Norfolk, and other eastern counties, and introduced or improved the manufacture of woolens, lace, hats, clocks, cutlery, and pottery. Manufactures during this reign were also taking root in western and northern England; western broadcloths, Manchester cottons and friezes, York coverlets, and Halifax cloth now began to figure in commerce.

During Elizabeth's reign the small farmers and farm laborers recovered somewhat from the bad economic policy of Henry VIII and his immediate successors, and English agriculture made quite substantial progress. This agricultural improvement was greatly favored by the prolonged peace, the restoration of the currency, the increase in the population, and the immigration of continental farmers. More capital was applied to the land, the breeds of horses and cattle were improved, fertilizers were used more intelligently, and new vegetables like hops, carrots, celery, and cabbage were introduced. The growth of woolen manufactures promoted sheep farming, not only among the great landowners but also among the middle-class farmers.

141. The progress made in agriculture, manufactures, and commerce during the reign of Elizabeth was attended by a marked improvement in the standard of living, which in turn stimulated manufactures and commerce. The queen's example was contagious, and encouraged showy dress, finer architecture, magnificent furnishings, and table luxuries, not only among the nobility but among the wealthy merchants. There was also a higher average standard among the middle and lower classes. Brick and stone houses replaced the previous wooden or wattled houses among all but the poorest classes. Chimneys and glass windows greatly improved the average dwelling. Carpets took the place of the former filthy rushes on the floor. "Pillows and cushions were found in all decent houses, and the quantity of carved woodwork of this period shows that men cared for something more than mere utility in their surroundings."

142. There was also a great improvement in food and sanitary conditions, which resulted in better average health, a lower death rate, and a decided increase in the population. The population of England at the time of the Domesday Book had been less than two millions; at the close of Edward III's rule it was still about two and one quarter millions; by the end of Elizabeth's rule it had increased to about five millions.

143. Position of England at the close of the sixteenth century. Thus, as we near the close of the sixteenth century, we find great changes in the relative industrial and commercial positions of England and other countries. The destruction of the Invincible Armada marked the end of the maritime and commercial supremacy of Spain; Portugal had been ruined by her reunion with Spain and other causes; Lisbon and Cadiz had even been pillaged by English squadrons. England, Holland, and France stood

One of the Spanish "Silver Fleet"

ready to take advantage of these changes; the sovereignty of the seas during the seventeenth century was to be disputed by these three powers of northwestern Europe.

144. The cardinal fact in the history of Germany during the first three centuries of the Modern Period, as well as during the Middle Age, was the complete political disunion existing there. During the Middle Age one fundamental cause for this disunion was the elective nature of the imperial office; but the political situation was not much improved in this respect, when, early in the fifteenth century, the empire became practically hereditary in the house of Hapsburg. This house was too much devoted to its dynastic interests and acquisitions of territory to do anything for German unity. So Germany was given over for several centuries longer to the conflict of jarring interests among several hundred petty princes and nobles. The free cities were decidedly the most progressive element in German political life; but as they were invariably opposed in interest to the nobles and princes, they only proved another hindrance to German unity. The Reformation made the situation still worse, for it divided Germany into two hostile camps. The religious dividing line corresponded generally to the geographical division of the country: the southern states remained for the most part Catholic, while the northern states, except the "bishop's row," adopted the Reformation. The tortuous policy of Charles V only tended to keep the two parties unreconciled and unsubdued. The Religious Peace of Augsburg in 1555, which was intended as a final settlement of the religious question, was far from successful. The underlying principle of this peace, which left the settlement of the religion of each state to the caprice of its ruler, doomed the measure to utter failure, as it did not in the least degree consider the interests and desires of the

people. Thus Germany was left a prey to a long and bitter struggle between the Catholic and Protestant parties, which culminated in the terrible Thirty Years' War, and this proved a most serious obstacle in the way of German industrial and commercial development.

145. The decline of the Hanseatic League was also a serious blow to German commerce and industry. When this league lost its monopoly in the commerce of the North, other countries, chiefly Holland and England, began to profit greatly at the expense of Germany. Some German towns, however, and some Prussian towns which were to become German towns, received a large share of the Hansa's trade.

146. Southern Germany. While northern Germany felt the effects of the decline of the Hansa more than southern Germany, the latter section also suffered from the same cause. Another important factor, however, entered into the decline of southern Germany during the sixteenth century. The towns in that section had previously thrived upon the trade coming from the Orient to the Italian cities and passing thence over the Alps, down the Rhine, and elsewhere throughout southern Germany. When most of this trade was diverted to Lisbon by the discovery of the cape route, the South German towns suffered with the Italian cities. The rich houses of Augsburg and Nürnberg tried for some time to divert a portion of the Portuguese commerce into Germany by way of Italy, but their efforts were not very successful. Erfurt, Brunswick, Köln, Aix-la-Chapelle, and many other towns that had been commercially important now became relatively insignificant. The commercial losses of some of these towns, however, were partially compensated for by their extensive banking business. Special local circumstances also retarded or prevented the decay of some towns. Frankfurt-am-Main, for

example, with her great fair, became for a time the most important inland town in Germany; Leipzig also continued to derive great profits from her fair, and became the greatest fur market in Europe.

147. Other causes for German decline. Germany also suffered much during the sixteenth century from the ravages of war. The Peasants' Revolt (1525) brought much plundering and produced very destructive effects upon industry and commerce. There were continual civil and religious conflicts, all of which were disastrous. The influx of precious metals also did particular harm to Germany by lowering the prices of the metals mined in her mountains, as well as by the derangement of her industry and commerce through the general rise in prices. Finally, the Peace of Augsburg caused many of Germany's best workmen to emigrate to other countries, thus weakening her industrial strength.

148. In the midst of this general decline, however, there were some encouraging signs. Beginning with the reign of Charles V, the imperial court became much more luxurious than before, and this tendency spread among the nobility and wealthy burghers. Even the cold and ascetic North thawed out somewhat and began to indulge in luxuries. The new demands stimulated German commerce and industry. Furthermore, some German industries retained their former importance in spite of all adverse circumstances; as, for example, the manufactures of weapons, hardware, and linen. Cotton cloth was still made on quite a large scale in southern Germany, but the finer varieties were rapidly being superseded by Flemish and French cottons. Hamburg and Bremen, commanding as they did the mouths of the Elbe and the Weser, seemed to thrive upon the general misfortunes of Germany; they became the great outlets for her exports and the inlets for imports. Much German

merchandise which had formerly found an outlet at Venice and Genoa, or down the Danube, now left the country from these great northern ports. Again, while many portions of Germany were suffering from the emigration of their skilled workmen, other portions were deriving a reciprocal advantage from the immigration of foreign refugees, especially the Protestants from France and Flanders. Saxony, in particular, under the wise policy of her rulers, profited by this foreign labor in her vineyards, mines, and linen and woolen manufactories. During the sixteenth century the North German merchants also had a part of the trade with Poland and Hungary. The characteristic products of those countries, and for a time also considerable quantities of oriental goods, were shipped from Breslau, Krakow, and Lemberg to Danzig, Königsberg, and Elbing, and carried thence by German, Dutch, and English traders.

149. The Scandinavian countries, as well as Holland, England, and France, profited by the decline of Spain, Portugal, and the Hansa. Sweden, in 1523, broke loose from the Union of Kalmar and made considerable industrial and commercial progress during the remainder of the century; but it was not until the seventeenth century that she was fairly started on her meteoric career of prosperity. Denmark, which still included Norway, made even greater progress than Sweden during the sixteenth century. Her characteristic industries — agriculture, cattle rearing, and dairy farming — were being well developed, and her foreign trade was extended.

150. Turning southward again, we find a sadly altered condition in Italy. The gradual occupation of the Levantine countries by the Turks had nearly ruined the trade of Bagdad. This, together with the capture of Constantinople by the same fierce people, had dried up the chief sources of the commerce of the Italian cities. The

discovery of the cape route diverted much of their trade to Lisbon, although, as we have seen, they made several attempts to check the growth of their new rivals, the Portuguese. These causes alone were quite sufficient to ruin the Italian cities, but the irony of fate brought still further calamities. In 1508 the League of Cambrai was formed against Venice by France, Spain, the emperor, and the pope, purely for plundering purposes. Then followed the numerous wars of foreign kings in Italy, who went there to fight out their endless quarrels. These wars resulted in the political overthrow of many of the old Italian republics, and completed the commercial and industrial ruin of nearly all of them. Venice, however, preserved her separate existence, and rendered an important service to Christendom during the sixteenth century by bravely continuing her great struggle against the Turks. In 1572 she won a signal victory over them at Lepanto, but by the close of the century her power, wealth, and commerce were greatly reduced, and she was a very different Venice from that of the thirteenth and fourteenth centuries.

151. The Netherlands came under the control of Spain as a result of three famous marriages that were destined to revolutionize the commercial, as well as the political, development of Europe. The marriage of Ferdinand and Isabella established Spanish unity; the marriage of Mary of Burgundy to Maximilian brought the Burgundian dominions, including the Netherlands, under the control of Austria; the marriage of Joanna, daughter of the first union, to Philip the Handsome, son of the second, united all the Austrian and Spanish territories, including those in the New World. The son of the third union ultimately inherited all these territories and, in 1519, became the Emperor Charles V.

152. None of the vast dominions thus suddenly brought together under one ruler were more important than, and none so rich and prosperous as, the Netherlands. We have seen what remarkable progress in civilization had been made there during the Middle Age. At the time of the accession of Charles V the Netherlands contained a busy population of about three millions, many rich cities and towns which thrived upon their prosperous manufactures and commerce, and a splendid system of agriculture.

153. Antwerp had already become the greatest commercial center of the country, as a result of a series of fortunate circumstances. In the first place she had inherited the trade of Bruges; secondly, the discovery of America had opened to her a large part of the carrying trade between Europe and the New World; thirdly, the discovery of the cape route, owing to the indifference of the Portuguese, gave the merchants of Antwerp the profits derived from distributing East Indian products throughout Europe after they were brought as far as Lisbon by the Portuguese.

154. For a time also, Antwerp and the other cities of the Netherlands continued to prosper and grow rapidly under Spanish rule. Charles V, born as he was in the Netherlands, always remained somewhat attached to his native country. While he hated the new religious ideas that were growing up there as a result of the Reformation, and gave some terrible exhibitions of this hatred, especially towards the close of his reign, he nevertheless protected and encouraged the commerce of his wealthy subjects in those provinces throughout most of his reign. Antwerp, in particular, continued to profit by the above-named fortunate circumstances, and now also derived great commercial advantages from the union of so many territories under Charles V, from the protection given by him to her commerce, and from several other favoring circumstances.

English, French, and German artisans fled thither to escape religious persecution. Great financiers and men of wealth settled there, bringing fresh capital and increased facilities for trade and manufactures; for example, the Fuggers and Welsers of Augsburg, and the Spinozas of Genoa. All the leading European banking houses established branches there: the Hochstetter of Augsburg, the Pentinger of Ratisbon, the Gualterotti and the Bonvisi of Milan, and the Peruzzi of Florence. The Antwerp stock exchange became the greatest center of financial operations in Europe. Her industries were numerous and flourishing; her tanyards and sugar refineries were the largest in Europe; her glassware rivaled that of Venice; her arms of every kind, her silver, gold, bronze, and other metal work were superior to those produced elsewhere; her woolen, linen, tapestry, fustian, silk, and carpet manufactures were very prosperous. The commerce of the city corresponded to her extensive manufactures. In the first place, she was the great outlet for all the products of the Netherlands: the woolens, linens, carpets, lace, leather, hardware, and other manufactures of her own artisans and those of Ghent, Brussels, Mechlin, Louvain, Courtrai, and other cities, as well as the vast quantities of fish and other products from the northern Netherlands. England sent thither, for distribution to various countries, her iron, lead, beer, cheese, furs, sheep, rabbit skins, and woolens; Scotland, her leather, wool, coarse cloths, and inferior pearls; Ireland, her hides, leather, and coarse woolens; Germany, her silver, quicksilver, copper, hardware, wool, glass, fustian, timber, furniture, wines, madder and other dyestuffs; the Scandinavian countries, their iron, copper, saltpeter, sulphur, potash, vitriol, amber, timber, tar, pitch, wool, flax, fish, honey, wax, hides, and leather. From France came salt, wines, copperas, wood, paper, gilded wares, silks, and other fine

stuffs; from Italy, raw and manufactured silk, gold and silver ornaments, embroidered brocades, Parmesan cheese, Lombardy rice, Levantine products (sponges, fruits, drugs, etc.), and Indian products (spices, sugar, cotton, and precious stones); from Spain, Portugal, and the Canaries, wool, leather, raw and manufactured silks, velvets, iron, soap, wine, vinegar, oil, and large quantities of East Indian products; from the New World, either directly or through Spanish ports, vast quantities of silver, gold, fine woods from Brazil, and Peruvian bark; from Africa, ivory and gold dust. It has been estimated that the annual volume of Antwerp's trade in her prime was about half a billion crowns.

155. Antwerp and the other cities of the Netherlands fared very differently under Philip II (1556–1598). His harsh and inflexible policy struck at both the consciences and the material interests of the Netherlands. He spent four years in the Netherlands immediately after his coronation, busily devising every conceivable method for rooting out the heresies of his subjects, and then left the fated provinces in charge of his half-sister Margaret, Duchess of Parma. This regent carried on the persecution of the Protestants with renewed vigor, which soon drove them to desperation. Taking up the national cry "Long live the Beggars!" in recognition of the epithet that had been contemptuously hurled against them by the Spaniards, the infuriated people broke out into wholesale riots. It is unnecessary to describe here the reign of terror that followed under various Spanish governors. It is chiefly important to note the terribly destructive effects of Spanish misrule upon the industry and commerce of the Netherlands, especially the southern provinces. Many thousands of the best citizens were killed and over one hundred thousand were driven into exile, vast amounts of property were confiscated or destroyed, many

oppressive taxes were levied, trade with the Iberian peninsula was prohibited, and Antwerp, Harlem, Leyden, and other cities were sacked. The net result of Philip's rule, therefore, was the commercial and industrial ruin of the cities of the southern Netherlands. Antwerp in particular was completely ruined, her commerce was gone, her busy streets were soon grass-grown and deserted.

156. While Spanish rule thus brought ruin to the southern Netherlands, it was the very impulse which brought forth a free and united Holland. The star of commercial empire which had hovered so gracefully over Antwerp moved but a short distance in the firmament and rested for a time upon the more prosperous neighboring city of Amsterdam, whose commercial career will be described in the next chapter.

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CHAPTER XVIII

THE DUTCH ASCENDENCY

157. The rapid material development of Holland during the war for independence was one of the most remarkable characteristics of that long and bitter struggle. During the very period that the Dutch were contending with Spain, then the most powerful nation in the world, they were steadily increasing in population and wealth, and their industries and trade were expanding at an astonishing rate. At the beginning of the war, the northern provinces of the Netherlands were far less populous and prosperous than the southern provinces, which remained loyal to Spain; at the close, the situation was completely reversed. Antwerp, the great commercial center of the Netherlands at the beginning of the reign of Philip II, was soon ruined, and the fortune of Antwerp was only typical of the general condition of the southern provinces at the end of the war. Much of their wealth was either destroyed by the ravages of war and Spanish misrule or was transported to Holland, England, and other countries; while their most skillful artisans and most enterprising traders emigrated to the same countries. On the other hand, by the close of the war, in spite of all its losses and ravages, the population of the northern provinces had increased to nearly four millions, which was considerably greater than that of both the northern and southern provinces at the beginning of the struggle. The northern provinces had already made some progress in manufacturing, especially in shipbuilding;

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but their chief industries were still cattle raising, dairy farming, and the fisheries. By the close of the struggle with Spain, however, the northern, or Dutch, provinces were exporting not only butter, cheese, and salted fish, but large quantities of manufactured goods. More vessels were built in the docks of Holland at this time than in all the other shipyards of Europe combined. The greatest expansion, however, occurred in their foreign commerce. The Dutch sailors had become the most skillful, enterprising, and daring that navigated the seas, and the Dutch merchants had extended their commerce into nearly every part of the known world. Corresponding to this material development was the equally remarkable intellectual progress made by the Dutch during this period. Rarely would one find in Holland at this time a person who could not read and write; colleges and universities existed in all the leading cities; some of the most distinguished scholars in Europe came from the Dutch provinces.

158. The reasons for this development are not hard to find. The war for independence was bound to produce a great exaltation of mind and purpose among all classes of the Dutch people, and this found a natural vent in larger and more enterprising industrial and commercial undertakings. Every military advantage was followed by some new commercial and industrial venture; every military loss developed greater hardihood and daring. This war was the very means by which the "beggars of the sea," already brave, venturesome, and skillful, gained new maritime experience and thus came to excel all other navigators. These "beggars" eagerly ventured into the most remote waters in search of helpless or poorly defended Spanish galleons laden with gold and silver from the New World or the rich products of the East. Furthermore, when Philip II, in prosecuting the war, prohibited all

trade between the Netherlands and the Iberian peninsula, he really rendered the Dutch merchants an inestimable service. Whereas, before this, they had been content to get their eastern products indirectly from Lisbon, they were now compelled to go directly to the East Indies for them. At the same time, the dependence of the Spaniards upon the Netherlands for much of their food and clothing made it comparatively easy for the Dutch to carry on an extensive smuggling trade with them. All along the coasts of the Iberian peninsula were found many people who were quite willing to help the Dutch draw their goods ashore from their smuggling vessels. On the other hand, be it said, there were not lacking Dutchmen, who, in their eagerness for driving a good bargain, so far overcame their patriotism as to render material assistance to their enemies by supplying them illegally with arms, ammunition, and other contraband of war. Throughout the war, therefore, many hundreds of Dutch vessels were busily engaged in illicit trade of various kinds with all parts of the Spanish dominions, and a large part of the enormous increase of Holland's wealth during this war is attributable to the constant activity of her army of smugglers.

There were other very evident causes for the rapid expansion of Dutch industry and commerce during the war for independence. Amsterdam received an extraordinary impulse from the immigrants and capital which came there from the fated city of Antwerp. According to contemporaries this rising commercial metropolis in the northern provinces had to be enlarged several times to accommodate the influx of immigrants. England, also, for a time rendered the Dutch great services. Not only did Elizabeth help them directly with money and finally with troops and ships, but indirectly she also aided the growth of Dutch trade. She developed the military marine of England rather

than the merchant marine, and thus left the carrying trade of the world for the Dutch to seize. For a time after her death the many troubles in England enabled the Dutch merchants to profit by that queen's naval victories over the Spaniards far more than the English merchants themselves. Likewise the reaction in France after the death of Henry IV (1610) enabled the Dutch merchants for a time to profit more than the French merchants by that monarch's victories over the Spaniards on the continent. A little later the Dutch were even assured the protection of the great French statesman and diplomatist, Richelieu. In short, in all parts of the world, during the struggle with Spain, the sea was left open for a clean sweep on the part of the Dutch, who took advantage of their boundless opportunities with great success.

159. The agricultural resources of Holland were, as already stated, one of the chief bases of her industrial life up to the beginning of the war for independence. Gradually, by an extensive system of dikes and canals, the Dutch had transformed an otherwise useless waste of swamps and barren sands into one vast garden of unsurpassed fertility. Here they produced large quantities of vegetables, cattle, butter, cheese, fruits, and flowers, which were a source of considerable wealth. During the wars with Spain and for some time thereafter the Dutch continued to develop their agriculture along with their manufactures, fisheries, and commerce; but the wars with Louis XIV made terrible inroads upon Dutch agriculture. Although there was an agricultural revival in Holland after the wars with Louis XIV, the Dutch gradually became more and more dependent upon other countries for their supply of raw materials, and even for a large part of their food, drawing these articles chiefly from the Spanish Netherlands, Germany, Scandinavia, Poland, Bohemia, Hungary, and Russia, all of which countries were accessible by river or sea routes.

160. The fisheries. For several centuries before the war for independence the Dutch had engaged quite extensively in the fisheries, this being in fact the chief industry of some provinces. Herring in particular were found in great abundance in many of the shoals of the Baltic and its islands, and at a very early date the fishermen of Zeeland and Friesland had learned the art of curing and salting herring and cod for export. Gradually the Dutch extended their fishing operations in all directions,—farther eastward along the Baltic, up the Norwegian coasts, to England, Scotland, and even farther. By the middle of the sixteenth century the annual haul was between eighty and ninety thousand tons, the value of which was about $3,500,000. The industry was by this time important enough to require the protection of nine war ships and to be made the subject of treaty between the emperor, Charles V, and James V of Scotland. The Dutch did not neglect the fisheries during their wars with Spain. By the beginning of the seventeenth century the value of the annual haul had increased to $10,000,000. In 1605 Sir Walter Raleigh estimated that three thousand Dutch fishing boats, with fifty thousand fishermen, came over to the English and Irish fishing grounds; the total number of Dutch vessels and men engaged in all the fisheries of the Baltic and North seas was undoubtedly several times as large. Towards the close of the seventeenth century the English Board of Trade estimated the annual value of the Dutch fishing industry at about $15,000,000.

In the course of time jealousies arose between the English and the Dutch fishermen. James I and Charles I therefore revoked the licenses for fishing in English waters, which the Dutch had enjoyed for several centuries. Partly in order to maintain Dutch rights to the North Sea fisheries, Grotius, in 1609, published his famous book, *Mare Liberum* (Open Sea). To this book the Englishman,

Selden, replied in his *Mare Clausum* (Closed Sea). The literary contest, however, did not settle the question. In spite of English restrictions the Dutch continued to fish in the disputed waters, and their fishing smacks were regularly accompanied by powerful naval convoys. In 1652 Admiral Blake defeated the Dutch convoy and captured many of the fishing boats. The war between England and Holland that followed (1652–1654) did great damage to the Dutch fishing industry. Gradually other rivals than England appeared, particularly Sweden and France, and consequently the Dutch fisheries declined rapidly during the eighteenth century.

About the middle of the sixteenth century the Dutch also began to push into the polar seas in search of whale fisheries, after having learned from the Basques the art of catching whales and boiling down the blubber. At first whales were found in large numbers around Spitzbergen, but about the middle of the seventeenth century the Dutch abandoned this whaling ground and went chiefly to Davis Strait and Greenland. In spite of all risks and expenses the Dutch whaling industry was for a long time very lucrative. This industry was supplemented by trade with the natives in bear and fox skins, which were readily obtained in exchange for hatchets, knives, copper kettles, and other cheap articles. In 1614 the Dutch government granted a monopoly of the whaling industry to a private corporation, but in 1642 it was thrown open to general competition.

161. Manufactures had been developed to some extent in various Dutch cities before the war for independence, but little more than enough for home consumption had been produced. The struggle with Spain, however, threw the Dutch more upon their own resources, and consequently the old manufactures were then developed more extensively

and new ones started. Even the more northerly provinces of Groningen, Friesland, and Overyssel were filled with various textile manufactories. To the southwest, Leyden became the greatest industrial, as well as the most learned city of Holland; her numerous factories were the center of the woolen industry of the country. Harlem became noted for her extensive bleaching yards and for numerous other industries; Delft and Gouda for their magnificent china ware; Utrecht for her velvets; Amsterdam for her marble works, oil mills, sawmills, soap factories, sugar refineries, diamond cutting, and tanneries. In many cities throughout Holland there were also extensive breweries and distilleries. For some time the Dutch textile industries were the most extensive and prosperous in the world; finer and better fabrics were woven in Holland than elsewhere. This industrial supremacy of Holland continued throughout the seventeenth century and was greatly aided by the influx of French artisans after the revocation of the Edict of Nantes (1685). One of the greatest and most prosperous industries of the Dutch was that of shipbuilding and naval supplies; Zaandam, situated on the narrow arm of the Zuyder Zee, was its greatest center. The Dutch built not only all of their own ships for their vast carrying trade, but also most of the vessels used by many other countries. After the decline of the Lisbon shipyards, those of Zaandam became the greatest in the world, employing many thousand men.

162. The Dutch in the East Indies and the Dutch East India Company. Although great as farmers, fishermen, manufacturers, and shipbuilders, the Dutch were even greater as merchants and bankers. During a large part of the seventeenth century their carrying trade was greater than that of any other nation, and Amsterdam was the commercial and banking center of the world. Their

commercial and financial ascendency may be studied best in connection with their two great trading companies, the East and West India companies, which we will now consider.

The first important ventures of the Dutch in the direction of the East Indies were made in connection with their celebrated searches for the northeast passage. The idea of finding such a passage seems to have been suggested to the Dutch by the famous Willoughby expedition starting from England in 1553. This expedition did not accomplish its intended purpose, but it did result in opening up a trade with Russia by which the Dutch profited quite as much as the English. When, in 1591, Philip II closed the port of Lisbon against the Dutch, and thus forced them to find a route of their own to the East Indies, the desire to find a northeast passage became much stronger, and three successive attempts were accordingly made, in the years 1594, 1595, and 1596. All these attempts were of course foiled by the severity of the northern climate, and their only tangible results were the discovery of Spitzbergen and Nova Zembla, which were utilized in developing the whale fisheries. But at the very moment that the Dutch explorers were icebound in these northern waters, another Dutchman, Cornelius Houtman, was imprisoned for debt in Lisbon. As this man had made the voyage to the East Indies several times while engaged in the Portuguese service, it was very desirable to obtain his release; this was finally accomplished with considerable difficulty by a newly organized company of Dutch traders, known as the Company for Foreign Parts. This company at once sent Houtman with a fleet of four vessels to open a direct trade between Holland and the East Indies. This explorer landed at Madagascar, India, Java, and several other islands of the East Indies, where he encountered many difficulties with the Portuguese and natives. Although he lost two of his ships and two

thirds of his men, he returned with glowing reports of the resources of these islands. The Amsterdam merchants therefore sent out another fleet, of eight vessels, in 1598, under the command of Admiral Van Neck, for the purpose of founding a permanent settlement at Java, which they intended to use as a basis for trade with India, China, Japan, and the East India islands. By alternate diplomacy and fighting with the natives, the Dutch managed to load four vessels with pepper, cloves, and valuable cloths in exchange for inexpensive Dutch wares and trinkets. These four vessels were then sent home, while the admiral sailed on to the Moluccas, where, with the aid of the natives, he succeeded in expelling the Portuguese from some of their settlements. After making favorable commercial treaties with the native princes and opening an extensive trade with Java and other islands, Admiral Van Neck returned to Amsterdam covered with glory and laden with riches.

The success of these first ventures naturally led other Dutch companies to fit out similar expeditions. Competition soon became so intense, however, and the various mercantile interests so conflicting, that it was decided to merge all the smaller companies into one large company. Accordingly, in 1602, the great Dutch East India Company was chartered by the states-general for a period of twenty-one years. The various companies thus combined represented a joint capital of about $2,500,000. The charter provided for a governor general and a council, in which each of the cities subscribing to the capital stock had representatives chosen indirectly from a list selected by the chief stockholders of each city. The council was invested with very extensive powers; it could declare war or make peace with eastern princes, erect forts, establish garrisons, and appoint administrative and judicial officers. The states-general, however, reserved the right of assuming future control of

the company, received a share of the profits, and required fees for each renewal of the charter, which fees were frequently quite heavy.

When the Dutch East India Company began operations in the East it found formidable rivals, not only in the Portuguese, but also in the English and the pirates of many nationalities who swarmed in this region. The depredations of the pirates were soon checked, although never wholly stopped. The struggles with the Portuguese were numerous and invariably fierce and bloody, but they were finally driven from nearly all of their eastern possessions except Macao: in 1615, from Amboyna; in 1651, from Malacca; in 1658, from Ceylon; in 1660, from the Celebes. For a time also the Dutch were triumphant over the English in the East, although the resistance of the latter was very stubborn. Gradually the Dutch obtained control of the Malay peninsula, most of the East India islands, and Formosa, whence they carried on an extensive trade with Siam, Indo-China, China, Japan, and the Philippines. In 1662 the Dutch were expelled from Formosa by an army of Chinese headed by Coxinga, who did this in revenge for the execution of his father as a pirate. After this, Java and the Moluccas remained the chief centers of Dutch trade in the East. Batavia, the "Pearl of the East," founded in 1619, became the capital of the Dutch colonial empire, where the governor general of the East India Company resided and controlled the eight vice governors established at Malacca, Macassar, Ternate, Amboyna, Banda, Coromandel, the Celebes, and the Cape of Good Hope. The profits derived from this trade in the East were enormous, especially the trade in pepper, nutmegs, cloves, sugar, rice, cotton, silks, fine woods, and precious stones. During the century beginning in 1620, the annual dividends of the East India Company were generally from twelve and a

half per cent to twenty per cent, and sometimes rose to fifty per cent, sixty per cent, and even seventy-five per cent. The capital stock of the company rose to about six hundred per cent and remained there for some time.

The many dangers from pirates, rivals, and other sources led the Dutch, like all great maritime powers that preceded them, to organize their trade very thoroughly. All trade was carried on by regular fleets, attended by powerful naval convoys, which left Amsterdam for Batavia three times annually, — in spring, autumn, and winter. These fleets usually carried bullion from the New World and Dutch manufactures suited to eastern wants, including cured herring, in return for which they obtained the many valuable products of the East. All this commerce was strictly and jealously monopolized by the company. Like the Spaniards, the Dutch, in order to defend their commercial monopoly, punished by death any one who made known the routes of their navigators. After securing maps of their islands they carefully guarded against their publication. Any captain showing these maps to strangers, even in dangerous regions, was liable to punishment with the rod, branding, and banishment. Pilots were not even allowed to strange ships in distress. On the other hand, the Dutch did not use their colonies quite so much in the mere spirit of exploitation as the Spaniards and Portuguese had done, but generally fostered the native industries. Instead of forcing the natives to buy what they did not want, they stimulated among them a desire for European goods, and this desire encouraged native production as a means of securing the desired commodities. Yet the Dutch came far short of developing an ideal colonial policy; their colonies were always subjected to extortions, and were regarded too much as mere feeders and places for quickly amassing fortunes to be taken back to the mother country and spent there.

163. The Dutch West India Company, like the East India Company, was an outgrowth of numerous previous enterprises on the part of individuals and smaller companies. Before they revolted from Spain, the Dutch had been allowed certain commercial privileges in the New World and from the first had enjoyed a portion of the trade with America. Under the protection of Charles V various Dutch companies had traded with the West Indies and parts of the western coast of Africa. Spanish governors in the New World were frequently glad to admit Dutch vessels, because they thus secured useful commodities cheaper than those furnished by the home government. An extensive smuggling trade was thus developed even before the Dutch revolted from Spain. By 1579, the year of the Union of Utrecht, one hundred and twenty ships from the Netherlands were engaged in the West India trade, and this trade was extended very rapidly during and after the war for independence, as a means both of profit and of attack on the power of Spain. One of the first Dutch settlements in America was that made in 1590 on the Demerara River in Guiana. A little later, in 1609, Henry Hudson, an agent of the Dutch East India Company, while seeking a northwest passage to the East Indies, discovered the river which now bears his name. This new region was promptly claimed by the Dutch, and in 1610 some enterprising Amsterdam merchants fitted out a ship to trade with the natives. This voyage was so profitable that in 1614 a fort was erected at New Amsterdam, and a little later forts Orange, Hartford, Good Hope, and others were built in this region. In the meantime, in another part of the world, the Dutch were extending their operations. The island of Principe, in the Gulf of Guinea, was seized from the Portuguese, and in 1612 a settlement was made on the Gold Coast. Thus far the various Dutch enterprises in the New World and

western Africa had been carried on by individuals or small companies. As they had been attended with a good many risks and dangers it was found advantageous, in 1621, to merge them into the great West India Company. The charter of this company granted exclusive trading privileges over about two thirds of the globe for a period of twenty-four years, and endowed it with powers practically the same as those enjoyed by the East India Company.

At first the new company traded chiefly with New Amsterdam, San Domingo, and Cuba, but it soon began an aggressive campaign against all rivals in the New World. In 1623 Bahia was seized from the Portuguese, and a little later Pernambuco was also captured. Bahia was recovered for a few years by the Portuguese, but in 1631 a Dutch fleet of sixty vessels recaptured the place. By 1643 the company had conquered about one half of the Portuguese territories in the New World. Dutch ascendency in Brazil, however, was short-lived ; misgovernment, neglect, lack of military discipline, and enervating practices among the planters soon weakened the Brazilian provinces. In 1654, during the war with England, the Dutch colonists were obliged to surrender their last Brazilian fortress to a Portuguese rebel who was secretly aided by the Portuguese government. In 1660 Holland renounced all claim to this territory, although Dutch merchants continued for some time to share with England nearly all of the carrying trade between Brazil and the rest of the world.

In the settlements along the Hudson and the neighboring coasts the West India Company made rapid progress for a time, only to have this territory torn from them by their great rivals, the English. An active fur trade was carried on with considerable profit to the company. The splendid harbor at the mouth of the Hudson was used as a refuge for the fleets which protected the Newfoundland

fisheries and also for those which preyed on Spanish vessels in the New World. But rivals soon appeared in the region of the Hudson. The Swedes erected numerous forts, and between 1620 and 1640 the English crowded rapidly into New England. Naturally there were many contests between these rivals, and the Dutch seem to have made the mistake of scattering their strength instead of centering it upon the strategic key to this region, viz., the mouth of the Hudson. For a time, however, the Dutch and Swedes successfully made common cause against the English settlers, but in 1654, during the war between England and Holland, the Swedes turned against and overpowered their former allies. The Dutch, however, returned in triumph the following year, drove out the Swedes, and remained supreme in the region of the Hudson until 1664, when New Netherlands was taken by the English. Although New York was recaptured by the Dutch in 1673, their occupation was very brief and New York was soon ceded to England.

While Brazil and New York were thus lost, the Dutch West India Company succeeded in paying very high dividends to its stockholders, though by somewhat questionable methods. Its chief profits were derived from the African slave trade, smuggling, privateering, and piracy, rather than true commercial enterprise. In 1630 the Portuguese were driven away from the coast of Guinea, and the Dutch took possession of the settlements at Angola, Arguin, and Gorée. From that time on, the company made considerable profit from the gold found on this coast, but much greater profits from the trade in African slaves. In 1634 Curaçao, a very small, unfertile, and rock-begirt island lying in the Caribbean Sea, about ten miles from the mainland, was captured from the Spaniards. It did not take the Dutch very long to discover the great value of this island, with its secure and easily defended harbors, as a station for

contraband trade. Curaçao, therefore, soon became the great smugglers' den of the New World. Throughout all the wars of the seventeenth and eighteenth centuries, fleets sailed openly from this island laden with contraband goods, and no one can estimate the number of vessels that secretly crept in and out even in the face of watching war vessels. This island was not only used as a basis for a vast smuggling trade but as a refuge for Dutch privateers. During the years 1623–1636 the company fitted out eight hundred privateers, which captured nearly six hundred Spanish and Portuguese merchant ships, including the celebrated "silver fleet" captured in 1628, which, according to Dutch estimates, was laden with treasure worth $6,000,000. As a result of these various questionable activities the company was able for some time to pay annual dividends ranging from twenty-five to one hundred per cent. These operations were perhaps partly justified by the belligerent conditions then existing, but there can be no doubt that the fabulous profits made in these illegitimate ways tended to unfit the company for more regular commercial enterprises. The Peace of Westphalia (1648), which formally concluded a long period of warfare between the Dutch and Spaniards, placed a check upon Dutch privateering and smuggling. It is not surprising, therefore, that the profits of the company dwindled thereafter very rapidly, and it was hardly to be expected that stockholders who had fattened for so long a time on illegitimate profits would take much interest in the more serious task of developing a regular commerce out of the meager pioneer conditions then existing in the New World. By 1674 the company had become bankrupt, and although a new one was created, it was no more successful than its predecessor in developing a profitable regular trade. Accordingly, in 1734 the states-general decreed freedom of trade with the New

World subject to a two per cent *ad valorem* duty. This decree seriously crippled the new company, and it died a natural death in 1790.

In only one part of the New World did the Dutch succeed in maintaining a permanent foothold, and this was in the most unpromising region exploited by the West India Company, viz., in Guiana. In the unhealthful marshes of that region the patient, sturdy Dutch colonists performed almost the same miracle that their ancestors had already performed in the inhospitable home land. Gradually canals were dug, dikes constructed, and swamps drained; in time the Dutch colonists were rewarded with abundant crops of sugar, coffee, indigo, cotton, tobacco, and cocoa. In 1667, by the Peace of Breda, the English in partial recompense for their seizure of New Amsterdam, surrendered Surinam to the Dutch; therefore, except for the brief period from 1795 to 1802, the Dutch settlements in Guiana remained in Dutch hands, and are still under the control of Holland.

164. Dutch banking and stockjobbing. The asylum afforded in Holland to all political and religious exiles attracted thither not only large numbers of mechanics, artisans, and merchants, but also vast quantities of capital. This, together with the large accumulations from home industry and foreign commerce, brought the current rate of interest down to three per cent by the close of the seventeenth century; at the same time it was over eight per cent in England and France. Another fortunate circumstance was the emigration of large numbers of Jews from the south of Europe to Holland. These Jews not only brought considerable capital into the country but, through their connection with Jews in the Orient, were able to aid the Dutch in extending their commercial and banking relations in that direction. As a result of these and other favorable circumstances the Dutch soon became the bankers

of the world, and retained that position far into the eighteenth century. Whenever a foreign government wanted to borrow money for its wars or other undertakings, whenever responsible private corporations and individuals, either native or foreign, wanted to borrow money for vast enterprises, either in the Old or New Worlds, they invariably turned to the banks of Amsterdam for loans. As late as the middle of the eighteenth century the banks of Holland held claims upon foreign debtors amounting to over $1,000,000,000. But there was another and darker side to Dutch financiering, and that was inordinate speculation. A very good illustration of this is found in the "tulip mania," one of the strangest speculative aberrations known to history. As the Dutch were great horticulturists, and the cultivation of the tulip was an especially favored pursuit, it is not strange that they should carry on a considerable traffic in tulip bulbs and flowers; but it is somewhat surprising in the middle of the seventeenth century to find the whole country going crazy in speculations on the values of various famous bulbs. One variety, called the Viceroy, sold for $1000; another, Semper Augustus, for over $2000. Speculators began to buy and sell bulbs according to their hypothetical values, and thus the prices continued to soar. In a few weeks one speculator gained $25,000; fortunes were soon made and lost. Finally the bubble burst and a panic ensued. The extent of the suffering may be judged from the fact that about $4,000,000 was invested in tulips. The stock exchange of Amsterdam also witnessed many other speculations during the seventeenth and eighteenth centuries, all of which had the usual effect upon stable business operations.

165. Decline of Dutch commerce. The seventeenth century may be said to belong commercially to the Dutch, as the sixteenth century had belonged to the Portuguese and

Spaniards. But during the whole of the eighteenth century the commercial power of Holland declined and at nearly every point gave way to her greatest rivals, the English and French, chiefly the former. Already signs of this decline had appeared in several unsuccessful struggles with these rivals, but the decline became more rapid and serious with the advent of the new century. At the very outset of this century the War of the Spanish Succession crippled Dutch manufactures and commerce. During this war the French merchants stole some profitable trade from the Dutch, but, more to the point, England gained enormously in prestige, in agriculture, manufactures, and commerce, and also made some very important territorial acquisitions. England now began to outstrip the Dutch in the trade with Portugal, Brazil, Russia, Sweden, and Denmark. In like manner England and France now rapidly gained on Holland in the trade with the Mediterranean countries and India. Furthermore, Dutch manufactures were discriminated against in England and France by import duties so high as to be practically prohibitive. To make the situation worse, Holland now felt keenly her scarcity of raw materials more than ever before. Wars and other causes had led to very heavy taxes, decreased the number of laborers, and raised wages, thus injuring her industrial efficiency and power to compete with other manufacturers. Commercial decline inevitably followed industrial decline and the other causes noted. But Holland still retained for a time her financial supremacy, owing to the large amount of capital accumulated during the period of her industrial and commercial ascendency.

References. — *Cunningham*, Western Civilization, II, 196–206 ; *Morris*, The History of Colonization, I, 300–360 ; *Gibbins*, History of Commerce in Europe, 109–113, 127–128 ; *Yeats*, Growth and Vicissitudes of Commerce, 202–245 ; *Rogers*, The Economic Interpretation of History ; *Marchant*, Commercial History.

A French Vessel of the Early Modern Period

CHAPTER XIX

THE STRUGGLE FOR SUPREMACY BETWEEN ENGLAND AND FRANCE

166. Introduction. In the seventeenth century Holland, England, and France contended for the maritime and commercial supremacy of the world; during the first half of the century Holland attained that position; during the latter half, as we have seen, her power began to wane, while England nearly reached first place, with France rapidly becoming second in the race. Early in the eighteenth century Holland dropped out of the race, and the struggle for supremacy was then chiefly between England and France, with a few other nations, like Denmark and Sweden, rising temporarily into prominence. Before describing this struggle we must briefly outline the economic development of England and France during the seventeenth century.

167. France during the seventeenth century. The civil and religious wars in France during the latter part of the sixteenth century had caused a great loss of life and property, and in many other ways had been disastrous to agriculture, manufactures, and commerce. Fortunately, however, Henry IV (1594–1610), guided by the advice of Sully, Laffemas, Olivier de Serres, and others, was able to rescue France from her miserable condition. Order was restored, the Edict of Nantes was issued (1598), the government finances were reformed, taxes were reduced, certain provincial duties and tolls and the restrictions on exporting grain were removed, old roads were repaired

and new ones built, a system of relays was created, river and harbor improvements were made, the Briare Canal was completed, shipbuilding and certain other manufactures were encouraged, waste lands were reclaimed, model farms were established, books on agriculture were circulated, and commercial treaties were negotiated with England, Spain, Holland, the Hanseatic League, Morocco, and Turkey. As a result of these and other measures there was a rapid economic revival: French farmers soon took the lead in European agriculture and held that position until they felt the blighting effects of Louis XIV's wars, some important manufactures thrived; and a considerable foreign trade and a still more active domestic commerce were developed. After the assassination of Henry IV, France was threatened with two serious dangers, (1) a general revolt of the nobles and (2) the attempted organization of a Protestant republic in the south; for a time it seemed as if there would be a relapse into feudal barbarism and civil war. These dangers, however, were averted by Richelieu (1624–1642), who obtained the loyal support of the masses and continued the work begun by Henry IV. This capable administrator took a special interest in French commerce and shipping: he removed the prohibitions which had prevented noblemen from engaging in commerce; he forbade the exportation of French merchandise, except salt, in foreign vessels; he levied retaliatory duties upon the goods and ships of foreign countries; he made extensive river, harbor, canal, and road improvements; he did his utmost to create a merchant marine; he organized two war fleets for the protection of French commerce; he negotiated numerous commercial treaties; he gave the French postal system a definite organization and established a service of messengers, coaches, and wagons throughout the kingdom. Under Mazarin (1642–1661), France suffered another

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economic reaction. Great as a diplomatist, this statesman continued the foreign policy of Richelieu with marvelous success; but his domestic policy was a dismal failure, and his administration was therefore a very critical period for French industry and commerce. Fortunately, when he died his place in internal administration was taken by Colbert, a man splendidly qualified by native ability, training, and experience to build upon the foundations laid by Henry IV, Sully, and Richelieu. The government finances were again reorganized and public burdens equalized; millions were lavished on roads, bridges, river and harbor improvements, coast defenses, and canals, the most important of which was the Languedoc Canal; the merchant marine and navy were greatly enlarged and improved and French shipping encouraged in various other ways; numerous commercial treaties were negotiated and foreign merchants were encouraged to settle in France; effective police regulations were established in the French ports; the law of maritime contracts was revised and the admiralty jurisdiction regulated; agriculture was encouraged by reclaiming waste lands, by the importation of foreign breeds of cattle, sheep, and horses, by creating a better home market, and by many other practical measures.

Colbert's leading idea was to make France industrially self-sufficient, and his most characteristic work was the establishment of a thorough system of protection for native industries. He found many industries declining and France flooded with foreign wares, and he attributed this to the lack of governmental encouragement. Accordingly, in 1664 and 1667 he carried through two comprehensive protective tariffs. He also spared no expense in buying the industrial secrets of other nations and in attracting their most skillful artisans to France; prizes were judiciously offered for the best workmanship, and heavy fines were imposed for

manufacturing inferior articles; liberal loans were made by the government to manufacturers. Colbert's protective system was excessively paternal in many ways, for the government went so far as to dictate the methods of manufacturing, and even the dimensions, qualities, colors, and fashions of the articles made; but whatever may be thought of this or that feature, or the ultimate effects of his industrial policy, there can be no doubt that French industry prospered during his ministry far more than ever before. It was an opportune moment for such a policy. The preponderance in European politics just assured to France by the treaties of Westphalia (1648) and the Pyrenees (1659), and the increasing brilliancy of Louis XIV's reign, had inspired the nation with unusual confidence in itself. All the industrial forces of France were ready for a new onward march. Colbert came into power at the right moment to give direction and encouragement to these forces, and his protective system admirably supplemented them. France became covered with thriving workshops; many French cloths soon had no rivals in Europe; the linens and serges of Holland, the laces, silks, velvets, and glassware of Italy, the carpets of Persia and Turkey were now equaled in France; the tapestries of Flanders were surpassed by those of the Gobelins; sugar refineries were numerous in Marseilles and along the Loire; French papers, hats, stockings, porcelains, leathers, steel, and hardware were also famous. Foreign and domestic commerce, as well as manufactures, prospered during Colbert's brilliant administration. France traded extensively with Holland, Flanders, England, Italy, Spain, Portugal, and the Levant, and to a lesser extent with Germany, Denmark, Norway, Sweden, Russia, America, northern and western Africa, and the East Indies.

168. French colonization during the seventeenth century. Although Basques and Normans had frequented the

Newfoundland fisheries from the first part of the sixteenth century, if not earlier, the French did not make any permanent settlement in North America before the reign of Henry IV. The expeditions of Cartier and Roberval (1534–1540), Ribault (1562), and Laudonnière (1563) failed, as did also the first ones sent out by Henry IV (1598–1604). In 1608, however, Port Royal was reoccupied, Quebec founded, and the colony of New France established. The death of Henry IV and other causes checked French colonization, and little more was attempted until Richelieu tried to awaken an interest in such enterprises by creating various trading companies. Even under Richelieu's stimulation little was accomplished, and the colonies were almost entirely neglected by Mazarin. Colbert, like Henry IV and Richelieu, dreamed of a French colonial empire and formed five great trading companies: (1) the West India Company, (2) the Senegal Company, (3) the East India Company, (4) the Company of the North, and (5) the Levant Company. A few settlements were made in the West and East Indies, Guiana, and western Africa, the Great Lake region and the Mississippi valley were explored, the Newfoundland fisheries and the fur trade were stimulated; but Colbert, like his predecessors, failed to awaken any great enthusiasm for colonizing enterprises, and after his death the colonial ambition of France was for a time completely stifled by the love of military glory.

169. The later years of Louis XIV. The death of Colbert left French industry and commerce under the personal control of a king influenced almost entirely by evil favorites. Guided by them, Louis XIV revoked the Edict of Nantes (1685) and plunged into his later wars, all of which were foolish and disastrous. The first of these measures crippled French industry and commerce very seriously, because the greatest merchants and manufacturers and most

of the best artisans were Protestants and fled from the country in numbers variously estimated from two hundred and fifty thousand to five hundred thousand, most of them going to London, Amsterdam, Geneva, and Berlin. Many of the manufacturing districts of France were almost depopulated, and the secrets of successful manufacturing, which had been patiently accumulated for many generations, were now suddenly revealed to other countries. The later wars of Louis were also terribly destructive to French agriculture, manufactures, and commerce. The ravages of these wars, the increased taxes and imposts, and the multiplication of useless offices, which were filled with incompetent debauchees of the corrupt court, completed the destruction begun by the revocation of the Edict of Nantes.

170. England during the seventeenth century. Many of the influences that had aided the growth of English manufactures during the latter part of Elizabeth's reign continued to operate throughout most of the seventeenth century. The tide of immigration from the Netherlands continued, and another one set in from France after the revocation of the Edict of Nantes. In this way many thousands of skilled workmen and large quantities of foreign capital were brought into the country; about fifty thousand came from France alone, bringing with them about $15,000,000. Furthermore, during the seventeenth century England enjoyed a prolonged peace, for with the exception of the parliamentary war there were few conflicts on home soil, and even that war was fought without much injury to English industry. On the other hand, the continental nations were almost continually engaged in very wasteful wars. The manufactures of Germany were ruined by the Thirty Years' War; those of Flanders had already been nearly destroyed by the Spaniards, and their ruin was soon

completed by the wars of the seventeenth century; those of Holland and France were also seriously crippled by the later wars of Louis XIV. The English government also tried to encourage manufactures by high protective duties, by the removal of many duties on raw materials, and by prohibitions on the exportation of such raw materials as could be used by English manufacturers. English commerce also made steady progress during the first half of the seventeenth century, and during the latter half this development was quite rapid. Most of this trade was conducted by great trading companies, such as the East India Company, the Levant Company, the Muscovy Company, the Eastland Company (trading with Baltic countries), the French Company, and the Merchants Adventurers' Company (trading with Germany and the Netherlands). Other companies and individual merchants traded with Spain, Portugal, Italy, and other Mediterranean countries. The establishment of a government postal system (1656), the creation of the Bank of England (1694), and the reform of the currency (1698) during this century proved very beneficial to English industry and commerce. During the second half of the century the annual exports of England increased from about $10,000,000 to about $30,000,000. It is important to note that English manufactures were now rapidly taking the place of raw wool as the leading export. English agriculture was on the whole very prosperous during the seventeenth century. Wool was still the most important product, but increasing quantities of grain, hops, flax, hemp, turnips, clover, and other root crops were grown; important treatises on agriculture were published, and rational methods of cultivation and fertilizing were much more generally employed; extensive inclosures of common lands were made, and vast tracts of waste land, especially in the Fen Country, were reclaimed.

171. English colonization during the seventeenth century. All the English attempts to colonize the New World during the Tudor period had, as we have seen, been unsuccessful. It was not until the Stuart period that English colonization took root in this region, and even then its growth was slow at first. Although last in the field, however, the English were ultimately far more successful than other nationalities. The English emigrants soon freed their minds of illusions regarding the fabulous riches to be found in America, and settled down to the steady work of pioneers, quite willing to endure all the necessary hardships. And well they might do so, for the mother country offered little but starvation and persecution to most of the poor emigrants who crossed the stormy Atlantic. In the New World they could at least be free and eke out a livelihood by hard work, for most of them were brave, sober, industrious, religious, and tenacious of their liberty. Step by step, therefore, in the face of all manner of difficulties, the sturdy English colonists conquered the American wilderness. One by one, in almost uninterrupted succession, colonies were established that were to endure: first in Virginia; then in Massachusetts; later in the century in Connecticut, Rhode Island, New Hampshire, New York, Pennsylvania, New Jersey, Maryland, Carolina, the West Indies, and other islands. For some time there was a wedge of foreign colonists driven in between New England and the southern colonies, but this was removed in the latter part of the century by the conquest of New Netherlands, thus giving a continuous coast line to England's continental possessions in America and removing one of the most important bases of operations from her great rival, Holland. During the seventeenth century England's island colonies in America were of far more commercial importance than those on the continent. In most of the islands the

cultivation of tobacco, sugar, indigo, allspice, and cocoa was developed quite rapidly, and England was thus released from her dependence on Spain and France for these articles. The sugar industry became especially important and enabled England to control the sugar market of the world during the seventeenth century. On the other hand, population increased quite slowly in most of the continental colonies; in 1700 their total population, white and black, was only two hundred and fifty thousand, less than that of Barbados alone. Furthermore, English restrictions[1] interfered much more seriously with the commercial and industrial development of most of her continental colonies than with that of her island colonies. In spite of all obstacles, however, the continental colonies made some economic progress during the seventeenth century. The tobacco industry of Virginia and Maryland was already being developed, and England received a large share of the exports of this article. By the close of the century Virginia was sending annually fifteen million pounds of tobacco to England alone, and the amount was increasing steadily. During the last decade of the century, the rice industry was developed quite rapidly in Carolina. At first most of the rice went to Spain and Portugal, but some went to England. Some lumber was also shipped to England from the southern colonies. England sent her own manufactures to these colonies in return for the above raw materials. The trade with the northern and middle colonies was even more limited, being confined chiefly to skins, furs, lumber, and fish, as other articles were generally excluded from England by high duties. The trade of these colonies was largely a "three-cornered" one, most of the money to pay for English manufactures being derived from their exports to other countries and colonies. In 1687 a French

[1] *Cf.* Part IV, chap. xxvii.

Protestant refugee, writing from Boston, said: "This town carries on a great trade with the islands of America and with Spain. They carry to the islands flour, salt beef, salt pork, cod, staves, salt salmon, salt mackerel, onions, and oysters salted in barrels, great quantities of which are salted here." In general it may be said that New England sent her best fish to Spain, Portugal, and sometimes to other Mediterranean countries, and received in return salt, money, and some manufactures; she sent to the island colonies of England, France, Holland, and Spain her poorer grades of fish and considerable quantities of lumber, staves, masts, horses, cattle, beef, and pork, receiving from them molasses, sugar, rum, and money. Similarly, the middle colonies sent to the West Indies flour, bread, peas, bacon, pork, beef, butter, cheese, cattle, horses, and lumber, and received about the same articles that New England did. During the seventeenth century the English fishermen were gradually supplanting the French on the mainland of Newfoundland, and thus supplied England and other European markets with large quantities of fish. Farther to the north enterprising English traders carried on a thriving traffic in skins and furs. In 1670 the Hudson Bay Company was given exclusive control of this trade, and it established numerous trading posts and forts at the mouths of the rivers Rupert, Moore, Albany, Nelson, and Churchill. French war vessels occasionally wrought great havoc there, but the Treaty of Ryswick (1697) left the English in undisputed possession. In Nova Scotia the English accomplished very little during the seventeenth century except mixing to a slight extent with the French population.

For a long time the English did not venture into the East Indies on account of the superior strength of the Portuguese and the papal bull giving the latter power exclusive possession of that region; but the decline of Portugal and

the weakening of the pope's authority in England by the Reformation removed these barriers. In 1582 Captain Stephens sailed to India by way of the Cape of Good Hope, and his voyage was followed by the more famous one of Cavendish, who went to the Philippines and returned richly laden with eastern products (1586–1588). The glittering reports of these voyages soon inflamed the daring and venturesome spirits of England with the desire to imitate them. In 1593 fuel was added to the flame by the capture of a large Portuguese ship filled with gold, spices, silks, pearls, drugs, porcelain, and ivory. In 1600, therefore, the great East India Company was chartered by Queen Elizabeth, and five small ships were sent out the next year under Captain Lancaster. This expedition, and two others which soon followed, proved unexpectedly successful; but the enthusiasm soon waned, and for many years thereafter the English trade with the East Indies was quite limited, largely on account of Dutch rivalry. After a struggle between the two nationalities in the islands of the Far East, a tacit agreement seems to have been made by which the English were to occupy the Indian peninsula and the Dutch the islands and mainland farther east. In 1612, therefore, the English obtained permission from the Great Mogul at Delhi to erect a factory at Surat. The Portuguese were soon driven away from this region and from most of the Malabar and Coromandel coasts, while English trading posts were established at Calicut, Masulipatam, and even at Delhi. In 1640 Fort St. George (Madras) was built and soon became an active trading center; in 1645 factories were established in the Bengal district. The company, however, did not make very rapid progress in India until after the Restoration. Charles I and Cromwell were too much occupied with other questions to give much attention to Indian affairs, and the stock of the company fell to sixty

per cent during this period. On the other hand, after the Restoration the affairs of the company were intrusted to the management of Sir Josiah Child, once only an errand boy in a countinghouse, but now one of the most eminent business men and economists in England. Under his efficient management the company's stock soon rose to three hundred per cent and even higher. In 1662 the English aided the Persians in capturing Ormuz, the chief Portuguese depot in the East at that time. This city was razed to the ground and opposite its site was created a new port, through which the English developed valuable commercial relations with Persia. In 1663 Bombay was obtained by Charles II as a wedding gift when he married the Portuguese princess, Catharine of Braganza, and five years later he gave it to the company. In 1689 Calcutta was ceded to the company by the Great Mogul, and this became an important station protected by a strong fort, named Fort William in honor of the new king. For a time the Revolution of 1688 threatened the extinction of the East India Company. A fierce war was waged on its monopolistic privileges by a large body of merchants who had long wished to compete in the Indian trade. This struggle culminated in the creation of a rival company (1698), but after a few years the older company wisely agreed to go into partnership with the new one. Accordingly, in 1702, the two companies were consolidated into the United East India Company.

172. Relative position of England and France at the opening of the eighteenth century. During the administration of Colbert and the years immediately following, French industry and commerce thrived in common with that of England; both countries were gaining rapidly at the expense of Holland. The blunders of the latter part of Louis XIV's reign, however, proved very disastrous to France. While the War of the Spanish Succession (1701–1714) enabled her

to seize some of Holland's carrying trade in the two Indies and the Mediterranean, it, together with Louis XIV's other blunders, crippled her agriculture and manufactures, seriously checked the growth of many parts of her foreign trade, and left her bankrupt with a public debt of about $500,000,000 and an annual deficit of $16,000,000. England, on the other hand, had gained upon Holland, during nearly all of the latter half of the seventeenth century, far more rapidly than France, and she, moreover, continued to prosper after France began to decline. Her colonies were multiplying and increasing their resources, and her trading companies were extending their mercantile operations into every part of the world. The opening years of the eighteenth century gave England still further advantages over both her great rivals. In 1703 the Methuen Treaty was signed with Portugal. By this treaty British woolens were admitted into Portugal and her colonies, while Portuguese wines were admitted into England at two thirds the duty on French wines. This was a blow at both France and Holland, for both countries were sending considerable quantities of goods to Portugal, while Holland enjoyed a monopoly of her carrying trade and that of her colonies. Of course this treaty increased England's trade with Portugal and Brazil, but it soon destroyed most of her trade with France and fanned the flame of commercial rivalry between these two countries. The Act of Union with Scotland (1707) was another advantage to England in her race for supremacy by providing reciprocal freedom of trade, by freeing English commerce from the danger of hostile Scotch legislation, and by adding the rapidly developing resources of Glasgow to the national wealth. The War of the Spanish Succession also proved a blessing rather than a curse to England; during its progress her farmers, manufacturers, and merchants were unusually prosperous, and the growth


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Scotland
Edinburgh
KINGDOM OF
GREAT BRITAIN AND IRELAND
Belfast
Dublin
Ireland
North Sea
ATLANTIC
OCEAN
England
London
Amsterdam
Utrecht
Brussels
Netherlands
Fontenoy
R. Seine
Paris
Versailles
Metz
Belfort
Neufchatel
KINGDOM OF
FRANCE
Orange
(To France)
Avignon
Barcelona
KINGDOM OF
Madrid
Lisbon
KINGDOM OF PORTUGAL
R. Tagus
SPAIN
Balearic Isles
Minorca
(To England)
Majorca
Iviça
MEDIT
Gibraltar
(To England)
AFRI
EUROPE
after the Treaties of
UTRECHT AND RASTADT,
1713-1714
Boundary of the Empire.
0 100 200 300
Scale of Miles.
M. N. ENG., BUFFALO.
10 Longitude West
Longitude East 5 from G


KINGDOM OF
SWEDEN
Copenhagen
NORWAY
Baltic Sea
Königsberg
Prussia
Stralsund
Pomerania
Prussia
Bremen
Verden
Hanover
Berlin
Saxony
Silesia
Bohemia
Prague
THE EMPIRE
Moravia
Electorate of Bavaria
Arch. Duchy of Austria
Vienna
Rastadt
Munich
Tyrol
Pesth
Buda
Kingdom of Hungary
Transylvania
Temesvar
R. Danube
R. Vistula
POLAND
Venice
Piacenza
Dy. of Parma
Modena
Lucca
Florence
Gr. Dy. of Tuscany
States of the Church
Rome
Naples (To Austria)
Naples
Ragusa
Cattaro
OTTOMAN DOMINIONS
Morea
Candia
Palermo
Messina
Sicily (To Savoy, later, 1720, to Austria)
SEA
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of Liverpool and some other towns was phenomenal; at its close she received Gibraltar, Minorca, the Hudson Bay Territory, Nova Scotia, Newfoundland, the French portion of St. Christopher's Island, a monopoly of the negro slave trade with Spanish America, and the right of sending annually to Panama a ship of six hundred tons laden with goods for the Spanish colonists. On the other hand, Holland was completely exhausted after this war, and France, as we have just seen, was also seriously crippled. England, therefore, after the Treaty of Utrecht (1713) was clearly in the ascendant; apparently she had already won the race for maritime and commercial supremacy. But England's supremacy was not yet based so much upon her own inherent strength as upon the decline of her two greatest rivals. While one of these rivals, Holland, never again recovered sufficiently to prove dangerous, the exhaustion of the other proved only temporary. England still needed much further economic development in order to cope again with France when that country had recovered her strength.

173. England's progress after the Treaty of Utrecht was commensurate with her future needs. Never before had her merchants been so powerful, wide-awake, and active; they now did business in all the Mediterranean and Baltic countries, and in fact with nearly every country in Europe; they went to India, Arabia, Africa, North and South America; in all these countries they were rapidly extending their trade. Unfortunately, about this time the investing public was seized with a mania for commercial speculation and gambling in stocks and bonds. This was a natural result of the development of banking, the extensive credit, and the enthusiasm and activity aroused by the war. Several hundred companies were organized with a nominal capital stock aggregating about $2,500,000,000, many of which undertook to float the wildest of projects.

One company, for example, was formed "for making salt water fresh"; another, "for breeding silkworms in Chelsea Park"; another, "for importing a number of large jackasses from Spain in order to propagate a larger kind of mule in England"; and finally one impostor had the impudence to ask the public to take shares in "an undertaking, the nature of which was in due time to be revealed." Some of the many companies formed were managed by men of experience and ability, and succeeded, but most of them were controlled by swindlers or ignoramuses and were failures. Unfortunately, many of the corrupt government officials of the time were swindlers, and helped bolster up these visionary schemes with their influence, in order to fleece the public. The two most notorious companies were the Darien Company, chartered by the Scotch Parliament (1695), and the South Sea Company, formed in 1711. The first company proposed to colonize the Isthmus of Darien, and to trade with Asia, Africa, and America. An expedition was sent out to Darien (1698), but the unhealthful climate, the attacks of the Spaniards, and the opposition of English capitalists sealed the fate of the colonists, few of whom ever returned. The failure of this scheme impoverished Scotland, but it helped to bring about the subsequent Act of Union (1707). The plan of the South Sea Company was very plausible. Its promoters proposed to assume the national debt and thus obtain extensive government credit; they secured the Assiento contract, giving a monopoly of the slave trade with Spanish America; they engaged in the whale fisheries and undertook to exploit the fabulous South Sea mines. The prospects of enormous profits from all these sources induced thousands, who had hoarded their money during the wars, to part with it, and the speculative fever ran so high that the price of shares rose from £120 in April, 1720, to £1020 in July. Just as soon as it was

ascertained that the company could not keep its promises the price of shares tumbled, causing a panic which ruined thousands of duped investors. On the other hand, the South Sea Bubble showed plainly that there was an abundance of wealth in England. While some of this wealth was wasted in foolish enterprises, much of it simply changed hands and was thus set loose for more stable undertakings. The revelation of this wealth made the English people more self-confident than ever and more determined to monopolize the world's trade.

Just in the midst of the collapse of the South Sea Company Robert Walpole came into power, and by shrewd manipulation and unparalleled bribery he retained control of the government for twenty-one years. During his "reign of common sense" England was able to recover from the bad effects of the panic and continue her economic development. One line of activity during this period, however, finally broke up Walpole's peace policy, viz., the extensive English smuggling in Spanish America. Walpole was very much annoyed by this smuggling, but could not prevent it. In 1739 he was forced by the opposition under the lead of William Pitt to declare war against Spain, chiefly on the ground of the Spanish claim to the "right of search" and the loss of an ear by a certain Captain Jenkins in an encounter with a Spanish vessel. Instead of resigning, Walpole remained in office hoping that he might bring peace sooner than some other minister. As might be expected the war was not very successful because the navy had declined and because Walpole did not conduct very vigorously a war which he did not favor. The English took Porto Bello, but failed to capture Cartagena and Santiago. In 1742 Walpole was forced to resign, and after he left office the War of Jenkins' Ear was merged in the larger War of the Austrian Succession. Thus was Walpole's peace policy finally broken up.

England's American colonies developed quite rapidly during the first half of the eighteenth century. Not only did the colonies already planted continue to grow, but new ones were established: Georgia was added to the list of continental colonies; English colonists pushed into the Ohio valley; England's title to the Hudson Bay Territory, Newfoundland, and Nova Scotia was cleared; French and Spanish pirates were driven out of the islands, which were then brought more completely under English control. England's trade with her continental colonies increased from about $3,250,000 in 1698 to $10,000,000 in 1751, and $27,250,000 in 1771. The general course of this trade was nearly the same as during the seventeenth century. Over three fourths of the exports from these colonies to England came from Virginia, Maryland, and the Carolinas, which sent most of their surplus products to the mother country, engaging in other trade only to a limited extent. The middle and northern colonies, on the other hand, sent only a limited amount of their products to England, because they were barred out by high duties. Most of their products were sent to the West Indies and other countries, generally in violation of the Navigation Acts. One new line of trade was developed by New England during the eighteenth century, in the course of which molasses was secured in the West Indies, taken to New England, and there manufactured into rum; taken thence to Africa and exchanged for negroes, who were sold as slaves in the West Indies and the southern continental colonies.[1] England's trade with her island colonies increased during most of the first half of the eighteenth century, though not so rapidly as during the seventeenth century, and more slowly than that of the continental colonies and the French

[1] This return voyage from Africa was the famous "middle passage," in which the negroes were subjected to very cruel treatment.

islands. By 1740 French sugars had driven English sugars out of all the European markets except England, and even the continental colonies were then securing a large part of their supply from the French islands. In 1733 England tried to improve the sugar industry by the Molasses Act, which fixed a duty of five shillings per hundredweight on sugar, sixpence per gallon on molasses, and ninepence per gallon on rum imported into any of the British colonies from foreign colonies; but the law was practically a dead letter and failed to accomplish its intended purpose. Towards the close of the century, however, the sugar industry improved somewhat in the British islands.

In India the English made slow progress during the first half of the eighteenth century. During the War of the Spanish Succession the United East India Company was quite successful, but its work was seriously interrupted for several years by the South Sea Company, which drew public attention in another direction. Even after the downfall of the South Sea Company, English colonial trade was more active in America and western Africa than in India. Enough trade had been developed in the East, however, to create a keen appetite for more, and we shall presently see that the desire to control India was one of England's motives in her great struggle with France.

174. The recovery of France (1726–1756). We have seen that France was economically exhausted after the War of the Spanish Succession; for a time, during the administration of the debauched and perfidious Dubois, she was even politically subservient to England. Partly induced by English bribes, Dubois signed the Triple Alliance (1717), which among many other things required France to demolish her defenses at Mardyk, fill up the port of Dunkirk, and waive her rights of navigation and commerce in the South Sea. In the Quadruple Alliance (1718), which

was primarily directed against Alberoni's schemes, France agreed to serve her former rival, England, by invading Spain. France, however, did not long remain under the domination of English bribed ministers. In 1726 Fleury became the leading minister and remained in power until 1743. On the whole his administration was a very prosperous period for France. He, like his contemporary, Walpole, desired peace in order that his country might retrieve her losses and enrich herself by industry and commerce. He reorganized the finances, got rid of the deficit, restored public credit, at the same time lightening the burdens of taxation, and further aided commerce and industry by constructing roads and other valuable public works. The French marine, however, was neglected by Fleury, and after seven years his peace policy was interrupted by the death of the king of Poland. Fleury wanted to keep out of the quarrel about the succession, but public opinion forced him to take part in the War of the Polish Succession that followed (1733–1735). Fortunately, the war was short and did not seriously check economic development. France, moreover, emerged from this war with a greatly enhanced reputation, and for several years thereafter was able to continue the development of her splendid natural resources. Just then she was forced into the War of the Austrian Succession (1744–1748), which seriously checked her industrial and commercial progress, and left her a distinctly weaker political power. During the eight years following this war, however, France made more rapid economic development than she had ever made before in a period of like duration. Private enterprise was unusually active and was ably seconded by wise governmental encouragement and protection; the prejudice against commerce was being rapidly overcome, and the merchant class was becoming a more powerful factor in the state; Voltaire had just

declared that "the merchant who enriches his country is an honor to the world"; the increasing patronage of art and the increasing attention paid to fashions renewed and strengthened the demand for the manufacture of numberless articles of luxury; just at this moment also science was beginning to place many discoveries at the disposal of industry. This fortunate combination of active private enterprise, wise governmental protection, scientific discoveries, liberal views concerning trade, and the demands of art and fashion was rapidly making France the leading industrial nation in Europe. Public works were also being constructed on a large scale during this period. France was minutely intersected by a network of magnificent roads; rivers were bridged; levees were built to protect the Loire valley from inundation; the Rhine was diked; many cities were transformed by the erection of museums, temples, palaces, monuments, chateaux, and villas.

French commerce with the Austrian Netherlands, Holland, Germany, Switzerland, Scandinavia, and Russia increased quite rapidly during the thirty years preceding the Seven Years' War, while Nantes, Bordeaux, Marseilles, and some other cities extended their trade with Spain, Italy, the Levant, and other Mediterranean countries. At first this awakening took the form of a speculative fever similar to the South Sea Bubble in England, the germs of which were brought across the Channel by the Scotchman, John Law. Just as the English began to dream of mines in the Orinoco country, the French began to dream of them on the banks of the lower Mississippi. All classes of people rushed eagerly into this Mississippi scheme only to be bitterly disappointed; the panic which followed caused widespread misery and disaster. On the other hand, Law's scheme was not without good results: it showed the power of credit; it gave a certain impulse to

commerce and industry, which fortunately was followed by the wise administration of Fleury; it was the means of striking some foreign products which France needed from the protective list; it created a great interest in colonial enterprises; it led to a more liberal colonial policy. The French West Indies were greatly benefited by the new interest in colonial enterprises and the more liberal colonial policy. From all the French ports, especially Nantes and Bordeaux, flowed a continuous stream of emigrants and capital to Martinique, San Domingo, Guadeloupe, and other islands. Soon vast quantities of sugar, coffee, rum, and molasses were produced there, together with considerable cocoa, spices, indigo, dyewoods, beef, hides, and cotton. The War of the Austrian Succession interrupted the prosperity of these islands, but after its close there was a speedy revival and a further rapid development. Canada did not share in this newly awakened interest and prosperity. Her defective social and political system, her neglect of agriculture and other stable industries, and other causes prevented her development; to the last she remained a constant bill of expense to France, her total trade in 1753 being less than $1,400,000. The French fisheries were temporarily checked by the loss of Newfoundland, Acadia, and the Hudson Bay Territory in 1713; but France atoned for this loss by strongly defending Louisburg on Cape Breton Island. The fisheries around that island, therefore, soon largely compensated the French for the partial loss of their fishing privileges in Newfoundland. Louisiana underwent a series of unfortunate enterprises. La Salle's expedition ended sadly, and Iberville's colony (1699) was soon stranded; Crozat vainly spent enormous sums there (1712–1717); even Law with his brilliant mining schemes could not attract thither voluntary colonists. Nevertheless, New Orleans was founded (1718),

some other trading posts were established, and the culture of tobacco and indigo was introduced; but population was too scattered for commerce to thrive in this region. If Louisiana had not been ceded to Spain in 1762, however, she would probably have developed more rapidly after that by an emigration from Canada and the English colonies.

In the East Indies, France was more fortunate for a little while, only to end in failure. The East India Company founded by Colbert had been unsuccessful, but a great revival followed the absorption of this company into Law's Company of the Indies. French colonists were sent to Mauritius; coffee was introduced into Bourbon; numerous trading posts were established in India; the hand manufactures of the natives were greatly stimulated by French demands. Many of the governors and other officials sent by France to the East during this period were very capable men, especially Dupleix, Dumas, and Labourdonnais. Dupleix, in particular, clearly foresaw the commercial possibilities of India and sought a French dominion over it. A long sojourn in the country had given him an intimate knowledge of its climate, resources, and peoples. His kind treatment of the natives, his respect for their customs and beliefs, his extensive personal acquaintance throughout a large part of the peninsula, the great influence exercised over the natives by his Creole wife, the Princess Jeannette, — all these things gave Dupleix a wonderful ascendency over the Hindoos and made his administration very successful. After a few years under his rule, Pondicherry was sending to France products worth about $7,000,000 annually, and Chandernagor was even more prosperous. Not only did Dupleix extend the commercial relations of the company, but he brought thirty million Hindoos under French suzerainty. On the other side of the Indian Ocean, Mauritius was transformed by Labourdonnais and made a

very active commercial center. Unfortunately for France a quarrel between these two governors prevented concerted action just at the critical moment when Dupleix needed all the strength he could muster to oppose the advance of the English.

175. The Seven Years' War. We are now prepared to see clearly the causes for the great struggle between France and England for commercial and colonial supremacy. England was very jealous of French success in the East and West Indies, French occupation of the Mississippi and Ohio valleys and the Great Lake region, and the remarkable growth of French manufactures and commerce during the previous thirty years. England was also alarmed at the rapid revival of France after the War of the Austrian Succession, especially the efforts of d'Argenson in developing the French navy. The sudden alliance of France and Austria after that war also threatened England's trade with the Austrian Netherlands. The two nations first came into collision in India and the Ohio valley; but England, under the Newcastle ministry, hesitated about declaring war for some time after these preliminary skirmishes. In 1756, however, when France recaptured Minorca, war was promptly declared. William Pitt, who represented the English traders, formed a coalition with Newcastle, who represented the landlords, and in this way was able to keep a parliamentary majority through Newcastle's control of the corrupt party machinery. By letting Newcastle manage the "patronage" Pitt was able to keep the control of the war in his own hands, and from first to last he managed it with an eye single to the interests of the English merchants; through his management the Seven Years' War, on England's part, became chiefly a great struggle for colonial, maritime, and commercial supremacy, while the war on the European continent was with her a matter of

secondary importance. France, on the other hand, for various reasons, either chose or found it necessary to center her efforts in the European part of the struggle. It is not surprising, therefore, to find a sudden collapse of French colonial and maritime power resulting from this war. During the war England gained possession of nearly everything in India and America, including most of the French and Spanish West Indies; but her part in the European war was not sufficiently brilliant to enable her to keep everything won in the colonies. England chose to retain Canada rather than the French West Indies, and probably made a mistake in doing so, for she took the less profitable of the two regions, and also removed the danger of French and Indian attacks upon the continental colonies, thus making them less dependent upon her. By taking the French West Indies, England might have made a most valuable addition to her commercial empire. Furthermore, she might have derived from the trade of these islands ample compensation for the debts incurred during the war without feeling it necessary to tax the continental colonies or to enforce her restrictions upon their commerce. In this way she might have gradually revised her colonial policy and welded together the continental and island colonies into a magnificent colonial domain. As it was, however, England, in the Seven Years' War, seriously crippled her greatest rival, France, in India, America, and on the sea, while Spain was shorn of all power to prevent England's westward march to the Mississippi. Holland was already hopelessly exhausted, and no other nation was able to contend with England for supremacy.

176. French revenge and England's loss of her American colonies. Just at the moment when she seemed supreme, England undertook to apply with renewed vigor the "sole market" theory to the world's trade. Unfortunately, this

policy, together with the levying of internal taxes and other causes, led most of her colonies in the North American continent to revolt and finally engage in a war for independence. This war gave France an excellent opportunity to take revenge for the losses already inflicted upon her. Vergennes, the French minister, at first contented himself with sending the Americans arms, ammunition, and money; but in February, 1778, after the British disaster at Saratoga, France openly allied herself with the United States. The example of France proved contagious. In 1779 Spain joined in the war against England, hoping thereby to recover Gibraltar and Minorca. These alliances were especially dangerous, because France had for several years been strengthening her navy, and Spain's naval quota was by no means insignificant. Early in 1779 a French squadron seized the British possessions in Senegal and on the Gambia, and later in the year a combined French and Spanish fleet sailed up the Channel without opposition. For a time the French navy was master of the seas and succeeded in taking numerous British prizes and possessions; by 1782 England had lost Minorca and nearly all of her West Indian islands except Jamaica, while her possessions in India were seriously endangered by several French naval victories. In the Treaty of Versailles (1783) England, in addition to the recognition of the independence of the United States, surrendered to France Chandernagor, Pondicherry, and a few other places in India, the islands of St. Pierre and Miquelon in the St. Lawrence, Tobago and St. Lucia in the West Indies, Gorée and Senegal in Africa, the right of fishing off Newfoundland, and guaranteed to her the right of fortifying Dunkirk. At the same time France agreed to withdraw her support from Tippoo, the son of Hyder Ali, in India. England gave Minorca and Florida to Spain, but

Spain ceded the Bahamas to England and had to give up all hopes of recovering Gibraltar.

In the meantime, in another direction, a vast coalition was forming against England's despotic exercise of the "right of search." In 1780 Catherine II of Russia issued a declaration containing what was then a new doctrine, viz., that "free ships make free goods," and proclaiming that "paper blockades" were inadmissible. To defend these principles Russia proposed a plan of "armed neutrality," which was adopted by Sweden, Denmark, Prussia, Austria, Portugal, the Two Sicilies, and Holland. France and Spain also supported the league, which thus proved a serious check upon England and enabled several countries to pick up considerable neutral trade, notably Sweden and Denmark. England, however, singled out Holland from the rest of the league and made war upon her. In the Treaty of Versailles, Holland was punished for her temerity by the loss of Negapatam. This league, however, was another important factor in compelling England to recognize the independence of the United States.

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CHAPTER XX

THE REMAINDER OF EUROPE DURING THE SEVENTEENTH AND EIGHTEENTH CENTURIES

177. Poland. Late in the Middle Age, Poland, under the house of Jagellon, shot like a meteor into the northern and eastern horizon of Europe and for a time seemed likely to become the leading state in that region; but her star waned almost as rapidly as it rose. Owing to her oligarchical constitution, her elective monarchy, the reactionary religious policy of her rulers, and other causes, she soon sank into insignificance and was ultimately parceled out among Russia, Austria, and Prussia. The continual dissensions and civil wars in this unfortunate country made it impossible for manufactures and commerce to thrive there; from first to last, therefore, Poland was an agricultural state and little more than a feeder for other countries. Foreigners monopolized what little trade she had, collecting her grain, timber, flax, hemp, and cattle at Breslau, Krakow, and Lemberg, and shipping it thence by way of Danzig, Königsberg, and Elbing in exchange for wines and manufactured products.

178. Sweden. Early in the sixteenth century Sweden, under Gustavus Vasa, freed herself from Denmark, became Protestant, and increased in strength quite rapidly. Between 1561 and 1648 Esthonia, Livonia, Pomerania, Bremen, and other portions of northern Germany were acquired. During the seventeenth century, under Charles IX, Gustavus Adolphus, Oxenstiern, and Charles XI, Sweden ranked among

the great continental powers. Throughout this century Swedish industry and commerce profited greatly by these territorial acquisitions and the liberal encouragement of these rulers. Towns sprang up, the iron, copper, and shipbuilding industries flourished, silks and other cloths were manufactured, large amounts of Dutch capital found profitable investment there, commercial treaties were signed, a Swedish South Sea Company was formed, and some temporary settlements were made in North America. Gustavus Adolphus (1611–1633) enlarged the navy, and its successes increased the security of Swedish commerce. Under Oxenstiern, the minister of Christina (1633–1654), the Swedish flag was supreme in the Baltic, and the Swedes even competed with the Dutch. Charles XI (1660–1697) continued the work of Gustavus Adolphus and Oxenstiern. He improved the finances, established a bank, imposed duties on foreign cloths, and facilitated internal trade. When he died Sweden was strong in resources and wealth, defended by a splendidly disciplined army and navy, ready for an onward march of industrial and commercial progress. Just then appeared Charles XII, the "Madman of the North," who, by his reckless wars and impossible ambitions, wrecked the industrial and commercial, as well as political, hopes of Sweden. His soldiers were drawn from the farms and shops, and agriculture and manufactures were thus undermined, while his heavy expenditures exhausted the country's wealth and destroyed the credit of the government. By the time of his death (1718) all the work of Gustavus, Oxenstiern, and Charles XI was undone ; industries were prostrate, the paper money badly depreciated, and there were only three Swedish ships on the Baltic where once the Swedish flag was supreme.

During the eighteenth century Sweden gradually revived. Agriculture made substantial progress, and the mines

were again worked quite successfully. During the war for American independence, Sweden also made very great gains in foreign commerce, as she was one of the few neutral nations during that war. The Swedes at that time almost entirely superseded the Dutch in the Mediterranean; they traded quite extensively with China and the East Indies; they obtained the island of St. Bartholomew in the West Indies in 1784, and this became an active trading center. This prosperity was temporarily checked by the war with Russia in 1789, but the Napoleonic wars afforded another opportunity for commercial growth, which, as we shall subsequently see, was eagerly taken advantage of.

179. Denmark, commanding the entrance to the Baltic, united to Norway, and possessing Iceland and Greenland, was better situated for becoming a commercial power than Sweden. Although portions of her territory were marshy or sandy, other portions were very fertile and well adapted to dairy farming and cattle rearing, and she also possessed very valuable fisheries. By the end of the sixteenth century, therefore, Denmark and Norway had developed quite an extensive trade, exporting considerable quantities of cattle, horses, sheep, wool, salted beef and pork, butter, cheese, tallow, lard, hides, skins, poultry, vegetables, tar, lumber, silver, copper, and large quantities of fish. During the seventeenth century a regular trade was developed with Iceland, Greenland, and the Faröes; an East India Company and a West India Company were formed; agriculture was improved, especially in Holstein and Jutland; manufactures were developed, chiefly by French Protestant exiles; in 1671 the island of St. John was obtained from England; Copenhagen became a city of considerable commercial importance, and a bank was established there; the navy was enlarged.

The eighteenth century was a period of still greater prosperity. Throughout the century, agriculture was further developed, as well as certain characteristic manufactures like tar, tile, lumber, rope, and sailcloth, and the fishing industry thrived. In 1719 St. Thomas was acquired and in 1733 St. Croix was purchased from France, both islands becoming the bases of an active trade, much of which was contraband. Factories were established in western Africa, whence were obtained gold, ivory, and slaves. In Asia, Frankebar, Serampore, and some of the Nicobar Islands were still held by Denmark, the first becoming an important center for trade with Canton and the Ganges valley. During the war for American independence, Denmark, like Sweden, profited greatly by her neutrality; her vessels then brought many products from the East and West Indies and China to Germany and other European countries. The Eider Canal, dug during this war, greatly facilitated Denmark's trade with Germany. After this war much of this newly gotten trade returned to its former possessors; but Denmark retained some of it, and her trade with France remained undiminished. During that portion of the French Revolution when Holland was occupied by the French, Denmark profited more than ever before from her extensive neutral trade; but a little later she lost her colonies and most of her marine by resisting England's claim to the "right of search."

180. Russia, until near the close of the seventeenth century, was "an annex of Asia" rather than a part of Europe. When she entered Europe she came knocking at the back door, so to speak, in the person of Peter the Great (1689–1725), who stubbornly contested Sweden's effort to convert the Baltic into a Swedish lake. Russia had already made some industrial and commercial progress, especially under Ivan the Terrible (1533–1584), who imported German

workmen and encouraged trade with England, Holland, Poland, Scandinavia, and France. But it did not take Peter long to discover Russia's immeasurable inferiority to western Europe and the weak points in her geographical situation. From foreign merchants traveling in Russia he had gotten a faint conception of western civilization, and he resolved to know more of it. Accordingly he spent two years traveling through Holland, England, Austria, and Italy, laboring as an ordinary workman in order to learn shipbuilding, attending lectures on anatomy, studying surgery and dentistry, inspecting paper mills, flour mills, printing presses, visiting hospitals, museums, and libraries. He then returned to Russia with two fixed purposes: (1) to extend Russia to her natural boundaries; (2) to force western civilization upon his subjects. While much of his work in attaining the second purpose was artificial, it left permanently good results. The foreign workmen imported by him laid the foundations of industry: marshes were drained, forests cleared, roads opened, canals dug, harbors improved (especially Azov, St. Petersburg, and Riga); agriculture was improved, sheep breeding introduced, and the exportation of grains encouraged; silk and woolen manufactures were introduced and protected by tariffs; firearms, rope, and ships were manufactured, mines were opened, and a Council of Mines established; a police system and a postal service were inaugurated; a code of laws based upon those of western nations was framed. Much of this sweeping industrial reconstruction was successful.

Peter's efforts to attain his first purpose must be outlined a little more fully. When he became czar the Russian dominions already embraced about five million square miles, but Archangel was the only seaport. This port was closed more than half of the year by ice and was at all times difficult of access. The only other sea upon which

Russia bordered then was the Caspian, but this was really an Asiatic lake and of no practical value as a basis for foreign commerce or maritime power. Between Russia and the Baltic lay the Swedish provinces of Livonia, Esthonia, Ingria, Karelia, and Finland; between her and the Black Sea lay the Crimea and the country between the Bug and the Dniester; between her and central Europe lay Poland and the old Russian Lithuanian provinces. Peter's first effort to extend his frontiers was his intervention in a war between Austria and Turkey. By the Treaty of Carlowitz (1699), closing this war, he obtained Azov, but was obliged to restore it to the Turks in the Treaty of the Pruth (1711). In another direction, however, he achieved more permanent results. In 1700 he effected a triple alliance between Russia, Denmark, and Poland against Charles XII of Sweden; but the young Swedish king soon surprised his enemies by defeating the Danes, then the Russians at Narva, and finally the Poles and Saxons. Peter, however, was not daunted; he quickly reorganized his army, and, foiled in his attempt to take Narva, he began the building of St. Petersburg. No site could have been more unpromising, as it was surrounded by marshes and impenetrable forests; but it was the only place on the coast which he had. Here, therefore, he undertook to rear a northern Venice, and his army of workmen was marvelously successful in spite of frequent epidemics and inundations. It should be noted that Charles XII missed his opportunity in not following up the Russians after the battle of Narva, for he might thus have thwarted Peter. Contrary to the advice of his best generals, however, he let the Russians escape and turned back to wreak vengeance on the Saxons and Poles. After doing this he plunged into the heart of Russia, where Peter's reorganized army crushed him at the battle of Pultowa (1709). This battle passed the dictatorship

of northern and central Europe from Charles XII to Peter the Great. Russia's hold upon the Baltic was now strengthened by the annexation of Livonia and Esthonia and the capture of Riga, Dünamunde, Revel, and other important towns. The building of St. Petersburg was resumed, merchants were encouraged to settle there, and within a few years the new capital of Russia had a flourishing trade.

The accession of Catherine II ushered in a new era of territorial expansion and internal development. Agriculture steadily improved throughout her reign (1762–1796), and the manufacture of linens, silks, woolens, sugar, iron, glass, potash, and some other articles was encouraged. But it is much more important to note that Russia now began a new march to Constantinople. In 1774, by the Treaty of Kainardji, Azov was regained and Kimburn secured, and Russian ships were allowed free passage through the Dardanelles and the privilege of sailing in Turkish waters, including the river Danube. In 1783 the Porte was forced to cede the Crimea to Russia, and the Treaty of Jassy (1792) extended the Russian boundary to the Dniester. Russia thus obtained a firm footing on the Black Sea, and her merchants were enabled to compete with Greeks, Italians, and others in the Mediterranean and Oriental trade. In 1781 five Russian ships left Russian ports for France, and quite an extensive trade was soon developed with that country, Italy, and Spain. Not only the products of southern Russia, but those of Turkestan and Persia, were shipped from Azov, Kherson, Taganrog, and the newly created port of Odessa; for while Russia had been gaining a foothold on the Black Sea, she had been extending her arms towards central Asia, taking Georgia, Tiflis, and the Kirghiz from Persia, thus getting access to the products of that region.

Catherine also advanced the Russian boundaries towards central Europe by that remarkable series of royal robberies

known as the three "partitions of Poland" (1772, 1792, 1795). Acting in conjunction with Austria and Prussia, Russia thus secured nine thousand five hundred square miles of territory in central Europe, containing a population of about six millions, and valuable resources which served as another basis for the extension of trade. Russian merchants were not so successful in the Baltic during Catherine's reign. St. Petersburg continued to grow and prosper, but the trade of this and other Baltic ports remained almost entirely in the hands of English, Dutch, and German merchants.

181. Germany. I. *Effects of the Thirty Years' War.* The century following the Peace of Augsburg (1555) was full of dissensions and misfortunes, and consequently, in most of Germany, a period of great industrial decline. The culmination was reached in the disastrous Thirty Years' War (1618–1648), which left all classes in Germany ruined. Eighteen million of the thirty million population were carried off by the war, pestilence, and famine. Trade, manufactures, and capital were annihilated; vast tracts of land lay uncultivated; the most fertile states of Germany, lower Saxony, Bavaria, and the Palatinate had been changed into deserts. The only cities that survived the general ruin were Hamburg, Lübeck, and Bremen, and these had lost a large part of their former glory. On nearly every frontier, important territories had been torn away from the empire by the Peace of Westphalia. The recovery from such a war was inevitably slow, but it was retarded by several other circumstances, chief among which were the extreme political disunion and the multiplicity of internal customs duties. At the beginning of the eighteenth century there were in Germany about three hundred and sixty sovereign states and nearly two thousand fiefs and religious divisions. Furthermore, during the first half of

the eighteenth century Germany suffered from the War of the Spanish Succession, the War of the Austrian Succession, and other wars.

II. *Recovery during the eighteenth century.* In spite of all hindrances, however, Germany slowly recovered during the first half of the eighteenth century and more rapidly during the latter half. Gradually her farmers, especially in the Rhenish provinces, began to export considerable quantities of wines, fruits, grains, cattle, and horses. The wars in which the other European countries were engaged encouraged German agriculture somewhat by creating a demand for her food products, especially wheat. At the same time certain old German manufactures were revived. The linen industry had best survived the ravages of war, and from the beginning of the century developed quite steadily. Nürnberg watches, wood carvings, and toys again became famous; textiles, iron, and arms were manufactured in Westphalia and the Rhenish states; Saxony fleeces surpassed in quality the wool of England and Spain, and consequently the woolen industry was rapidly developed there. Some important new industries were started: porcelain manufactures at Meissen; paper, books, leather binding, engraving, and wood carving at Leipzig and Frankfurt; cotton goods at Chemnitz; glassware in Thuringia; gloves and hats in various parts of Germany.

The increase of agricultural and manufactured products led to an increase of foreign trade. The more general use of coffee, tea, rice, and tobacco furnished one impulse; the luxuries of the many German courts, all of which patterned after Versailles, was another. Hamburg became the great center of the most distant foreign trade; Bremen had most of the trade in grains and French wines; Lübeck monopolized the trade with Russia and the Baltic countries; the

trade of South Germany was largely carried on through Holland, up and down the Rhine, with Amsterdam as the chief center. Although most of the "fairs" in the interior of Germany had been ruined by the Thirty Years' War, some of them were still well attended; as, for example, those at Frankfurt-am-Main, Frankfurt-am-Oder, Leipzig, and Brunswick, the first of these towns becoming the chief interior financial and commercial center for northern Germany and Holland. The building of roads and canals in many parts of Germany during the second half of the century, together with the establishment of banks and trading companies, also stimulated commerce.

III. *The growth of Prussia was more rapid than that of any other German state during the eighteenth century.* Frederick William, the Great Elector (1640–1688), had tried all sorts of enterprises for the aggrandizement of Brandenburg. His efforts to secure Swedish Pomerania and his schemes for colonial conquest had not succeeded, but he clearly indicated to his successors the best policy to follow in order to develop the state industrially, commercially, and politically. No state in Germany revived so quickly after the Thirty Years' War as Brandenburg under his rule. French emigrants were encouraged to settle there, and Berlin became a very prosperous city. In spite of his militarism, Frederick William I, his second successor and the second king of Prussia, was also an ardent protector of industry. He hated France, but borrowed her system of industrial protection. He also acquired the port of Stettin. Frederick the Great continued the protective system inaugurated by his father. From 1763 to 1773 he founded two hundred and sixty-four manufactories, and the velvet, silk, satin, woolen, leather, iron, and sugar industries flourished under his tariffs and subsidies. Eight hundred new villages were created; many towns were

enlarged and beautified; marshes were drained, agriculture was encouraged, and colonists were attracted from all directions; the acquisition of Silesia and Polish Prussia doubled the population and resources of the kingdom; the port of Emden was secured; the Gulf of Danzig and the estuary of the Elbe were connected by a system of canals between the intervening rivers; an Insurance Chamber, a Society of Maritime Commerce, the Prussian Indian Company (1750), and the Bank of Prussia were created. Under such varied stimulants, Prussian industry and commerce developed very rapidly during the latter half of the eighteenth century, until checked by the French revolutionary wars.

182. Austria also suffered seriously from the Thirty Years' War. Deprived of her best workmen by that war and by the continual persecutions of the Protestants, her industries declined throughout the seventeenth century. The eighteenth century was to be a most critical period for her, both politically and industrially, on account of the numerous wars in which she was engaged. Her magnificent struggle against the Turks was for a time terminated quite favorably to her by the Treaty of Passarowitz (1718), thanks to the military skill of Prince Eugene. The Treaty of Utrecht (1714) also gave her the Spanish Netherlands; but this proved to be a doubtful advantage, for the trade of these provinces was one of the leading causes of the later wars which impeded her industrial development and checked her political power. For a time, however, Austria derived considerable benefit from these provinces. Charles VI (1711–1740) successfully encouraged the agriculture, manufactures, and trade of the Netherlands. Larger crops of grain and flax were grown; linens, woolens, yarns, laces, iron, hardware, and various other articles were manufactured in much larger quantities than before; an extensive

trade was developed, especially with France, England, and some German states. The port of Ostend was created and the Ostend Company chartered (1722) to trade with the East Indies, but after a long dispute with England and Holland, Charles VI was obliged to dissolve it in order to get England to guarantee the Pragmatic Sanction. Charles VI did not neglect his hereditary dominions, but encouraged their agriculture and manufactures and granted liberal privileges to merchants trading there. Through his endeavors many of the tariffs between Austria and the German states were abolished; the linen and glass industries of Bohemia were revived; Moravia manufactured linens, woolens, cottons, and leather; the spinning of wool and flax increased rapidly in Silesia and the archduchy of Austria; the iron industry flourished in Styria and Carinthia; the various industries of the Italian provinces prospered, especially silk manufactures; the ports of Trieste and Fiume were declared free, and thus commercial routes were opened through the very heart of the empire.

Maria Theresa (1740–1765) continued the policy of her father with considerable success. She studiously avoided religious persecution; she enlarged the ports of Trieste and Fiume, and created twenty-five consulates in various countries for the protection of their trade; she organized a Council of Commerce for supervising trade, and established an Oriental Academy from which to recruit the consular service; the Nicobar Islands were occupied; by the close of her reign the port of Trieste was visited by about six thousand vessels annually. Her son, Joseph II (1765–1790), by very radical means undertook to weld together all the scattered Austrian territories into a great centralized monarchy of the Prussian type; but his program, most of which was laudable enough, would have required a century to carry out instead of the few years allotted to the task.

As a result of his visionary plans he left to his younger brother, Leopold II, who succeeded him, an empire involved in war with Turkey, weakened by a revolt in the Netherlands and a threatened revolt in Hungary, with confusion in every province caused by the violent conflict between the old and the new régime. On the other hand, Joseph's industrial and commercial policy proved on the whole quite beneficial. He protected old and new industries against foreign competition, created numerous roads and commercial routes, improved rivers and harbors, signed commercial treaties, and developed the naval and merchant marine. Throughout the reigns of Charles VI, Maria Theresa, and Joseph II, therefore, the agriculture, manufactures, and commerce of the Austrian dominions made as much progress as could be expected in the midst of the numerous wars which occurred. Leopold II, fresh from a successful career in Tuscany, soon proved his superior practical ability by concluding an honorable peace with Turkey, by recovering the Netherlands, by opposing the aggrandizement of Russia, by restoring order in Hungary, by wisely compromising most of the troublesome questions bequeathed by his brother, and by continuing the industrial and commercial improvement of his various dominions. But, unfortunately for Austria, Leopold II died after a brief rule of two years (1790–1792).

Francis II (1792–1835) was as weak and incapable as Leopold had been strong and capable. His minister, Thugut, at once entered headlong into the old Hapsburg policy of territorial expansion, instead of continuing the consolidation and improvement of the territories already under Austrian rule. The French Revolution, which was just then attracting attention, was, in his eyes, only an opportunity for taking a liberal slice of French Flanders; to him, Bavaria, Turkey, Poland, and Italy were only weak

neighbors who might be compelled to surrender territory to Austria; his only criticism of the ruthless second partition of Poland (1792) by Russia and Prussia was that Austria had not gotten a share. Under his administration, therefore, Austria's real interests were continually sacrificed; her material development was suddenly checked, and her agriculture, manufactures, and commerce at once began to decline — a decline which was soon accelerated by the terrible Napoleonic wars.

183. The Italian cities rapidly declined in wealth and commercial importance after the great geographical discoveries of the fifteenth century; but they still had their favorable situation in the Mediterranean, their splendid harbors, and their intrepid sailors. Consequently, some of them again built up a rather extensive trade during the seventeenth and eighteenth centuries. Venice was in some respects more favored than the rest. Early in the sixteenth century she recovered nearly all the territories she had lost, but for two centuries thereafter was obliged to wage almost continual warfare against the Turks. In these wars she was at first successful, and in the battle of Lepanto (1571) rendered a signal service to Christendom by checking the Turks most decisively and thus keeping them out of Europe. Later, however, she was less successful, and by 1715 all that she had left in Greece were the Ionian Islands and a few scraps of territory on the Albanian coast. But in spite of wars and territorial losses Venice was able to carry on quite an extensive commerce. She managed to retain valuable commercial privileges in the sultan's dominions, and thus took a prominent part in the trade of the Orient. Furthermore, her home territories were for the most part exempted from the ravages of war and were among the best cultivated regions in Europe. Many of her manufactures still retained their ancient reputation, —

her glasses, silks, goldsmith wares, and jewelry. Some of her subject cities in Italy, as, for example, Verona, Bergamo, and Brescia, were flourishing and fed her commerce with valuable products. Genoa also had an active merchant marine during the seventeenth and eighteenth centuries and was the chief center for the trade between Italy and France, a trade amounting to about $9,000,000 annually during most of the eighteenth century. Some of the Italian states under Austrian and Bourbon domination made considerable economic progress during this period, as, for example, Tuscany under Leopold, and Naples under Charles VII.

184. Holland in the eighteenth century. We have already shown the exhausted condition of Holland at the close of the War of the Spanish Succession (1714), and have referred several times to her further commercial and industrial decline during the eighteenth century, in connection with the history of those countries which profited most at her expense, viz., England, France, Denmark, Sweden, and some of the German cities. The further development of Holland may better be traced in subsequent chapters.

185. Spain, the leading political and commercial power of the world during the sixteenth century, sank in the seventeenth century almost into a position of insignificance. Many of her richest possessions dropped away from her, and her industries and commerce were almost ruined by the expulsion of the Moriscos, the indolence of her people, her bad colonial policy, and other grave mistakes. The Treaty of Utrecht (1714) subjected her to the further loss of Gibraltar, Minorca, and the southern Netherlands. The "assiento" clause in this treaty gave England a virtual monopoly of the African slave trade in the Spanish American colonies, while the clause allowing the British the right of sending there each year one ship of six

hundred tons laden with merchandise was made the pretext for very extensive English smuggling, in which the Dutch and the French joined. In spite of all these adverse circumstances, however, there were several industrial and commercial revivals in Spain during the eighteenth century. The first change for the better came under the administration of Alberoni (1714–1719), who restored the Spanish navy and spared nothing which would develop industry and commerce. Just as soon as he was driven from power, however, Spain sank back into her former lethargy. About the middle of the century a more extensive revival occurred. The first notable sign of its appearance was the vigorous exercise of the "right of search" by the Spanish navy, in order to stop British abuses of the commercial clauses in the Treaty of Utrecht. The War of Jenkins' Ear which followed (1739–1744) terminated to the advantage of Spain and her commerce. After this war a considerable revival of industry and commerce began in the reign of Ferdinand VI (1746–1759) and culminated in that of Charles III (1759–1788). The neglected roads were improved and new ones laid out; canals were dug; vast tracts of sterile land were fertilized; German farmers were imported and better agricultural methods and implements introduced; the prohibition of the exportation of grain was removed; model farms were established; agricultural societies were created. At the same time the protective policy of Charles III, though excessive, revived old manufactures and stimulated new ones. Cadiz, which since the days of Alberoni had displaced its less favorably situated neighbor, Seville, now became the center of quite an extensive trade, especially with France and the Spanish colonies. The trade with France, for example, amounted in 1789 to about $26,000,000, and it was primarily to preserve this trade that Godoy, the "Prince of Peace," a

little later so subserviently restored Louisiana to France at the dictation of Napoleon. The trade with the colonies increased from about $8,500,000 in 1748 to $22,000,000 in 1785, not counting the goods carried between Spain and her colonies by foreign vessels. This growth was favored (1) by opening the colonial trade to all Spaniards, (2) by allowing intercolonial trade, (3) by the establishment in 1764 of a regular monthly line of packets between Spain and the colonies, (4) by the rapid development of Cuba after 1763, owing to the introduction of the tobacco, sugar, and coffee industries, slave labor, and the immigration of French colonists from San Domingo after the insurrection in 1789.

The revival of Spanish industry and commerce did not long outlive the reign of Charles III. This was due chiefly to (1) a succession of incompetent rulers and ministers, (2) a bad colonial policy and the loss of all except a few of the American colonies early in the nineteenth century, (3) the inability of the Spanish people to apply themselves seriously and permanently to the development of their native resources. In short, the various revivals of the eighteenth century were wholly artificial, though temporarily quite successful.

186. Portugal, when she regained her independence in the middle of the seventeenth century, was only the shadow of her former self, her power in the East having been supplanted by the Dutch and English. By the opening of the eighteenth century her possessions in the East were reduced to Macao, Timor, Goa, Diu, and Damaun; at the close of that century the products brought by her from these possessions amounted to less than $800,000 annually. In Brazil the situation was somewhat better. This province was recovered from the Dutch in 1654 and after that was developed quite rapidly. The importation into Portugal

of Brazilian sugar, coffee, tobacco, rice, cotton, dyewoods, indigo, and drugs increased to $7,000,000 annually before the eighteenth century was very old; by 1730 the Brazilian gold mines, opened about 1700, were yielding about $9,000,000 yearly; the sale of diamonds yielded about $750,000 yearly to the crown; the African slave trade was still very profitable; the trade with the Azores and Madeira was quite important. But more and more, especially after the Methuen Treaty (1703), the commerce of Portugal fell into the hands of English merchants; Portugal and Brazil became commercial annexes of Great Britain. As a result, Portuguese products were excluded from their natural markets, Spain and France, by retaliatory duties, and Portuguese industries declined. Pombal (1750–1777) succeeded in diverting some of the Portuguese trade to France and in improving industry somewhat, especially the wine and fruit industries, which have ever since been the chief bases of Portuguese commerce. He was unable, however, to stimulate the carrying trade to any great extent.

References. — *Gibbins*, History of Commerce in Europe; *Yeats*, Growth and Vicissitudes of Commerce; *Morris*, The History of Colonization, I; *Cunningham*, Western Civilization, II; *Wakeman*, Europe, 1598–1715.

THE WORLD IN 1772

Part IV—The Age of Steam

CHAPTER XXI

THE ENGLISH INDUSTRIAL REVOLUTION

187. Three important economic revolutions occurred in England during the eighteenth century, — a commercial, an agricultural, and an industrial revolution. The first two began in the latter part of the seventeenth century, continued through the eighteenth, and overlapped the nineteenth; the third, which we are to consider in this chapter, began late in the eighteenth century and extended far into the nineteenth. The revolution in English commerce has already been traced as far as the close of the American Revolution and will be continued in the next chapter. Before considering the third, a word must be said concerning the second.

188. The agricultural revolution. Until the latter part of the seventeenth century the small farmers remained an important factor in English agriculture, but from that time they declined rapidly, and throughout the eighteenth century the land of England was more and more slipping into the hands of a haughty and powerful aristocracy. This aristocracy was composed of such members of the old land-holding nobility as were able to retain and extend their ancient domains, and of the wealthier merchants, who riveted their increasing power by buying land, then the surest key with which to open the door to all social and political

privileges. Late in the eighteenth century the wealthier manufacturers also entered the lists to secure as much of this kind of property as possible. They were not only actuated by the desire to get land, but also wanted to swell the crowd of cheap laborers in the cities by forcing to the wall as many small farmers as possible. The aristocracy acquired their land at that time chiefly in two ways: (1) by buying out the small farmers, and (2) by inclosing the numerous commons, or waste lands, then existing in nearly all parts of England. Many small farmers were either obliged to sell their holdings under foreclosure, or were willing to do so because it did not pay to farm them under the old system of cultivation, and they had not enough capital to introduce the new system. Throughout the eighteenth century, therefore, and even in the nineteenth, this class in England was selling out and going either to the growing cities or to the colonies, where better opportunities seemed to be afforded. The process of inclosing also went on rapidly, especially during the latter half of the eighteenth century and the first half of the nineteenth. Between 1700 and 1759, 244 inclosure acts fenced in 333,877 acres; between 1760 and 1839, 6,955,830 acres were inclosed by 3801 acts. As might be expected, the wealthy classes profited chiefly by these inclosures, while the small farmers were often evicted unfairly and suffered very greatly. The burdens of such small farmers as were not driven from their holdings in either of the above ways were greatly increased by the heavy taxes resulting from the Napoleonic wars. On the other hand, this consolidation of farm lands into larger estates led to a much better system of farming through the application of sufficient capital. The growth of population increased the demand for wool, grains, mutton and other meats, and this demand led the new class of capitalistic farmers to

adopt a more intensive system of cultivation, suppress fallow lands, sow the cleared lands with fodder, fertilize more, practice reasonable rotations of crops, and introduce better tools and machinery. A great increase in the production and profits of the land resulted from these improved methods. The annual production of wool, for example, increased from $10,000,000 in 1700 to $15,000,000 in 1741. Although wool was still "king," there was also a great increase in other agricultural products. The cultivation of turnips and artificial grasses increased the supply of winter food for stock, and thus increased the number and improved the quality of sheep, cattle, and horses. There was also a considerable increase in the quantity of grains produced.

Although the new agricultural knowledge and new methods were gradually diffused among the small farmers who retained their holdings, and although they were benefited by the increased profits from farming, it was the large landholders who profited most. Rents rose rapidly: in 1750 the average rent was about $1.75 per acre; in 1770, $2.50; in 1812, $12, and in some sections, $17.50. At the same time the prices of most articles used by rich landowners decreased. The political power of the landlords also increased. The political changes of 1688 had benefited them chiefly, and throughout the eighteenth century they were becoming more and more powerful: they held all the offices; they controlled, by bribery or high property qualifications, the House of Commons, which was rapidly becoming omnipotent; they were socially supreme. Thus the agricultural revolution, while benefiting England greatly by increasing her supply of food and raw materials, caused serious temporary suffering among large numbers of her people. Just so the industrial revolution, while conferring great benefits upon England, and while giving

her a great advantage in the markets of the world, caused, as we shall presently see, untold temporary suffering. From another point of view, however, the industrial revolution, by creating a class of wealthy manufacturers and by increasing the wealth of the merchant princes, destroyed the monopolistic grip of the landholding oligarchy upon the government of England, which the agricultural revolution had tightened almost beyond endurance.

189. At the beginning of the Age of Steam England was still mainly an agricultural country. On the other hand, her manufactures had developed steadily, and some industries quite rapidly, during the first three quarters of the eighteenth century. The chief line of manufacturing was that of various woolen goods. The total value of the woolens manufactured increased from about $40,000,000 to $65,000,000 during these seventy-five years. The salt mines of Cheshire were worked quite actively during the first half of the eighteenth century. During the decade 1740–1750 the coal mines began to be worked more extensively, and this soon brought a great increase in the production of iron. The shipbuilding industry was quite important. England also manufactured considerable quantities of glass, hardware, beer, bricks, tiles, and coarse potteries, and smaller quantities of silks, linens, paper, and other articles. The cotton industry was only in its infancy at the beginning of the eighteenth century. As late as 1750 the cotton exports did not exceed $250,000, and even at the beginning of the Age of Steam they had not become important. Nearly all of England's manufacturing was still done on the "domestic plan," that is, it was still carried on by a number of small master manufacturers who gave out work to be done in the homes of their employees; and they often combined agricultural with manufacturing pursuits.

190. A few great inventions made in England during the latter part of the eighteenth century were destined to revolutionize her manufactures. In 1770 Hargreaves patented his spinning jenny, which he had invented about 1764. This was a frame containing a number of spindles, all fed by machinery, thus spinning many threads at once instead of one at a time, as had formerly been done by hand. In 1769 Arkwright invented his water frame, another machine for spinning, and employing water power, as the name indicates; he first used his invention in 1771 at Cromford. In 1776 Crompton invented his mule, which was first used in 1779. This machine combined the main features of the two preceding inventions and soon superseded them. In 1792 Kelly invented his self-acting mule, which was subsequently improved by Roberts, but not extensively used before 1825. These four inventions, however, only increased the power of spinning, not of weaving. It remained for Cartwright to do for the weaving industry what had already been done for spinning. In 1785 he patented his power loom, but it was not employed upon a large scale before 1815. Eli Whitney's cotton gin, invented in 1793, also proved a great stimulus to the cotton industry by greatly increasing the amount of raw cotton produced.

191. The discovery of steam power and the beginning of the Age of Steam. The six inventions named above, important as they were, would not alone have worked the wonders of the industrial revolution. Something more than water power was needed; the discovery of steam power and its application to various manufacturing processes was the link which completed the magic chain of development. In 1769 James Watt patented his steam engine, and the Age of Steam began. This invention was first used in mining, and in 1785 in spinning and weaving in some

of the factories of Nottinghamshire. After that it was rapidly introduced into the cotton-spinning industry, so that the cotton trade trebled during the fifteen years following its introduction, and it was not long before King Wool was displaced by King Cotton. The importation of raw cotton increased from one million pounds in 1760 to fifty-six million in 1800 and to four hundred million in 1840, while in the last-named year the consumption of wool was only two hundred million pounds. During this period important improvements were also made in dyeing and bleaching, and these also aided very greatly the development of English manufactures.

192. The mining industries were the first to be revolutionized. In 1735 Darby discovered the system of smelting by coal rather than wood. Watt, backed by the Birmingham capitalist, Matthew Boulton, introduced his steam engine into the mines for pumping water, sinking shafts, hauling up the coal and ore, and for many other processes. In 1788 the system of steam blasts was discovered. These great improvements soon revolutionized English mining. Watt's engine made possible a rapid development of the coal fields, and the new demand for coal in smelting iron and in driving the new machinery used in the textile and other industries was a sufficient stimulus to the new mining methods just referred to. The great demand for iron in making the new machinery, coupled with the rapid development of the coal fields, led to a revival of the iron industry. By 1788 sixty-eight thousand tons of iron were being turned out annually, and the production steadily increased thereafter.

193. The growth of factories. The system of "domestic manufactures" prevailed in England until near the close of the eighteenth century, but after that the "factory system" developed rapidly. As long as water power was

used, the crowding of laborers was not necessary, but steam power could be used advantageously only by centralizing large numbers of laborers and machines in one spot. The various economies in administration and management made possible by centralization also favored the rapid substitution of factories for domestic manufactures. At first the new system was employed chiefly in the spinning of cotton and woolen yarn; by the earlier part of the nineteenth century machinery and the factory system were used in many branches of spinning. But machinery was also gradually introduced, even before the close of the eighteenth century, into cotton, woolen, and linen weaving, lace making, calico printing, and other manufacturing processes. It was not until about 1830, however, that weaving machines seriously threatened the former hand looms. Kay's flying shuttle, invented in 1738, had enabled hand weavers to weave much more quickly than before, while hand spinners could not supply them with a sufficient amount of yarn; hand weaving, therefore, was more slowly supplanted by machinery than hand spinning. But there was a tendency, as soon as spinning factories were established, for the weavers to collect around the new mills, where yarn could be secured for weaving much more advantageously than by depending on the hand-spun yarn formerly produced by their wives and children. Gradually, therefore, in one locality after another, and in one industry at a time, machinery and the factory system almost entirely supplanted the former domestic system.

194. The growth of the factory system of manufactures, together with the rapid development of commerce, caused a great increase and an important shifting of population. Before 1750 the largest decennial increase had been about six per cent, but during the last decade of the eighteenth century it was fourteen per cent, and during the first

decade of the nineteenth it was nearly twenty-two per cent. The total population in 1760 had been seven million; in 1821 it was twelve million. This increase was almost entirely in the manufacturing districts, especially in Lancashire, Yorkshire, and parts of Nottinghamshire and Staffordshire. Northern England, therefore, grew very rapidly, while the west grew more slowly and the eastern counties declined. As would be expected also, the urban population increased much more rapidly than the agricultural population, especially in the north. The older cities like Bristol, Norwich, York, and Exeter grew, but much more slowly than the new manufacturing cities in the coal section. The population of Liverpool increased from four thousand in 1685 to forty thousand in 1760, to seventy-eight thousand in 1801, to two hundred and twenty-eight thousand in 1841; that of Manchester was six thousand, forty-five thousand, ninety thousand, and three hundred thousand in the corresponding years. Birmingham and Sheffield, which were smaller than Manchester in 1685, reached thirty thousand in 1760, and increased to seventy-four thousand and forty-six thousand respectively in 1801. Thus a new England was added in the north to the old one in the south.

195. Evil results of the factory system. Just as the capitalist farmers profited chiefly by the agricultural revolution, so the new class of capitalist manufacturers received the lion's share of the benefits derived from the industrial revolution, while the laboring population was for a time seriously injured in many ways by the introduction of machinery and the factory system. For one thing, the new machinery inevitably threw many men out of employment. Then, too, women and children were employed in large numbers in the factories, as they tended the machines just as well as men and at lower wages. This wholesale

employment of women and children in numerous factories soon gave rise to frightful conditions. Both sexes, among adults and children, were thrown together in some shops under no moral control whatever. Few arrangements were made in these shops for the preservation of health, comfort, or even of decency. There was no legislation to protect laborers from being worked too many hours or for insuring proper conditions for their labor. The women and girls who worked in the factories lost their knowledge of even ordinary household duties, and this led to filthy houses, ragged clothes, poor cookery, and consequent disease and increased poverty. In those sections where machinery was most suddenly and generally introduced, the dissatisfaction of the laborers broke out into riots; and this was not to be wondered at, because they necessarily saw only the present disadvantages of the factory system and not its ultimate advantages even for them. The most famous riots of this sort were the Luddite riots in 1812, which broke out again in 1816, in which much machinery in Nottinghamshire and the Midland Counties was destroyed. In 1826 there were extensive riots in Lancashire for the purpose of destroying the power looms. There were numerous other riots and outrages in many parts of England, but it is worth noting that the agitation for the Reform Bill in 1832 caused more riots and violence than the introduction of machinery. And at the same time we should remember that the former domestic system of manufactures had its evils. Not all master craftsmen had been kind, and that system afforded endless opportunities for petty tyranny. Furthermore, while many of the earlier factory employees and managers were doubtless cruel and harsh in the extreme and utterly unfit for the responsibilities of their new positions, others, like David Dale and Robert Owen, for example, took great interest in their

employees. The worst evils of the factory system were undoubtedly, from first to last, connected with the small mills rather than the large ones.

196. The apprentice system and its attendant evils. In the earlier stages of the factory system before the wages of workmen were lowered to the starvation level, they would not consent to the employment of their wives and children in the factories. This led to the practice of employers "apprenticing" paupers from the numerous parish workhouses throughout England. These pauper apprentices practically became the slaves of their manufacturer owners, and there soon grew up a regular class of white-slave dealers who made a business of securing paupers from all the parishes of England. These cruel dealers took their victims to the manufacturing districts and herded them in damp cellars until sold at a bargain to the manufacturers. Here they were put up at auction, subjected to indecent physical examination, and sold to the highest bidder, just as blacks were sold in the Southern States of the United States before the Civil War. These white slaves in England, however, were so cheap that it was not worth while for their owners to feed, clothe, and house them properly. They were fed on the same kind of food that was served to the pigs; they were herded together at night in miserably wretched, filthy hovels, regardless of sex, thus breeding both vice and misery. Those who were the least bit intractable, even among the women and girls, were frequently and heavily chained while at work. They were overworked to the very verge of human endurance and submitted to cruel punishments for the slightest offences. Very small children, from six to twelve years of age, were often worked sixteen hours per day. Such, in brief, was the apprentice system, developed during the early stages of the industrial revolution,

and this system unfortunately endured far too late into the nineteenth century. From the pauper children and women of the parish workhouses, the curse of long hours, cruel treatment, starvation wages, and unsanitary conditions spread to the labor of all women and children employed in factories, with the terrible results of physical deterioration in the population and the rapid growth of vice.

197. Low wages and expensive wheat. During the latter half of the eighteenth century the bad harvests and the Corn Laws made the price of wheat very high. After 1790 it was hardly ever below $1.60 per bushel, and often double that price. In 1795 it rose to $3.40 per bushel, and in 1812 to $3.83. At the same time the wages of laborers kept decreasing. The heavy taxes caused by the great continental war led the manufacturers and landlords to squeeze compensation for these taxes out of their employees by lowering their wages. The legal restrictions upon the migration of laborers from one part of the country to another, and the combination laws forbidding workmen to combine to raise their wages or shorten their hours of labor, were also important causes of the decrease in wages. The following comparison of weavers' wages with the current price of wheat will give some idea of the workingman's condition; in 1802 the average weekly wages of weavers was $3.38; in 1806, $2.63; in 1812, $1.55; in 1816, $1.30; in 1817, $1.02. The price of wheat per bushel in the corresponding years was $2.11, $2.39, $3.83, $2.38, and $3.

198. Another very important factor in the industrial revolution was the great improvement in the means of transit during the latter part of the eighteenth century. Although the difficulties of traveling and carting in England prior to the nineteenth century have been greatly exaggerated by many writers, there was certainly a great chance for improvement at the beginning of the new manufacturing

period. Most of the roads had been allowed to wear out without repair, and the pack horse was about the only means of transportation. Under the impulse of the rapid growth of manufactures and commerce many new turnpikes were built, and tolls levied upon them under the authority of various acts of Parliament. Old roads were repaired and improved methods of road building introduced.[1] But these roads were not sufficient to meet the growing demands of traffic. Consequently, enterprising manufacturers and merchants successfully applied themselves to the problem of improving water transportation. Brindley's successful completion of the Bridgewater Canal in 1761 proved contagious. This canal, running from the duke of Bridgewater's mines at Worsley to Manchester, although only seven miles long, was a triumph of engineering skill on account of the extensive tunneling through rock and the other physical difficulties encountered. Other canals soon followed. In 1777 the Grand Trunk Canal, ninety-six miles long, connecting the rivers Trent and Mersey, was completed; other canals connected Hull with Liverpool and both with Bristol. In 1792 the Grand Junction Canal, ninety miles long, connected London with Oxford and other important towns in the Midlands. It is very evident that this growth of canals and turnpikes greatly facilitated the development of the industrial revolution.

199. Thirty years of industrial and commercial progress (1763–1793). As we have seen, the Treaty of Paris (1763) cleared the way for an onward march of English industry and commerce, and the thirty years following this treaty was a period of almost uninterrupted progress. England's greatest commercial rival, France, had lost her power in India and America; Germany was torn asunder by the

[1] The name of John L. Macadam, 1756–1836, is associated with these improved methods.

struggles between Austria and Prussia and unable to seriously compete with England; Holland, the victim of internal dissensions and unfortunate foreign interference, was only a shadow of her former self; Spain, the ally of France in the Seven Years' War, had also lost her place as a rival of England in foreign trade; the other commercial countries of Europe — Sweden, Norway, Russia, and Italy — were not for a moment to be considered in the same class as England. By a fortunate coincidence it was just at this moment that the new inventions and discoveries began to appear that were to revolutionize English industries, and eagerly did English enterprise enter into a new race for wealth and commercial monopoly. It was in many ways unfortunate for England that she soon lost most of her colonies in America by a combination of unwise policy, misinformation on the part of her American officials as to the nature and extent of the revolt, and other adverse circumstances; but it must not be forgotten that England soon after found great compensations for her loss. The new nation in America prospered and grew rapidly, and, being for a long time chiefly an agricultural nation, served as a splendid feeder for the expanding manufactures of England. At the same time India was now rapidly developed into another great outlet, and England was able to obtain several important markets farther east which had hitherto been monopolized by Holland. Furthermore, the war for American independence did not seriously interrupt the steady and rapid development of English home industries caused by the fortunate combination of inventions, discoveries, and transit improvements already noted. This industrial development was clearly revealed in the increase of England's foreign trade during the decade following the war for American independence. In 1782 her imports were about $51,250,000 and her exports a little more than

$65,000,000. By 1792 these figures had been nearly doubled; the imports were about $100,000,000 and the exports were nearly $125,000,000. Similarly, England's shipping trade was doubled in the same period. Especially noteworthy was the increase of trade with her old rival, France, owing to the conclusion of the commercial treaty in 1786. From 1783 to 1786 England's exports to France had not averaged $2,000,000 per year, but from 1786 to 1793 they averaged more than $5,000,000. As already intimated, another notable increase was England's American trade. From 1763 to 1773 the average exports to the continental American colonies had been about $10,000,000; in 1792 the exports to the United States were over $20,000,000. The West Indian trade had also steadily increased; in 1792 the exports to these colonies rose to $10,000,000, and the imports from them to $20,000,000. The fishing industry was also rapidly increasing in importance, especially the herring fisheries in the North Sea, the cod fisheries off Newfoundland, and the whale fisheries in the Arctic and South seas. Furthermore, during this decade England's trade with every European country and many others increased greatly, with the exception of Spain and the Canaries.

200. The French Revolution and the outbreak of the great continental war. In the midst of this remarkable progress, while every resource of England was marshaled in a vast army moving to the conquest of the world's markets, came, like a thunderclap, the news of the outbreak of the French Revolution, portending the awful storm of the great continental war that was to follow. At first this revolution was generally welcomed in England, because the nature of the movement was entirely misunderstood. Statesmen like the enthusiastic and impulsive Fox gloried in it. On the other hand, Burke cried it down in his

famous *Reflections* and said his dying words would be, "Fly from the French Revolution." Between the two stood Pitt, who was chiefly anxious for peace. For the sake of peace he was willing to overlook many French provocations, the threats and boasts of the Girondists, the early massacres of the mob, while Burke, in 1792, wanted England to join the allies. Pitt did not even find a cause for war in the French conquest of Savoy, Nice, and the Austrian Netherlands, and decreased the English army and navy. When, however, the French gave a special challenge to England by throwing open the navigation of the Scheldt to all nations and by besieging Antwerp, he remonstrated, and took his stand in resisting the threatened invasion of the Dutch Netherlands. Finally, France took the initiative, and Feb. 1, 1793, declared war against England and her ally, Holland. Pitt was finally forced into war by the capitalists and merchants, who feared that the conquests of the French Republic might help France to recover her former position as the most formidable rival of England in the world's markets. This fear, more than the invasion of Holland by France, was the real cause that led England into the war, and commercial considerations remained, throughout the long struggle that followed, the dominant ones, before which others, important as some of them were, paled almost into insignificance.

201. The commercial crises of the war. In the meantime, before the declaration of the war between England and France, a severe commercial crisis fell upon England in the winter and spring of 1792–1793. The rapid extension of commerce, especially during the decade 1782–1792, had caused many private and provincial banks to make an overissue of notes. This overissue, together with the unsettled conditions in Europe caused by the outbreak of the French Revolution, compelled nearly one third of these

banks to stop payment, and this led to a large number of bankruptcies and finally a general commercial panic. Another important cause for the panic was the exceedingly bad harvest in England in 1792, which forced farmers to draw heavily on the local banks and necessitated the export of considerable specie to pay for foreign wheat. It is needless to say that the declaration of war made the crisis more severe and led to further bankruptcies. The war from beginning to end cost England about $4,155,000,000. In spite of a heavy income tax and increased duties on articles of almost every description, the government was obliged to resort to numerous disadvantageous loans which added more than $3,000,000,000 to the national debt. Of course this heavy strain on the resources of the country led to several serious commercial crises, and from 1797 to 1817 even the Bank of England refused to cash its own notes.

202. Growth of English industry and commerce during the war. But severe as was the financial strain upon England during this long war, and great as was the suffering among the working classes, who felt it most, her manufactures and commerce continued to prosper during this very period. The war removed a great deal of competition by checking the manufactures of the continent, while the increased supply of coal and iron and the new machinery gave a sudden impulse to English industries. England, therefore, during the continental war was able to build up a monopoly in many important manufactures and to increase her exports quite rapidly. Her exports naturally fell off somewhat during the first year of the war, but they quickly rose again and soon surpassed all previous records; they increased from $85,000,000 in 1793 to $170,000,000 in 1800, and to $290,000,000 in 1815. It was the wealth derived from this rapid increase of foreign trade that enabled England

to endure so long a war with Napoleon, and in this way the industrial revolution proved her salvation by helping build up a monopoly of the world's trade during this critical period. Some of the important stages in the development of this trade, as well as the commercial policy of England's statesmen during the great continental war, appear in the next chapter.

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CHAPTER XXII

THE FRENCH REVOLUTION AND THE GREAT CONTINENTAL WAR

203. The recovery of France after the Seven Years' War was surprisingly rapid. For several years she devoted herself almost uninterruptedly to industry and trade with great success. In the American Revolution she was able, as we have seen, to take revenge upon England, and after that war her manufactures and commerce continued to make astonishing progress until rudely checked by the outbreak of her own revolution. The new French East India Company, created in 1785, exported nearly $3,000,000 worth of French merchandise the first year of its existence, and this increased to $7,000,000 in 1791. Most of these exports were manufactures sent to China, Mauritius, and Bourbon. The trade with India did not increase so rapidly, but that with Africa and the West Indies was very prosperous. In 1789 French vessels exported three hundred thousand negroes from Africa, valued at over $3,000,000; the total trade of the French colonies in that year was valued at $120,000,000, as compared with $90,000,000 in the case of the British colonies. In 1788 the French colonies sent to France alone products worth $44,000,000, chiefly sugar, cotton, indigo, and coffee; the French exports to these colonies were worth about $16,000,000. Thus, in spite of territorial losses, France was again rapidly developing her industries and extending her commerce.

204. The commercial treaty with England in 1786, which reciprocally lowered the duties in each country on many

products of the other, was believed by its friends to be a bond which would draw the two rival nations into more friendly relations with mutual advantage; but it proved to be only a brief truce in the long commercial struggle between the two countries. The treaty was never popular in any part of France except the wine-growing south, and when the manufacturers of the north obtained control of the government they quickly abrogated the treaty, substituted successively higher protective tariffs (1791–1793), and finally declared war against England.

205. Prosperity during the first years of the Revolution. For a time, after the meeting of the States-General in 1789, France continued to prosper. The removal of the feudal obligations greatly improved the French land system; the transformation of many common lands into personal property, and the secularization of church property, increased the number of private holdings to at least one hundred thousand; these changes, together with the strong demand and high prices for grain, greatly aided the farmers. The removal of the internal customs duties (Oct. 30, 1790) was another important reform. The protective tariffs of 1791, 1792, and 1793 temporarily benefited French manufactures; for a time they developed quite rapidly in spite of internal troubles, the continuous emigration from the country, and other adverse circumstances. Foreign trade also continued to increase for a little while. During the first half of the year 1790 the exports amounted to about $76,000,000 and the imports to $45,000,000.

206. One of the leading aims of the Convention in its declaration of war against England (February, 1793) was to shut that country out of the markets of Spain, Portugal, and Asia and open them to France. The Jacobins, who controlled this body, believed that England's wealth was vulnerable because based chiefly on foreign commerce. This

belief and the faith in the more compact and solid industrial strength of France led them to think that war would ruin England's wealth. Their mistake was in thinking England's wealth solely dependent on foreign trade; they overlooked the great agricultural and industrial development that had been going on in that island. They did not foresee that the English industrial revolution and their own unwise measures would enable English manufacturers to undersell French manufacturers in other countries and even in France, and that English merchants would flood the continent, in spite of war, with large quantities of cottons, muslins, woolens, hardware, etc., which, on account of their small bulk, could easily be smuggled.

207. The decline after the outbreak of war was very rapid. Not only the taxes, losses of property, and draining of the labor supply, produced by the war, but other important causes contributed to this decline. The continued emigration of the nobles removed many of the best customers of French manufacturers and large amounts of capital that had hitherto been employed in various industrial enterprises. The rapid depreciation of the assignats checked trade. The constant increase in the number of idlers, especially in Paris and other cities, who were fed at public expense was another important cause, as well as a result, of the industrial decline.

208. The harmful socialistic laws of the Convention, which were passed under the pressure of the ignorant mob in the galleries and around the clubs, also seriously crippled industry and commerce, and increased the very difficulties they were intended to alleviate. Three laws, more iniquitous than the rest, deserve special mention: (1) the Law against Monopolies (May, 1793); (2) the Law of Maximum (Sept. 29, 1793); and (3) the Table of Maximum (1794). The first of these laws compelled grain merchants to state publicly the quantity of grain possessed by them, forbade

them to sell it elsewhere than in the public markets, and required them to sell it there at a maximum price, which was to decrease from month to month. By a supplementary law (September 4), the uniform price for all France was fixed at fourteen livres per hundredweight. The Law of Maximum arbitrarily fixed the price at which the following articles were to be sold: fresh and salted meat, salt fish, cattle, salt, lard, butter, sweet oil, sugar, honey, soda, cabbages, tobacco, wine, brandy, vinegar, cider, beer, candles, combustible oil, firewood, coal, soap, potash, paper; woolens, linens, and other cloths; wooden and leather shoes; iron, bronze, lead, steel, copper, wool, flax, hemp, and other raw materials for manufactures. The difficulty of enforcing a uniform price for these articles in the different departments of France led the Convention in 1794 to decree the Table of Maximum. This decree tabulated the value of each article in the place of its production; to this value was added five per cent for wholesalers' profits, five per cent for retailers' profits, and a fixed price per pound for transportation; this total was the maximum price allowed by the Convention. But although those who tried to evade the law were declared "suspects" and made liable to be fined, imprisoned, or to have their booths closed, it was found impossible to enforce this drastic socialistic measure. The enforcement of these maximum prices was made more difficult by the overissue of assignats, the speculation in them, the almost daily variation in their value, and their final depreciation to the point of utter worthlessness. By October, 1795, the assignats in circulation amounted nominally to nearly $9,000,000,000, and so great was their depreciation that a small quantity of firewood cost nearly $5000. In the meantime, however, the Law of Maximum was repealed, Dec. 23, 1794; but the industrial and commercial disorder caused by its attempted enforcement was not healed by its repeal.

209. Continued decline under the Directory. When the Directory came into power, Oct. 27, 1795, they found the treasury empty, the assignats fallen into complete discredit, the army unpaid and without supplies, the people without food, and industry and commerce paralyzed. Unfortunately, they were unable materially to improve the situation. The territorial mandats,[1] which they substituted for the assignats (March, 1796), were at first welcomed by the people and gave temporary relief to the government, but they soon began to depreciate and in the long run benefited only a few stockjobbers. Roads and bridges were left unrepaired; river and canal navigation became difficult; the protections against sea and river floods were in such a plight as to expose large numbers to constant danger; crimes were frequent and bands of robbers infested nearly every highway; speculation and gambling vitiated all commercial transactions in spite of the efforts of the Directory to check these evils. What little trade remained was controlled by monopolies and impeded by the exorbitant rates of interest, fifty per cent being a not uncommon rate. Marseilles did about one fifth its former business, and this was only typical of the general decline in industry and trade.

210. The rise of Napoleon was at first beneficial to French industry and commerce. The first industrial exposition, held in the Champ de Mars in 1798, revealed the growth of some important industries. Luxury reappeared as a feeder for reviving trade and industry. France after the Treaty of Campo Formio (1797) was supreme in northern and central Italy; she held Corsica and controlled the Ionian Islands; she had already bargained for the surrender of Malta into her hands; in short, "the Mediterranean was

[1] The mandats were nominally exchangeable for public lands, but they, like the assignats, were issued in too large quantities.

fast becoming a French lake," and this fact promised much to French merchants. On the other hand, England just then found her military reputation and commercial credit at a low ebb; her sailors had mutinied at the Nore and Spithead; the Bank of England had suspended specie payments, thus reducing England to a paper currency; she was sorely afflicted with her Irish troubles, which were jealously fostered by France. In India, Tippoo Sahib, the son of Hyder Ali, backed by France, was contesting English supremacy. The cape route to the Indies was in the hands of the Dutch, who were now in alliance with France. It seemed to Napoleon, who had now become the real leader in France, a favorable moment to arouse the old-time hostility against England to its highest pitch and to strike a final blow at her eastern commerce and empire. Accordingly, he was purposely lenient towards the Austrians in the Treaty of Campo Formio and wrote at once to the Directors, "Let us concentrate all our activity on the marine, and destroy England. That done, Europe is at our feet." The underlying purpose of the Egyptian campaign which followed was to destroy England's commercial empire in the East. England, however, realized her danger, centered all her efforts upon the naval struggle, and, with Nelson in command, her fleet annihilated the French Armada in the Bay of Aboukir. A little later Tippoo Sahib was slain and his capital, Seringapatam, captured by the English. England's power in India was more secure than ever.

211. The 18th Brumaire (Nov. 9, 1799). In spite of the failure of his Egyptian campaign, Napoleon was for many reasons received rapturously by the French people upon his return. By the bold *coup d'état* of the 18th Brumaire he became the supreme ruler, and he at once proved himself a splendid administrator. Many political exiles and

prisoners were set free or recalled; the proscription of the nobles ceased; the various revolutionary disturbances were crushed or appeased; the government finances were thoroughly reorganized; the country was cleared of robbers. From the moment that Napoleon assumed supreme power, therefore, French industry and trade improved.

212. Napoleon's peace overtures (1799). One of Napoleon's first acts as consul was to address a letter to the king of England proposing peace, and about the same time he made a similar proffer to Austria. It is very doubtful whether Napoleon really desired peace at this time, but the refusals of England and Austria gave Napoleon an excellent excuse to continue the war. He began by skillfully detaching the lunatic czar, Paul I, from the Coalition, and induced him to revive the Armed Neutrality League against England. Then with characteristic suddenness he crossed the Alps and defeated the Austrians at Marengo (1800), thus regaining what had been lost in Italy during his absence. It is interesting to note that England left her ally, Austria, without support in the Marengo campaign, and yet if Napoleon had failed in that campaign his power in France would have been overthrown by various discontented factions. This raises the question why England missed this opportunity. The answer is found in the fact that England was sacrificing all other considerations in the pursuit of her commercial ambition, and consequently continued to center her whole energy upon the tremendous naval struggle in which she was just then engaged with the neutral states of Europe.

213. The Northern Maritime Confederacy. Several circumstances had conspired to arouse against England other enemies than Napoleon, the most important of which was the general discontent among neutral nations over England's arbitrary exercise of the "right of search." Briefly

stated, England claimed: (1) that an enemy's goods might be seized on neutral ships; (2) that neutral ships might be seized when sailing for a port the blockade of which was only nominal; (3) that iron, hemp, timber, pitch, and grain were contraband of war, and might be seized on a neutral ship under any circumstances; (4) that a neutral ship might be searched even when convoyed by a war vessel. In order to oppose these claims the Northern Maritime Confederacy was formed in December, 1800, consisting of Russia, Sweden, Denmark, and Prussia,— Russia taking the lead. England, ever alive to the commercial aspects of the war, centered her efforts, as already stated, upon the crushing of this league. She placed an embargo upon all vessels of the allied neutrals lying in her ports, commissioned a swarm of privateers against trading ships going to the Baltic, and detached Denmark from the confederacy by ruining her fleet in the terrible battle of Copenhagen (April 2, 1801). The assassination of the czar, Paul (March 23, 1801), soon led to a more important defection from the league. The new czar, Alexander I, reversed the anti-English policy of his father and made peace with England. In June, 1801, the Northern Confederacy was dissolved on the condition that England should yield the second, third, and fourth of the above claims.

214. The Peace of Amiens. England was now supreme on every sea, while France was invulnerable in western Europe. It seemed hopeless for England, single-handed, to try to maintain the old European system against French aggression, and Napoleon's attempt to destroy England's maritime power by the combined Baltic fleets had failed. Both parties wanted a breathing spell, and accordingly, in March, 1802, the Peace of Amiens was signed. The treaty was very favorable to France, for all her continental acquisitions and all the "republics" established by her arms

were recognized, as well as all her colonies, in spite of her reverses in Egypt and on the sea. Nevertheless, all Europe hailed the treaty with joy, for it seemed to usher in an era of general peace and prosperity. The sea was finally reopened to trade, and commercial relations were rapidly renewed and extended.

215. France from the Treaty of Lunéville (1801) to the establishment of the Empire (1804). Four years of respite from continental war followed the Treaty of Lunéville, — years during which French influence was extended into every neighboring state, Napoleon's power consolidated, the Civil Code and Concordat promulgated, and industry and trade revived. France possessed an abundance of resources which Napoleon was alert to husband and develop. Party strife was checked and order preserved; public credit was restored; roads, bridges, and canals were constructed; harbors were improved; Paris and other cities were partly rebuilt. In 1800 the Bank of France was created, first as a private bank having an account with the treasury; in 1803 this bank was placed under the supervision of the government and given the exclusive right of issuing banknotes. The continued division of the great domains into small holdings, and other changes, doubled agricultural products. A high protective tariff was maintained; new industries were created, and former ones recovered their patrons. At the exposition of 1801 there were two hundred and twenty-nine exhibitors, at that of 1802 five hundred and forty. Machines appeared and gave a new impulse to the weaving industries; at the exposition of 1801 Jacquard exhibited his loom, and his other inventions soon followed. Important chemical industries arose, and in 1801 the Society for the Encouragement of National Industry was founded. Napoleon also made heroic efforts to revive the foreign trade of France. The extension of

French territories, together with Napoleon's policy of excluding English goods from them, tended to increase the number of French markets. Napoleon also tried to revive the French colonial empire; Louisiana was recovered from Spain (1800); the Peace of Amiens restored to France some important colonies; an attempt was made to reconquer San Domingo (May, 1802); French men-of-war went to survey the southern coast of Australia for a settlement. For a time, therefore, especially during the fourteen months of peace with England (March, 1802–May, 1803), the foreign and colonial trade of France revived rapidly and the French flag reappeared on every sea. It soon appeared, however, that Napoleon's efforts to reëstablish a colonial empire were futile. In 1803 Louisiana was sold to the United States, partly because of the prospect of war with England and partly on account of the failure to recover San Domingo. Even more disastrous was the outbreak of war with England in May, 1803. As this war soon involved nearly all the countries of Europe, and continued almost without interruption until 1815, it made terrible inroads upon French industry and trade, as well as upon that of all Europe.

216. The reasons for the rupture of the Peace of Amiens. The French could not pardon England's aid to the *émigrés* nor the subsidies furnished by her to the Coalitions; the English masses were incited by the Tories to regard the Peace of Amiens as almost treasonable. Furthermore, Napoleon during the peace annexed Piedmont and Switzerland, and England suspected that he intended to reoccupy Egypt. The most important cause, however, was the industrial and commercial rivalry between the two nations; the long war which followed was another struggle for the markets of the world. France saw herself being outstripped in the use of machinery, in colonial markets,

and in colonial empire. England had superior coal and iron mines and excelled vastly in the production of cottons, woolens, muslins, hardware, and other necessaries. England was also beginning to compete seriously with France in the production of luxuries. On the other hand, England was irritated by Napoleon's persistent war of tariffs. The question of the commercial relations between the two countries had not been touched by the Treaty of Amiens. England therefore claimed the right of sending her goods to French ports according to the terms of the treaty of 1786, but Napoleon, instigated by the protests of French manufacturers, maintained that this treaty had been superseded by the French tariff of 1791, and revived the old Jacobin laws against English commerce. Every French annexation of territory in northern and central Italy restricted England's trade and cut off her supply of raw silk. The French garrisons in Switzerland and Holland impeded or diverted English trade with western Germany. The temporary success of the French in San Domingo and the recovery of Louisiana occurred during the interval of peace, and both seemed seriously to jeopardize English trade. Moreover, while England saw France reviving her manufactures and extending her trade with the continent and the colonies, the Peace of Amiens did not seem to greatly benefit her own industries and trade. In fact, the outgoing tonnage of the United Kingdom actually decreased during the interval of peace: in 1801 the clearances were 1,958,373 tons; in 1803, 1,788,768 tons. War was indeed preferable to such a peace, for war would enable England freely to resume her campaign of smuggling with the continent and the Spanish colonies and enable her to steal the French trade with the United States. If considerations like the above were not sufficient to decide England to renew the war, there were not wanting direct

provocations. Historians have emphasized Napoleon's insult to Lord Whitworth as a direct cause for the outbreak, but a much more important provocation was Colonel Sébastiani's "commercial mission" to the East. The publication of the report of this emissary of Napoleon's was probably one of the most important direct causes leading England, contrary to the terms of the Treaty of Amiens, to retain the island of Malta, which act was technically the cause of the renewal of hostilities. This report pointed out very significantly the weak points in the English hold on the East, saying, among other things, that six thousand French troops would suffice to conquer Egypt, and that the Ionian Islands would declare themselves French territory as soon as a "favorable opportunity" was afforded. Such a hint might well alarm England.

Napoleon, on his part, was quite willing to take up the challenge given by England in her retention of Malta. He entered into the war fully aware that it was to be a life and death struggle for supremacy, but he was confident that he could crush England by starving her industry and commerce, and he hoped by destroying England's commercial and industrial supremacy to raise himself to the political supremacy of the world. Thus hoping and believing, he hastened to build up his continental system. At the same time he devoted all his energy which was not otherwise absorbed to various measures for developing French industry and commerce, some of which must now be considered.

217. French industry and commerce under the First Empire (1804–1814). The encouragement of industry and commerce begun under the Consulate was continued under the Empire. Napoleon offered magnificent rewards to inventors; he promised $200,000 to him who would invent a machine for spinning flax, and the same amount to the

scientist who would make it possible to substitute beets for cane in the manufacture of sugar; he pensioned Jacquard, the inventor of a loom for weaving silk; he decorated with his own hands Lenoir for his cotton-spinning machines. The chambers of commerce were reorganized; a school of arts and trades was established at Compiègne; investigations of the condition of trade and industry were ordered; the monetary system and the standard of weights and measures were fixed; the Code of Commerce appeared in 1807; about forty thousand miles of roads were maintained; some important new roads were created, especially those across the Alps, the Cévennes, and the Vosges; twenty rivers were improved; ten canals were created or completed; many bridges were built; the ports of Antwerp, Cherbourg, Flushing, Dunkirk, Calais, Brest, and Savona were enlarged and improved; the rebuilding of Paris and other cities was continued. For some time, therefore, under the Empire there was an appearance of great prosperity. Former industries were revived, and many new ones appeared; the beet-sugar industry was developed; cotton was grown in the south; muslins, linens, velvets, silks, satins, brocades, calicoes, cashmere shawls, rubber goods, morocco leather, clocks, watches, potteries, goldsmith wares, chemicals, firearms, and surgical and mathematical instruments were manufactured in considerable quantities; there were 1422 exhibitors at the exposition of 1806. The countries annexed by France participated for a time in this development, and French goods found ready markets over the whole continent. But the development at this time was artificial; everything was overdeveloped and overregulated. Furthermore, France in the end was to suffer from the failure of Napoleon's misconceived continental system. He, who from first to last acted on the assumption that England's wealth

was artificial and could be destroyed by a war of tariffs, found to his sorrow that his own scheme was infinitely more artificial. He did not properly estimate English persistence and industrial skill, England's superiority in machinery and mineral wealth, her long schooling in commercial enterprises, and her naval supremacy; neither did he reckon with the inevitable reactionary protests which finally arose from all parts of the continent against his own monstrous, artificial tariff scheme. These were the homely forces, however, which, in a last analysis, caused his downfall.

218. Napoleon's continental system. The germs of this system are to be found in the Jacobin laws against English commerce and the hostile decrees of the Directory, some of which have already been noted. As soon as Napoleon came into power he revived these earlier laws, enforced them more vigorously than they had ever been enforced before, and as fast as he annexed or obtained control of new territory he extended their application, — in Naples, Tuscany, Piedmont, Elba, Sardinia, Switzerland, and Holland. Even after he made peace with England in 1802 he continued his war of tariffs against English goods. Just as soon as England refused to surrender Malta (May, 1803) Napoleon, in violation of the Treaty of Basel (1795) with Prussia, occupied Hanover and sent a French force to Cuxhaven at the mouth of the Elbe, in order to cut off England's trade with the interior of Germany. England thereupon threatened Prussia with a blockade if the French force were not withdrawn. Fearful for the linen trade of Silesia and other industries, the Prussian king sent a letter of protest to Napoleon; but the Prussian envoy, Lombard, was duped and Cuxhaven continued in French hands without further Prussian protest. England was as good as her word and proceeded with the blockade; thus Prussia and England, who ought to have been allies, were separated

temporarily, at a critical moment, by Napoleon's skillful diplomacy. Spain's grievances against England were also skillfully used to close the markets of that country against English merchants until 1808. The famous Boulogne expedition was undoubtedly a feint to exhaust England by compelling her to support a great array for defense, while her resources were further exhausted by the extension of the "coast system." England's victory at Trafalgar (1805) destroyed Napoleon's hopes of directly crushing her navy, and accordingly, after his victory at Austerlitz (Dec. 2, 1805), he proceeded to turn the thumbscrews still tighter upon English commerce. The coast system was at once extended throughout all Italy, as well as Istria and Dalmatia, and in March, 1806, Prussia was forced to exclude English ships and goods from all Prussian and Hanoverian harbors. Prussia, however, soon learned that she had been duped by Napoleon, and Oct. 9, 1806, declared war against him; but just five days later the two wings of the Prussian army were completely routed at Jena and Auerstädt. Napoleon then promulgated his celebrated Berlin Decrees (Nov. 21, 1806), which declared the British Isles in a state of blockade, and prohibited the inhabitants of all territories held by French or allied troops from carrying on any trade with Great Britain or admitting any merchandise whatever that had been produced in Great Britain or her colonies. No vessel that had even touched at a British port was allowed to enter a continental harbor; all English subjects in French territories were to be seized; all English letters and all goods of British origin, whoever might be the owner, were ordered to be seized. Half of the confiscated goods were to serve as an indemnity to French and allied merchants for their losses in the maritime war; the other half was taken by Napoleon. The coast system was now applied to all of Europe from the Vistula on the

north to Dalmatia on the south, except Denmark, Portugal, and the Austrian port of Trieste; it had already become almost a continental system.

In February, 1807, the Russians and Prussians made a desperate stand at Eylau, and Alexander then appealed to England for aid. Had England complied with this request, Napoleon would probably have been overpowered. England, however, instead of promptly coöperating, sent her troops to every other part of the world,—to Constantinople, Egypt, and Buenos Ayres. This resulted in the crushing defeat of the Russians at Friedland (June 14, 1807) and the Treaty of Tilsit (July 7, 1807), which enabled Napoleon to complete his continental system and exclude British goods from the rest of Europe. The best explanation of England's policy at this critical moment is found in the fact that she was looking out chiefly for wider markets, and her various expeditions just alluded to were really useful to her by opening valuable markets in Turkey, Egypt, and South America. It is difficult to see how England could have endured the strain of her struggle against Napoleon and his continental system during the years 1807 to 1810 without the trade gained in these new markets. Her trade with Spain, for example, increased from $10,000,000 in 1807 to $55,000,000 in 1811; her total trade increased, in spite of many inroads upon it, from $235,000,000 to $330,000,000 during the same period.

While England was thus extending her trade in various parts of the world she also retaliated against Napoleon's continental system by a series of Orders in Council (January to November, 1807). These decrees, especially that of November 21, were undoubtedly excessive. By compelling all neutral trade with Europe to pass through English ports, they rendered it liable to confiscation by the French, and thereby alienated several neutral nations,

especially the United States. In 1806 the United States bought from England goods worth about $64,000,000, over two thirds of which was paid for by exports to Europe. As the Orders in Council cut off these exports from the United States to Europe, England inevitably lost much of her trade with this country and ultimately became involved in the War of 1812. On the other hand, we must not forget that the underlying idea of all these orders was to starve Europe into revolt against Napoleon, and that finally this policy was one of the most powerful factors in his downfall. It is not so easy to excuse England's high-handed treatment of Copenhagen and the Danish fleet in September, 1807. England had no right to bombard this city and demand the surrender of this fleet without positive evidence that the Danish government intended to hand over the fleet to Napoleon, and this evidence England did not possess. It is also certain that the Copenhagen expedition was on the whole disastrous to England, for Denmark became one of Napoleon's most faithful allies, and Alexander soon after (November 7) declared war against England.

In spite of England's single-eyed attention to her commercial interests and her retaliatory policy against Napoleon's continental system, this system was apparently quite successful up to 1809. By that time the blockade included Denmark, Sweden, and Turkey, in addition to the countries included in 1807; England was disgraced in the eyes of the world by her treatment of Denmark; her trade with the United States had seriously declined; French corsairs were doing much damage to her colonial trade, especially around the island of Mauritius. But it was not long after this date before signs of a revolt against the continental system began to appear. Merchants and manufacturers were aroused against the soldiers and spies who dogged

their footsteps in most of the large continental towns and cities; the terroristic rule of Davoust in Hamburg was especially galling. Throughout the Napoleonic empire a general decline in trade and industry set in. English cruisers more and more deprived continental manufacturers of their raw materials. The continent became dependent upon English ships for its colonial products. By 1809 England had a monopoly in sugar, tea, and coffee; in 1811 the prices of sugar, coffee, tea, cotton, indigo, etc., in Paris were about ten times as high as in London.

In 1810 Napoleon decreed an average duty of fifty per cent on all colonial products and ordered all British goods throughout his dominions to be burned. This decree alienated the whole continent and proved a turning point in his vast artificial system. England had already shown herself very ingenious in eluding Napoleon's blockade: Gibraltar and many other parts of the Iberian peninsula, the Channel Islands, Jersey, Heligoland, Malta, Corfu, Sicily, and Salonica were all centers whence English and continental smugglers passed her goods to the continent, and all sorts of tricks were resorted to in order to gather the enormous profits derived from such trade. Even Napoleon himself recognized the failure of his continental system by selling numerous licenses to evade it and by clothing his own troops with British cloths. Finally, in December, 1810, Russia withdrew from the blockade, and from that moment English goods began to pour into central Europe by way of Riga. Napoleon tried to punish this defection in his Moscow expedition, but it ended disastrously and his overthrow soon followed.

Enough has been said to show that the great continental war was from beginning to end, far more than is commonly realized, a struggle between giants for the commercial and industrial supremacy of the world; that many

of the decisive turning points of this war hinged on commercial considerations; that one of the most important and direct causes for the overthrow of Napoleon was the reaction against his misconceived continental system.

References. — *Rand*, Economic History since 1763, 3d ed., 55–148; *Gibbins*, History of Commerce in Europe, 169–182; *Ibid.*, Industry in England; *Cunningham*, Growth of English Industry and Commerce, II; *Rose*, The Revolutionary and Napoleonic Era; *Yeats*, Recent and Existing Commerce; *Marchant*, Commercial History, 177–220; *Andrews*, The Historical Development of Modern Europe, I.

CHAPTER XXIII

ENGLAND AND FREE TRADE

219. Depression after the great continental war. This war left England with a national debt of nearly $4,500,000,000, in spite of the fact that an average annual revenue of $350,000,000 had been raised during its continuation. Unfortunately, these burdens weighed heaviest upon the poorer classes. The landlords, aided by the inflated prices for produce, squeezed part of their share of the taxes out of their tenants by raising rents, and another part of it out of the poor wage workers by lowering their wages and raising the duties on wheat. The manufacturers and merchants likewise found compensation for the taxes paid by them in the high prices secured for every necessary of life which they manufactured or sold, as well as for luxuries, and by lowering the wages of their employees to a starvation level. The wealthy manufacturers, merchants, and landlords found another compensation for their taxes in the scandalous discounts which they obtained in loaning their money to the government. Thus throughout the war they were continually getting richer, while the wage earners were growing poorer.

The heavy pressure of taxation and debt was increased after the war by the general distress which prevailed, and then the rich as well as the poor began to feel the burden. The sudden fall in the price of wheat in 1812 injured the farmers and landlords, especially as they had just paid out large sums in reclaiming waste lands, which produced enough

to pay while the price of wheat was so high, but not enough to pay after the price fell. Then in 1816 and 1817 there were bad harvests, which sent up the price of wheat again; but this did not greatly benefit the farmers, because they had little wheat to sell. On the other hand, these bad harvests, coupled with the Corn Law of 1815, which kept out all foreign wheat until the price rose above $2.50 per bushel, produced frightful suffering among the wage earners. Under the artificial stimulation of this obnoxious law the price of wheat rose above $3.25 a bushel in 1816 and 1817, while wages continued to go down. Furthermore, the cessation of expenditures for war purposes, and the glutting of the home and foreign markets after the war by the too rapid development of English manufactures, and the increased production of continental countries under the stimulation of their new tariffs, caused serious losses to English merchants and manufacturers, compelling them to shut their factories for a time. This fact, together with the disbanding of the large land and naval force and the continued introduction of machinery, threw many out of employment and made wages still lower, thus adding to the terrible distress among the poorer classes. Lord Castlereagh's hostility to any measures of political reform increased the discontent among the distressed classes, and there were not wanting agitators to fan the flame. Consequently, there were numerous political meetings, which were attended by large numbers of the suffering and discontented workmen. Worse still, there were many riots on the part of the agricultural, industrial, and mining laborers. The reactionary effects of these riots upon industry and trade are very evident.

220. Alternate commercial revivals and panics (1819–1840). In 1818 there was a temporary return of prosperity; the price of wheat fell, thus relieving the poor; trade revived,

factories and mines were reopened, thus giving workmen employment. Prosperity, however, led to speculative overproduction and the next year there was a severe industrial and commercial panic; factories and mines had to be closed, and workmen suffered; money became scarce, prices fell, and exports decreased rapidly; there was widespread ruin among the merchants and manufacturers, causing nearly thirty-six hundred bankruptcies in one year (1819). In 1821 trade and industry began to revive, but there was another serious panic in 1825. Some claim that this panic was caused by the Bank of England's resumption of specie payments, but whether or not this be true, there were undoubtedly other important causes, such as overproduction, the too rapid importation of cotton, silk, and other raw materials at too high prices, the overissue of paper notes by country banks, and the foolish speculations in the trade with the Spanish American countries. After this crisis had run its course there was a slow but steady improvement for several years; but again, from 1836 to 1839, there was a panic, caused chiefly by the formation of numerous joint-stock banks and other companies and by the extravagant speculation in grain and tea. In spite of all these interruptions, however, the foreign trade rose to $815,000,000, the exports being $513,500,000.

221. Condition of English agriculture under the protective system (1815–1845). The sudden fall in the prices of agricultural products after 1812, coupled with the refusal of the landlords to reduce their rents, and the bad harvests of 1816 and 1817, had ruined many farmers. The more stringent Corn Law of 1815, which had been passed to relieve the farmers from the competition of Prussian, Polish, and other foreign grains, and to bolster up the landlords' rents, not only caused much suffering among the wage earners, but failed to permanently help the farmers. Relying

on the artificial protection of these laws to keep prices up, they began to grow grain in such quantities as to bring the price down. For quite a number of years, therefore, they were obliged to pay their rents out of their capital rather than their profits. During the last ten years of the protectionist period, however, they again became more prosperous, partly owing to favorable legislation of various kinds, but chiefly to the improvements in farming methods. More scientific drainage was introduced and fostered by the government; the chemical nature of the various soils was studied more carefully and the most suitable fertilizers were applied to them; nitrate of soda and guano began to be used; the art of making superphosphate of lime by dissolving bone dust in sulphuric acid was discovered. There was also a marked improvement in agricultural implements and machines; Small's plow, Meikle's threshing machine, and the drilling machine came into use. The rearing and breeding of stock, the cultivation of artificial grasses, and the selection of seeds now received closer attention and more scientific treatment; the Royal Agricultural Society was founded in 1838; the introduction of railways, canals, and steam navigation decreased the cost of transportation and enabled the farmers to bring their produce to market more easily.

222. Gradual undermining of the protective system (1820–1849). By the close of the great continental war the English protective and restrictive system had already been partially undermined. The Navigation Acts, protecting English shipowners, had been gradually going to pieces; in 1796 they were modified so as to allow the United States to send goods to England in her own vessels; in 1811 Brazil had been allowed the same privilege. The new commerce and the new manufactures ushered in by the industrial revolution had grown up largely without

governmental control or influence. Many new commercial companies had been formed without governmental regulation, and in 1813 the trade of the East India Company was thrown open to general competition. Many old laws regulating trade and industry, like the Assize of Bread and the Statute of Apprentices, had for some time been practically dead letters. In 1814, after having been undermined by piecemeal, the Statute of Apprentices was repealed. The beginning of the removal of import and export duties had been made in 1786 when Pitt's commercial treaty with France had been signed, but the operation of this treaty had been rudely interrupted by the French Revolution and Napoleonic wars. In 1820 a new campaign was begun against the excessive protective system, when the famous petition from the London merchants was sent to Parliament asking for a repeal of all protective duties and the reduction of the tariff to a strictly revenue basis. About the same time the Edinburgh Chamber of Commerce sent in a similar petition. Parliament promptly appointed an investigating committee, which soon made a report favoring the principle advocated in these two petitions. At that time Huskisson was president of the board of trade, and he proposed the reduction of certain import duties and further modifications of the Navigation Acts. Gradually, after much opposition, several measures of this kind were adopted by Parliament. In 1822 the Corn Laws were slightly modified and the Navigation Acts again changed so as to allow the Spanish American countries to send their goods to England in other than English vessels. The next year Huskisson's Reciprocity of Duties Bill was passed, authorizing the crown to make reciprocity treaties so far as shipping was concerned. Acting under this authority, the government at once made such treaties with Prussia, Sweden, Denmark, and Hamburg, and during the next

twenty years with nearly every important country in the world. In 1824, in the same spirit of removing governmental restrictions, Parliament repealed the Combination Acts, forbidding laborers to combine to settle wages and hours, and in the same year the exportation of machinery was legalized. In 1828 Wellington's sliding-scale system of duties on wheat was introduced, by which the duty was to fall as the price of wheat rose and vice versa. For a few years after this, other questions absorbed the chief interest of Parliament, and there was a lull in the campaign against the protective system, although several bills looking towards repeal were brought in. Another succession of bad harvests, however, again raised the price of wheat from $1.25 per bushel in 1835 to $2.20 in 1839. Besides, the crowded, dirty, and miserable condition of the poor living in the large cities was attracting more and more attention and sympathy, especially after the passage of the Reform Bill (1832). The high price of wheat not only added to the misery of the poorer classes, but was a serious obstacle to trade. These facts led certain leaders to direct attention again to the Corn Laws as the chief cause for the high price of wheat.

A new stage in the struggle for free trade was entered upon when the Anti-Corn-Law League was formed at Manchester in 1838. The president, leading spirit, and most influential agitator of the league was Richard Cobden, who was ably seconded by the orator, John Bright. The wealthy Whig manufacturers soon became interested in the movement because they saw that abundant food would help to keep labor cheap; many of the wealthy merchants were also interested because the Corn Laws interfered with trade. Money was therefore easily secured for promoting the objects of the league, and an active campaign of agitation was at once begun. A regular free-trade journal was

published; millions of free-trade tracts were distributed; skilled lecturers were employed to address mass meetings throughout the country; the speeches of Cobden and Bright were printed and scattered broadcast. Of course the industrial wage-earner class was easily enlisted, but there were many others who were open to conviction, and these were made to see that the object of the league was in harmony with the tendency of the period against governmental restriction. Gradually a great many electors of all classes were enlisted and thoroughly organized. On the other hand, the efforts of the league were opposed by the whole body of agriculturists, who formed the main strength of the Tory party then in power. When Peel came into power in 1841, the country was quite sharply divided on the issue of the Corn Laws and was threatened with a profound political crisis. He saw clearly that some extreme measures must be taken to avert a violent revolution, and although representing the Tory party he resolved to impose some heavy sacrifices upon the Tory landlords and farmers. Accordingly, in 1842, he substituted another sliding scale of duties on wheat for the Wellington scale still in force, and reduced or abolished the duties on several hundred other articles, food products, raw materials, and manufactured goods. At the same time he protected the treasury against the changes thus made in the revenue by reëstablishing an income tax for three years. Of course Peel's measures were very unsatisfactory to the advocates of protection and were not just what the Anti-Corn-Law League wanted. All the previous advocates of protection and even many of the manufacturers, who had favored a repeal of the Corn Laws, thought he had gone too far; the Tory landlords did not like the change in the Corn Laws, and many of the manufacturers did not like the changes in the duties on manufactured goods. On the other hand,

the radical free traders, the merchants, the industrial wage earners, and some of the more enlightened manufacturers thought Peel had done too little. They, therefore, redoubled their efforts and were favored by the circumstances and tendencies of the times. Prosperity and good times soon returned; during the next three years manufactures flourished more in the face of the new competition than they had before without it. Although a series of good harvests and other circumstances contributed to this revival of prosperity, there is no doubt that Peel's policy had a good deal to do with it. He thus won the support of many manufacturers, as well as the merchants and the industrial wage earners, who were already for the most part on his side. In 1845, therefore, he swept away many more duties on imports and all the duties on exports, and lowered still other duties. The country gentlemen now began to transfer their allegiance to Disraeli, who became their leader and used all of his great ability to defeat Peel. But the Anti-Corn-Law League was rapidly growing in numbers and in influence; Bright's oratory and Cobden's reasoning were telling even on the farmers, who now saw themselves suffering while the manufacturers and merchants flourished. At this stage of the struggle Peel was a free trader in principle and practice so far as manufactures were concerned, but he feared that the repeal of the Corn Laws would make England dependent for her food supply upon foreign countries, which might in time of war starve her into submission. His fear was no doubt justified, but that very year the grain crops in England and Scotland were again seriously injured, and Ireland was afflicted with a terrible potato famine. Of what use was it to talk about possible future starvation in case of war, in the face of actual present starvation in time of peace? Peel was soon convinced by the argument of

necessity thus forced upon him, and saw that the Corn Laws must be swept away completely, in order to relieve the starving millions in Ireland and the many sufferers in England and Scotland. Late in the year 1845, therefore, he proposed to the Cabinet the repeal of the Corn Laws. Failing to convince the majority, he resigned, but was recalled and in January, 1846, brought in his bill for repeal, which was finally carried in June, after a long and fierce debate. This bill provided another sliding scale by which a slight temporary protection was placed on wheat until 1849, after which the protective tariff on wheat was to be altogether removed, though a nominal duty of about three cents per bushel was still to be collected. Thus ended the great struggle for free trade. English farmers and landlords were sacrificed for the sake of the industrial and commercial interests. England became, far more than Peel had feared, dependent on other countries for food, but their masters in manufactures and commerce. Side by side with the final overthrow of the old system of agricultural, industrial, and commercial protection was the repeal in 1854 of the last vestige of the Navigation Acts. Thus the colonies were also freed from all economic subjection to the mother country.

223. Effects of free trade. England was undoubtedly well prepared for this important change from protection to free trade on account of her financial strength, her splendid fleet, extensive colonial empire, and the previous development of her industries caused by her mechanical skill, cheap labor, coal supply, and extensive use of machinery. By taking this step, perhaps more than by any other, she saved herself from the agitations and revolutions which troubled the continent after the Revolution of 1848 in France. By this step also she became the great dock, as it were, where were unloaded, free of charge, the products

of all countries, thus leaving her a large share of the profits of the world's trade. Not only did foreign merchandise come there for redistribution, but foreign merchants, after unloading there, replenished their cargoes in her markets. She profited also from the sojourn of foreign ships in her ports by supplying them with coal and provisions and by charges for their repairs. Her banks profited enormously by conducting the financial operations of these foreign merchants. Furthermore, the new prosperity of the free-trade period caused a continued rapid growth of population and a new exodus of her people to her colonies in all parts of the world, where they created new outlets for her goods and new supplies of raw materials. No wonder then that her trade and industry took a new flight of progress and that her market came to regulate the markets of the world. By the close of the Age of Steam her foreign trade amounted to $2,670,000,000, of which $1,195,000,000 were exports. On the other hand, it is important to note that England's free-trade policy subsequently proved quite one-sided, for other leading nations did not follow her example. They retained or created high protective tariffs, and thus attracted English capital to develop their industries, the products of which gradually began to enter the free markets of England and her colonies. In the next period we shall see that England's one-sided free-trade policy thus helped to undermine her industrial supremacy, at the same time that it helped her to build up such a commercial supremacy as the world had never seen before.

224. The adoption of the free-trade policy was not the only cause of the new industrial and commercial development. It is rather true that a fortunate combination of circumstances coöperated with the new policy to make it successful. For one thing, the discovery of gold in California and Australia furnished a much-needed addition to the supply

of precious metals. Coming as it did, immediately after the commercial crisis of 1847 and just at the time when the repeal of the protective system was first taking effect, this discovery gave a great stimulus to trade by raising prices and by developing new markets in Australia. The first international exposition, held in London in 1851, also benefited England's industry and trade very greatly, not only by revealing her supremacy, but also by showing her manufacturers how they might improve their own work. This exposition and those that soon followed were relatively much greater stimulators, educators, and revelators than those of more recent years. The commercial treaty with France in 1860 also proved a very great help to England's commercial expansion. The systematic improvement in the means of communication and transportation was another important factor. Many river and harbor improvements were made; the system of turnpikes was revolutionized during the first half of the nineteenth century, under the competent direction of the Scotchmen, Telford and Macadam; many iron bridges were built; by 1840 the network of English canals was completed. But more important was the rapid construction of railroads and the still more rapid development of steam navigation. The Stockton and Darlington Railroad was opened in 1825, the Liverpool and Manchester Railroad in 1830; the *Royal William* crossed the Atlantic in 1833; a regular line of steamers was opened between England and India in 1837, between England and America in 1838; by 1845 there were about three thousand miles of railroads in England, in 1866 nearly fourteen thousand miles. These improvements in the means of transit not only greatly reduced the cost of transportation, but also led to more efficient ways of doing business. Similarly, the introduction of the penny post in 1840 and the development of

the electric telegraph system after its first use in 1837 gave a great impulse to trade and industry. Other important factors were: (1) the superiority of the English marine; (2) the improvement in banking facilities; (3) the multiplication of mechanical inventions; (4) the adoption of the gold standard as the basis of the English monetary system; (5) the abundance of capital and cheap labor; (6) the growth of population, with its increasing demands upon industry and commerce; (7) the industrial skill and business experience of the British; (8) the growth of trade with the United States and South America; and (9) the fact that in all the great questions of her foreign policy her statesmen were alert to secure the utmost benefits and privileges for their manufacturers, merchants, and shipowners, — this being preëminently true in their attitude towards South American independence, the independence of Greece, the Russo-Turkish War (1828–1829), the Belgian question (1830–1832), the formation of the German Zollverein, the various Spanish, Portuguese, French, and Italian revolutions, the Afghan War of 1838, the Crimean War, and the various interventions in Egypt.

225. The colonial expansion of England was one of the most important causes for her rapid industrial and commercial development under the free-trade régime. The close of the continental war had left her in possession not only of all the colonies which she had before that war, but also of Tobago, St. Lucia, Trinidad, Demerara, Ceylon, Mauritius, the Cape of Good Hope, Malta, and Corfu (protectorate). During that war she had also annexed Mysore, Surat, Tanjore, and the Carnatic, and extended her power in northern and central India. Soon after, she fortified Socotra and Aden, and later, Perim, Cyprus, and Egypt, thus protecting her approaches to the East Indies. In 1819 she established herself at Singapore, and in 1826 annexed Assam and

Malacca. The opening of the Indian trade to private enterprise in 1813 gave a great impulse to the commerce with that peninsula; the exports of India increased from $5,000,000 in 1810 to $50,000,000 in 1834, her total trade in the latter year being $70,000,000. But the development of India was much more rapid under the free-trade régime, especially during Lord Dalhousie's administration (1848–1856) and during the Civil War in the United States, when England derived a large part of her cotton from this colony. By 1866 the total trade of India amounted to $615,000,000. After the reopening of the American markets the Indian cotton trade decreased so much that in 1867 the total trade was only $430,000,000, but it gradually increased thereafter, subject to some fluctuations, as we shall subsequently see.

Parallel with the development of India was that of Australia. While India was acquired only by a long series of wars, Australia was taken by peaceful occupation. In the same year that Watt patented his steam engine and thus opened the Age of Steam, Captain Cook made his famous voyage of discovery to New Zealand and New South Wales. By his advice a shipload of convicts was sent out in 1788, and Sydney was founded. In 1799 sheep were introduced, and thus was laid the foundation of a very important industry in that colony. Between 1815 and 1850, Victoria, Queensland, West Australia, South Australia, Tasmania, and New Zealand were colonized, and their exports of wool increased quite rapidly; but this magnificent continent failed to attract settlers in large numbers until gold was discovered there in 1851 by Hargreaves. Then the population and trade of these colonies grew by leaps and bounds. Gold worth about $700,000,000 was exported between 1851 and 1866, and by the latter year about one hundred and fifty million

pounds of wool were being exported annually. Besides these staples, Australia was then exporting considerable quantities of silver, copper, iron, tin, grain, flour, hides, cattle, horses, sheep, and tallow. She already possessed several important manufactures based upon her agriculture. Melbourne and Sydney were thriving commercial and industrial cities, each with a foreign trade of about $100,000,000. The total trade of Australia, exclusive of specie, amounted to about $250,000,000.

England's posts at Aden and Socotra gave her a good base for trading with Persia and Herát as well as India. After the Opium War (1839–1842), China was compelled to cede Hongkong to England and to admit opium into the Celestial Empire. As rice and opium were the two leading Chinese imports, which England obtained from India, while other European nations did not have access to a similar supply and were obliged to give silver for the tea and silks which they bought from China, England had a great advantage from the first in her trade with that empire, and she rapidly extended it after the cession of Hongkong. The Chinese War of 1857, regrettable as it was, only tended to increase England's trade in that direction. It was during the Age of Steam that England laid the foundations of her present extensive power in South Africa. The Cape of Good Hope, which had first been acquired in 1796, was finally ceded to England in 1814 and then became Cape Colony. Natal, which had been founded by Dutch settlers, was placed under British rule in 1841. It was not until the next period, however, that England acquired her larger territories in Africa and entered seriously into the development of their resources.

226. There were some serious interruptions in the growth of English industry and commerce under the earlier free-trade régime. First, there was the panic of 1847, caused

by the too rapid development of railroads and the wild speculation connected with it, which locked up capital in a form from which it could not easily be diverted. So great was the craze for investing money in new enterprises, no matter how shaky, that nearly $2,500,000,000 was borrowed in 1847. Fortunately, the influx of gold from California and Australia soon relieved the situation, and there was a rapid revival; but in 1857 there was another commercial crisis. This panic originated in the United States, but the close relations between the two countries made the American panic affect England quite seriously. The iron and textile industries were the chief sufferers, many of their factories being obliged to close. No sooner had the country nicely recovered from this crisis than the Civil War in the United States caused a cotton famine which turned about eight hundred thousand wage earners in Lancashire out of employment, producing frightful misery there and seriously checking for a time the growth of English trade. Fortunately, other circumstances again partially compensated for the heavy loss. It was just at this time that the commercial treaty with France in 1860 came to the rescue. This treaty caused a very rapid growth of trade between France and England, which largely compensated for the loss of trade caused by the cotton crisis. At the same time the cultivation of cotton was developed rapidly in India; in 1860 India supplied England with two hundred and four million pounds of raw cotton, in 1866 six hundred and fifteen million pounds.

227. The abolition of slavery in the colonies, while very creditable to England from the moral standpoint, undoubtedly did much industrial damage to some of the West India Islands. Jamaica, in particular, suffered irretrievably from this measure. The freed negroes, each with his little patch of ground, were able to eke out an existence satisfactory

to their low tastes without doing much work. Without any motive to labor, large numbers of them refused to work on the plantations, and the labor supply became utterly inadequate. The result was that the exports of Jamaica soon fell from $15,000,000 to $5,000,000, and the production of sugar to one fifth of what it had been under slavery. Rival producers of sugar soon outstripped Jamaica, and she has never recovered her supremacy in sugar production. The other islands, for various reasons, fared somewhat better, and their production began to increase again a few years after the slaves were freed; the negroes in those islands purchased lands and prospered; education made some headway, and crime diminished.

228. Condition of English agriculture under the free-trade régime. Although many predicted that the repeal of the Corn Laws would ruin the English farmer, he continued to prosper for some years after this step was taken. This was due chiefly to the enormous development of trade and manufactures under the new régime and the greater interchange of products made possible by the improvements in transportation. Moreover, the farmer was greatly aided by the increase in the total and the per capita consumption of other farm products than wheat. Vastly more of the farmer's butter, cheese, and bacon, for example, was consumed in 1866 than in 1840. At the same time, some very important improvements in implements and farming methods were made during that period; the reaping machine was introduced in 1852, the steam plow in 1855. Up to the very close of the Age of Steam, and for a little longer, English agriculture was therefore quite prosperous. After the Franco-Prussian War, however, for various reasons, it began to decline, and continued to do so throughout most of the remainder of the century. It cannot be denied that England, since the repeal of her

Corn Laws, has been to an increasing extent dependent upon other countries for her agricultural products; but this was the sacrifice she was compelled to make, sooner or later, for the sake of her industrial and commercial supremacy.

229. Factory legislation (1800–1866). While the government was unwinding its arms of protection from the landlords, manufacturers, and merchants, it began to reach them out in behalf of the industrial laborers, and sadly did this class need protection from numerous dangers. The long hours of labor and the miserably unsanitary conditions, as well as the excessive employment of women and very small children, which characterized the introduction of the factory system, have already been referred to. The unhappy life of these overworked, underfed, half-clothed, and otherwise abused women and children in the northern factories at length began to receive the attention of Parliament. The first Factory Act, passed in 1802, regulated the labor of "bound" children in cotton factories, prohibiting night work, longer hours than twelve hours per day, and the employment of children under nine years of age, and prescribing certain sanitary conditions and provisions for elementary and religious instruction. The rapid introduction of machinery, however, soon led to the employment of other children under nearly or quite as bad conditions as first applied to "bound" children and pauper adults. Their condition soon began to attract attention, and a vigorous crusade was begun that led to a series of laws placing the conditions of factory laborers more and more under the protecting control of the government. The second Factory Act was passed by Parliament in 1819, and extended the provisions of the act of 1802 to children who were not pauper apprentices; but it also applied only to cotton factories. Some minor acts were passed during the next fourteen years, when, in 1833, a very important one was passed,

applying to children employed in all kinds of textile factories. This act provided for four salaried inspectors with extensive powers for enforcing it, and numerous prosecutions and convictions were made. In 1844 another act was passed, the most distinctive provision of which was that children should be employed only a half day or the whole of alternate days, and that they should be sent to school the other half of the time. Fielden's Ten-Hour Act, in 1847, limited the work of those under eighteen to ten hours a day and eight hours on Saturday.

The next stage of development was the extension of these regulations from textile factories to other industries. The Children's Employment Commission, appointed in 1840, reported in 1842 on the condition of underground labor. They found children beginning work in the mines at five and six years of age and girls and women, half clothed, working with men who were stark naked; the usual hours per day were twelve to fourteen, and these often at night. A law was immediately passed prohibiting all underground work by females or by boys under thirteen. Subsequent acts provided minutely concerning the age and hours of laborers in mines, their lighting, ventilation, and safety. In 1846 calico-printing works were similarly regulated; in 1860, 1861, and 1863 bleaching and dyeing factories, lace factories, and bakeries, in 1864 and 1867 still other kinds of factories and workshops, were brought under control. Finally, in 1878, the Factory and Workshop Consolidation Act repealed all former special laws and substituted a general code regulating all industrial establishments. These various English factory laws are especially noteworthy because they exerted considerable influence upon the similar legislation of other countries, including the United States.

230. Growth of trade unions. While the English laboring classes were during this period coming to be better

protected by the government, they were at the same time learning how to protect themselves better. One evidence of this fact is the rapid growth of trade unions during the latter half of the period. The factory system inevitably forced a clear distinction between employers and employees. Unfortunately, this distinction soon led to serious disputes between the two classes, and gradually the laborers learned to protect themselves against the consequences of such disputes by organizing themselves into trade unions. At first such organizations were made illegal by the so-called "Combination Acts," of which the act of 1800 was the most famous; and they were, for manifest reasons, very unpopular with the manufacturers, merchants, landlords, and even with the clergy and philanthropists. In spite of law and public opinion, however, unions were formed in many trades, sometimes secretly, sometimes openly. This led to many prosecutions and convictions of persons enrolled in these organizations. By 1824 and 1825, however, the principle of *laissez faire*, or freedom from governmental regulation, had so far triumphed in England as to bring about two laws guaranteeing freedom of labor and freedom to combine for securing better terms from employers, and these laws gave a great stimulus to the further formation of trade unions. In 1859 a law was passed allowing combinations to secure changes in wages and hours of labor, even if it involved outsiders, and making it lawful to use peaceful persuasion to induce outsiders to join in strikes. This law led to a still further growth of unions, which unfortunately was attended with much disorder and violence. The numerous and prolonged strikes, with their attendant violence, led to several parliamentary commissions, and after their reports were made, Parliament, in 1871, passed the Trade Union Act and the Criminal Law Amendment Act. The first declared that trade unions

could not be declared illegal because they were "in restraint of trade," and that they might be registered as benefit societies capable of holding property and having their funds protected by law. At the same time, the second act renewed and made more stringent the prohibitions upon "molesting," "obstructing," "threatening," or "persistently following" workmen outside the union. Manifestly this second law, in the hands of hostile judges, could easily be construed so as to convict unionists for very innocent practices. Accordingly, the law was modified by the Trade Union Act of 1875, which declared that no action committed by a group of workmen was illegal, unless the same act was criminal if committed by a single individual. This act is the basis of the present English law regarding trade unions.

231. Political reform in England during the Age of Steam. The intimate connection existing between political reform and industrial development makes it necessary to summarize the leading changes made in the suffrage and parliamentary representation during the period we have just been studying. At the beginning of the period the English government was about as complete an aristocracy as ever existed. The list of represented towns was about the same as in the fifteenth century. The large manufacturing towns that had in the meantime grown up in the north had no representatives, except those of the counties in which they were located. On the other hand, many towns once respectable had dwindled until they had a population of only a few dozen, and some could no longer even claim that much basis for representation. As a result of these glaring inequalities the selection of more than one half of the members of Parliament was in the hands of a very small number of the aristocracy, many of whom already had seats in the House of Lords.

But this was not all; nearly all of the offices in the army, navy, foreign service, and counties, as well as the positions in the Church and the universities, were held by members of the aristocracy. There had been some agitation for political reform before the French Revolution, but it did not arouse much interest until awakened by that movement, and the interest thus awakened was checked by the reaction following the excesses of the Jacobins and the Reign of Terror. After the continental war some Whig leaders advocated a moderate reform, and when that party suddenly came into power in 1830 it soon introduced the Reform Bill, which after much opposition was carried in 1832, largely under the influence of the pressure from the masses of the people. This measure disfranchised fifty-six towns which had returned one hundred and eleven members, and reduced from two to one the number of representatives from thirty-one other towns. The seats thus vacated were transferred to the more populous towns and counties. This was a great victory, yet the masses did not directly profit very much, for the suffrage was extended only a very little by this law. But this was only the first step; the industrial classes constantly grew in influence until 1867, when another Reform Bill was passed giving almost universal suffrage to the inhabitants of the town, which included the great body of workingmen. Thus the industrial and commercial progress of England during the Age of Steam was reflected in the progress of her democracy.

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CHAPTER XXIV

FRANCE FROM THE FALL OF NAPOLEON TO THE FRANCO-PRUSSIAN WAR

232. The Condition of France in 1815 was such as to discourage even her most hopeful prophets. During the long war England had stolen some of her choicest colonies and colonial markets, and, in spite of the continental system, had undermined her trade with Europe. The Congress of Vienna took from her most of her continental conquests, even the mouth of the Scheldt, and confined her to the boundaries of 1790. In spite of Napoleon's herculean efforts to foster French industry and commerce, they had been seriously injured by his continual wars and misconceived policy; France was financially exhausted, and her five per cent government bonds were selling at fifty-seven per cent. As if to add to the irony of her fate, the foreign powers imposed indemnities upon her amounting to about $300,000,000, while foreign soldiers extorted untold sums from her defenseless people. The tide of foreign soldiers upon French soil did not turn until about eleven hundred thousand had overrun it, and France was required to support a foreign army of occupation numbering one hundred and fifty thousand. The burdens of France were also increased by an exceptionally bad harvest in 1816, which brought famine prices for agricultural products. This bad harvest and the industrial decline caused the exports of France to fall much below what they had been even before the Revolution; in 1787 they had been about $105,000,000, but in 1817 they were not quite $79,000,000.

233. The industrial development of France during the fifteen years following the overthrow of Napoleon was quite rapid, in spite of the discouraging situation at the outset and the political strife which characterized this period. The intoxication of military glory which had seized the French people under the leadership of Napoleon gradually gave way to a love for peaceful industry. The French peasants toiled industriously and saved their earnings; better implements and methods of farming were introduced; the cultivation of wheat increased; the cultivation of corn, tobacco, wood, madder, and beets, introduced by Napoleon, was now developed; the use of potatoes became more general; domestic breeds were improved; agricultural schools and model farms were established; access to markets was facilitated by improvement of the roads, rivers, canals, and bridges; tramways were begun in 1824, and in 1832 the first steam railway for passengers was built.

Several circumstances also tended to aid the development of manufactures during this period, among which may be noted the agricultural prosperity and the growth of population, the peaceful policy of the government during most of the period, the introduction of machinery and the other contributions of science to industry, the return of French capital to its native soil, the acquisition of many industrial secrets from England and other countries, and the large number of foreign travelers, with their numerous demands for French goods. Although English industries, on the whole, developed more rapidly than French industries, some of the latter were ahead and others were abreast of the corresponding industries in England. French bleaching and dyeing, in particular, surpassed English, and consequently the brilliantly colored French silks and cottons brought higher prices than English goods. The output of coal from French mines increased from 600,000 tons in

1815 to 1,700,000 tons in 1829; the total consumption of coal in 1829 was 2,300,000 tons. The consumption of cotton increased from 22,000,000 pounds in 1815 to 66,000,000 pounds in 1830. In 1830 the silk manufactures of Lyons required 27,000 looms; twenty-seven calico factories in Alsace turned out 527,000 pieces; fifty-eight beet-sugar refineries produced 14,300,000 pounds of sugar. At the exposition of 1827 there were nearly eighteen hundred exhibitors, and the products displayed were much finer than ever before.

234. The retention of Napoleon's protective system in some respects aided, but in others seriously retarded the industrial development of the period. At first the government of the Restoration suppressed Napoleon's prohibitive system and tried to bring about a moderate tariff, but the protectionists finally triumphed and an almost prohibitive tariff was reëstablished. From 1816 to 1826 no fewer than eight protective tariffs were imposed on various agricultural and manufactured products. Some of these stimulated certain manufactures and the growth of certain agricultural products, but on the whole this protective system was excessive and injurious. For example, the duty on foreign fleeces in 1826 was about $8, that on cattle and horses $10 per head, that on coal-smelted iron one hundred and twenty per cent. Until 1825 the duties on the importation of English machinery were almost prohibitive; in 1822 a duty of $1400 was paid for introducing a foreign steam engine into St. Etienne. It is difficult to see how these and similar duties could aid French manufacturers. Furthermore, it must be remembered that the French prohibitive system provoked retaliatory tariffs in other countries which greatly checked the growth of French exports.

235. The foreign trade of France did not develop during this period as rapidly as agriculture and manufactures,

partly owing to the retaliatory duties just alluded to, especially those on French wines and silks. Some progress, however, was made; in 1830 the foreign trade reached $242,000,000, of which a little more than one half was exports.

236. The French colonies. Some of the most desirable colonies and colonial markets, as already stated, had been seized by other countries during the Napoleonic wars; San Domingo had become independent; Bourbon was of little value on account of the English occupation of Mauritius. Nevertheless, some of the colonies which remained in French possession made considerable progress during this period, especially the French West Indies. The development of the sugar industry in these islands was favored by reciprocity treaties with England and the United States, and a little by the emancipation of the negroes in the English colonies; their total production of sugar increased from forty million pounds in 1817 to one hundred and seventy-eight million pounds in 1829, most of which passed through the hands of French merchants. Some improvements were also made in Senegal, and there were some efforts to reestablish French dominion in Madagascar. The foundation of the French empire in northern Africa was laid by Charles X's expedition against Algiers in 1830.

237. The July Revolution (1830), although it caused few great political changes, had a profound industrial and commercial significance. In the first place, it was the triumph of the commercial and industrial classes. Louis Philippe, the new "Citizen King," owed his elevation to the bankers, manufacturers, and shopkeepers of the large cities, especially Paris; influence passed from the great landlords to the great manufacturers and merchants. In the second place, this revolution turned France towards an English alliance and

a pacific policy. Had the Russian alliance, begun by the restored Bourbons and interrupted by the July Revolution, been continued, Russia would doubtless have aided France in pushing her boundaries to the Rhine, while pushing her own to the Danube. The rapid increase in the French army and navy under the restored Bourbons, had it been coupled with a continued alliance with so aggressive a power as Russia, might have rendered such efforts quite successful in view of the disturbed conditions then existing in central Europe. On the other hand, England as an ally would not even allow a French prince to accept the throne of Belgium. Although a continuation of the Russian alliance and a policy of territorial conquest might have been very gratifying to French pride and love of glory, it would not have permitted, as did the English alliance and Louis Philippe's peace policy, the continuation of the economic development already begun under the restored Bourbons.

238. The internal disturbances following the July Revolution interrupted for a time the development of industry and commerce. The excitement of the July Revolution cooled slowly, and numerous causes prolonged the discontent and provoked frequent riots. During most of Louis Philippe's reign there were fierce conflicts between capitalists and laborers, and various socialistic systems were developing, chief among which were those of St. Simon and Fourier. These conflicts were perhaps the logical outgrowth of the advance of the industrial and commercial capitalists to the supreme position in the state, for this class proved almost as oppressive as the landed aristocracy had under the *ancien régime*. It is not strange, therefore, that for a time during and after the July Revolution capital withdrew from the country in large quantities, and that industrial and commercial development was checked.

239. Foreign complications also threatened to break up Louis Philippe's peace policy. As the July Revolution had aroused many similar movements throughout Europe, the great question for the French government to decide was whether it should pose as the champion of the revolutionary party in other countries. Many French enthusiasts, with a large part of the masses back of them, were ready to "regenerate Europe" by French armies at whatever risk and cost. The new king, however, was willing to make many sacrifices rather than involve France in another general European war. These sacrifices were made very galling to the French masses by revolutionary leaders, and consequently the peace policy of the king was for some time very unpopular. As peace was very advantageous to the middle classes they generally supported Louis Philippe; his influence over the wealthy manufacturers, landlords, merchants, and bankers became very great. With such support, and by an extensive and skillful use of bribery, he managed to avert war in most of the foreign complications which threatened him.

240. The industrial and commercial progress during the reign of Louis Philippe was therefore very great after the excitement following the July Revolution had fairly cooled; the progress was especially rapid from 1838 to 1847. This reign was noted for the many applications of science to agriculture, manufactures, commerce, and sanitary improvement. Machines were introduced in large numbers, with a corresponding saving of labor, increase of production, and lowering of prices. Many workmen were temporarily thrown out of employment, but soon there were more employed than ever, and the suffering was not nearly so great as in England during her industrial revolution. There was a notable increase in the production and consumption of iron and steel during this period, and the

manufacturers of these articles emigrated from the wooded regions to the coal regions. There was also considerable progress in other industries. On the whole, agriculture was very prosperous during this period; but in 1845 and 1846 there were very bad harvests, which caused famine prices for foods and some frightful disorders. In spite of the customs duties which directly checked imports and indirectly checked exports by causing retaliatory tariffs, the foreign trade of France rose in 1846 to about $523,000,000, of which about $240,000,000 were exports. There was also considerable improvement in the transit facilities. The law of 1836 provided for a network of beautifully paved roads radiating in every direction from Paris. In 1838 Arago also mapped out a system of railroads radiating from Paris to all parts of France. The construction of the proposed railroads was at first left to private enterprise, which did not quickly respond; but finally the government, as we shall see, took other steps, and then the work proceeded more rapidly. This reign also witnessed many river, canal, and harbor improvements, a great improvement and extension of the postal service, and the construction of the first telegraph line between Paris and Rouen in 1845. Many useful and ornamental public works were constructed, and Paris and other cities were greatly improved. In 1833 a law providing for primary education was passed; in 1841 a law regulating the work of children in factories; in many other ways the material and moral condition of the working classes was improved.

241. The Revolution of 1848 threw France into a commercial and financial panic. Money was forced out of circulation, capital left the country, many factories were closed, and thousands of industrious workmen were thrown out of employment. Unfortunately, the provisional government which was created contained some socialists, like Louis

Blanc and Ledru Rollin, who carried through certain dangerous measures. It was at once proclaimed that the "state would guarantee employment to every citizen," and national workshops were opened, although no one knew what would be manufactured in them. The proclamation made the situation still worse. To those who had been thrown out of employment by the closing of factories were added swarms of hungry, worthless idlers, who flocked to Paris from all parts of the country or organized strikes for the express purpose of getting into the government workshops, where they could draw good wages without the trouble of working. In a very few weeks the crowd of idlers in Paris was thus swelled from about fourteen thousand to over one hundred thousand, which formed one vast hive of swarming disorder. In the April elections (1848) the socialistic extremists tried to intimidate and secure a majority of "red republicans" in the Assembly, and when they failed, they incited riots among the men of the workshops, who drove the Assembly out of its chambers (May, 1848). After the national guard had quelled this outbreak, the Assembly proceeded to pass measures against the national workshops, and then followed the Four Days in June during which Paris was a battlefield for a grand fight between the guards and the mob. This fight at first brought General Cavaignac to the front as the hero of the hour, but gradually his influence declined, and by various tricks and subterfuges Louis Napoleon was elected president of the republic for a term of four years. From the moment of his election it was almost a foregone conclusion that Louis Napoleon would turn the new republic into an empire. He courted the favor of the army and the clergy in various ways, and secured the support of the masses by measures improving the sanitary condition of their dwellings and the quality of their food, and by transferring

taxation from necessaries to luxuries. He stimulated industry by encouraging the construction of railroads, canals, telegraphs, and in other ways, and he was greatly aided in his efforts for power by the revival of trade, the rise in prices, and the reopening of factories, which furnished employment to many. The law of May 31, 1750, disfranchising about one third of the voters of the country, gave Napoleon a good opportunity to test his strength and popularity. Accordingly, in November, 1851, posing as the champion of universal suffrage, he demanded the repeal of this law. The Assembly refused; the *coup d'état* of Dec. 2, 1851, followed, and later in the month he was elected president for ten years by an overwhelming vote. The next year the people elected him hereditary emperor by a still larger vote, and he was proclaimed as Napoleon III, Dec. 2, 1852.

242. The industrial and commercial revival (1852–1860). Whatever may be said concerning the character and policy of Napoleon III, his reign witnessed an extraordinary industrial revival in France. Although his foreign policy, especially after the Crimean War, was for the most part unsuccessful, he did not involve the country very seriously in war until the disastrous Franco-Prussian conflict, and in the intervals between his various foreign complications he gave industry and commerce a good many years of peaceful development. Furthermore, while his government was the most expensive France had ever had, industrial progress was aided, directly or indirectly, by many governmental measures. The savings-bank system and the operations of mutual benefit societies were extended. Many credit organizations were formed, which enabled farmers to raise their mortgages, assisted manufacturers in building and extending industrial plants, and stimulated foreign and domestic exchanges: the Crédit Foncier (1852), the Crédit Mobilier (1852), the reorganized Discount Office

(1854), the General Society of Industrial and Commercial Credit (1859), the Crédit Lyonnais (1863), and the Society for Favoring Commerce and Industry (1864).[1] In some cases, however, these organizations favored too rapid a circulation of credit and consequently led to business failures. Over $20,000,000 were advanced by the government to facilitate the draining and reclaiming of waste lands; the common lands were divided and sold to small farmers; the forests on the mountains were renewed. Boards of agriculture were created; elementary agricultural instruction was provided for in the schools; agricultural prizes were established, thus spreading better methods of tillage and breeding. There were many improvements in the roads, rivers, canals, and harbors. The railroad mileage in operation increased from 1364 miles in 1848 to 5469 miles in 1860. Steam navigation improved even more rapidly, and the government aided the establishment of steamship lines to America and from the Mediterranean ports to Asia. The reduction of the rate of postage to twenty centimes per letter throughout France quadrupled the number of letters sent during the period from 1848 to 1865. Telegraphic communication was established between Paris and the Crimea in 1855 by laying a cable in the Black Sea. The work of beautifying and improving Paris and other cities was continued on a larger scale than ever before. Paris, in fact, and a few other cities were almost completely torn down and rebuilt. Old crowded tenement districts were removed, and in their place were created beautiful boulevards, promenades, parks, gardens, public buildings, churches, and private residences. The material condition of the agricultural population was also greatly improved: mud huts gave way to brick houses, thatch roofs to tiles,

[1] Most of these credit institutions loaned government money upon first mortgages bearing five per cent interest.

and there were better barns and outbuildings. Steam machinery and mechanical improvements in nearly every industry were increased at a rapid rate, especially after the further reduction of duties on machinery in 1856. Numerous national and international expositions stimulated industrial activity, chief among which were the international expositions at London (1851) and Paris (1855 and 1867).

Owing to these varied encouragements and several fortunate circumstances over which the emperor had no control, the rich resources of France were developed more rapidly than ever before. Many French manufactures progressed steadily, keeping pace with the rapidly increasing wants of the people, and to a lesser extent feeding the more slowly developing foreign trade. The copper, lead, iron, and coal mines were worked more extensively than ever before. French manufacturers vied with English manufacturers in furnishing the French and other continental railroads with rails, locomotives, and rolling stock. France also turned out much hardware of other kinds, especially arms. There was also a great advance in the cotton, woolen, and linen industries. But it was most of all in the artistic industries that France then, as ever, excelled, — beautifully tinted and finely woven silks, porcelains, glassware, jewelry, fine paper, Parisian goods, etc. In these and similar industries France still took the lead, although England, Belgium, and northern Germany began to compete with her after the London exposition (1851). It was in agriculture, however, that France made the most remarkable progress during this period. The new methods of cultivation, the better fertilizers, and the more judicious breeding brought a great increase in production and a much finer quality of produce and stock. The rapid growth of the cities and the provisioning of the urban population, coupled with the influx

of gold and other causes, assured the farmers good markets and high prices for their steadily increasing produce. In short, while England marched at the head of the industrial and commercial world, France took the lead in agriculture. The United States and Russia were soon to be the great agricultural rivals of France, and Holland and Belgium were already ahead of her in some agricultural products; but France was easily predominant at that time in the production of grains and wines. Towards the close of the period she produced 1,060,000,000 gallons of wine yearly, more than one third of the total production of the world. At the same time she produced on the average 255,000,000 bushels of wheat, while Russia harvested 227,000,000 bushels, and the United States only 142,000,000 bushels. In 1860 France had 336 beet-sugar refineries, which turned out 277,600,000 pounds of sugar. France also produced a great variety of other agricultural products in considerable quantities. The retention of the protective system and other causes prevented as rapid a growth of foreign commerce as of agriculture and manufactures, but the exports nevertheless increased from $254,000,000 in 1847 to $350,000,000 in 1860. The imports exceeded the exports and consisted chiefly of raw materials and colonial products.

243. The discovery of gold in California and Australia was one important factor in this industrial and commercial revival. The gold from these sources began to flow into France just at the time when specie had been forced out of circulation by the Revolution of 1848, when even the reserves of the Bank of France had been almost exhausted. It had been necessary to force the circulation of paper money as a legal tender and to sustain public credit by various heroic measures. The gold from Australia and America, therefore, was a much needed article. The first

effect of the influx of gold, which was felt much more quickly than the influx of silver in the sixteenth century, was to raise prices to a much higher general level and to stimulate unwonted industrial and commercial activity. Unfortunately, all classes were not benefited alike by the change; some, especially renters and salaried people, suffered greatly from the rise in prices and were obliged to modify their style of living. Furthermore, the opening of the gold fields just at the time when revolution was raging, drew away quite a number of Frenchmen to the new eldoradoes.

244. Speculation and commercial gambling also characterized this period. The years from 1852 to 1856 may be called the "golden age" of the Paris Bourse. "London, which had been the financial center from the beginning of the century, now ceded the palm to Paris." The unusual extension of commercial credit, resulting from the formation of numerous credit institutions already referred to, was one of the most important causes of this speculative activity. The influx of gold was another important cause; those into whose hands the specie from the new mines happened to fall, began to invest eagerly in railway stocks, gas companies, mining stocks, city bonds, etc. The extension of the telegraphic system enlarged the field of speculation and intensified its activity. Unfortunately, this mania for making fortunes out of speculations and gambling was carried to a great excess and resulted in some serious business failures, and consequently retarded substantial development.

245. The commercial treaty with England, negotiated principally by Richard Cobden and Michel Chevalier, in 1860, marked the beginning of a new commercial period. The treaty was quite readily sanctioned by the British Parliament, but was forced upon the French people by the

emperor, in the face of the strongest kind of opposition from the manufacturing interests. In this treaty France agreed to abolish her prohibitions upon English cutlery, woolens, cottons, linens, silks, and carriages, and to substitute very low duties upon them; she also lowered her duties on coal, iron, bronze, steel, hardware, chemicals, and many other products. England, on her part, abolished all duties on French silks, bronzes, goldsmith wares, jewelry, gloves, artificial flowers, and millinery, and reduced her duties on other goods to a small revenue basis. One of the most important reductions was on French wines and brandies: the duty on wines was reduced from $1.02 per gallon to sixteen cents, that on brandies from $4.45 per gallon to $1.57.

246. Similar treaties with other countries were soon concluded: with Belgium in 1861; with Prussia and the German Zollverein in 1862; with Italy and Switzerland in 1864; with the Hanseatic cities (Hamburg, Bremen, and Lübeck), Holland, Mecklenburg, Spain, Sweden, and Norway in 1865; with Portugal, Peru, and Austria in 1866. About the same time that these treaties were made, various laws and decrees permitted the free entry in French vessels of all raw materials for French manufactures, — wool, cotton, gums, potash, dyes, etc. Foreign grains coming in foreign vessels were subjected merely to a nominal inspection fee of eight cents per hundredweight; those coming in French vessels paid only four cents per hundredweight. The duties on sugars were reduced one half; the colonies were opened to free trade under all flags with all countries; the laws protecting the French merchant marine were abolished.

247. Various other circumstances favored an extension of French commerce during the years from 1860 to 1870. The work of building railroads and improving their equipment

continued and resulted in a great reduction in freight charges. The cost of production was greatly reduced in various ways, much to the advantage of buyers and sellers. Canal tolls were reduced, new maritime transportation companies were created, technical and agricultural schools were established, the postal and telegraphic services were further extended, the submarine telegraph was laid. The Universal Exposition at Paris in 1867 surpassed all preceding ones and stimulated industry and commerce. The specialization of industry, the growth of powerful corporations, and the legislation for regulating and protecting them; the opening of French commerce with China and Japan; the occupation of New Caledonia and Lower Cochin China; the new commercial relations with ancient Latin America which resulted indirectly from the unfortunate French expedition to Mexico; the construction of the great transalpine roads (Semmering road, constructed 1848–1854, the Brenner road, constructed 1857–1871); the reopening of the markets of the United States after the Civil War; the completion of the Suez Canal, — all these were factors in the remarkable extension of French trade and industry following the commercial treaty of 1860.

248. The cotton famine produced by the Civil War in the United States compromised for a time the complete success of the new commercial policy inaugurated by the commercial treaties with England and other countries. The importation of cotton in 1862 was less than one third of the importation of 1861, and this decrease caused frightful misery in the cotton manufacturing districts, especially in Normandy. Manufacturers, however, soon turned to India, China, Egypt, the Mediterranean coasts, and Brazil for their supply of cotton, with considerable success. By 1866 the importation had again increased to an amount

nearly equal to that before the war, and after that the American supply was again open and the development of the cotton industry was continued. It is to be noted that the commercial treaties helped to alleviate the suffering from the "cotton crisis," by giving France new markets for other goods. In particular, these treaties aided the extension of the woolen industry in the very districts most affected by the failure of the cotton supply, — in Roubaix, Fourmies, Amiens, Rheims, etc.

249. The growth of French trade and industry under the new commercial policy (1860–1870) was remarkably rapid in many directions. The commerce with England, which had increased only from $14,000,000 to $38,000,000 during the years 1827–1846, increased to $360,000,000 in 1866. The export of French woolens attained an average of $74,000,000 during the years 1865–1867, while the annual export in 1860 had been about $44,000,000. The export of French silks to England was about doubled between 1860 and 1867; that of wines was more than quadrupled. The French manufacturers had especially feared an invasion of English cottons, but in 1870 they imported one fourth more raw cotton than in 1860. The French production of iron, far from being destroyed by English competition, increased from 602,000 tons in 1859 to 916,000 tons in 1869. The export of French fruits increased sevenfold during the decade 1861–1870; that of butter, eggs, and vegetables (especially potatoes) increased very rapidly. In spite of the increased European emigration to America, and the consequent growth of American agriculture, French agriculture was not yet seriously affected by the competition; the export of French grains continued to increase. The trade with other countries did not increase so rapidly as did that with England, but the total increase during this period was quite great. By

1869, the last year before the Franco-Prussian War, the export of French products reached $672,700,000, the imports for home consumption $764,000,000. In addition to this "special trade," France had a quite important transit trade, consisting chiefly of goods passing between Great Britain and the Mediterranean countries. This transit trade brought the total "general trade" of France up to $1,500,000,000 at the close of the period.

References. — *Rand*, Economic History since 1763, 148–170, 284–298; *Morris*, The History of Colonization, I, 416–436; *Yeats*, Recent and Existing Commerce, 56–86; *Gibbins*, History of Commerce in Europe, 190–194; *Andrews*, The Historical Development of Modern Europe, I, II; *Seignobos*, Political History of Europe since 1814.


EUROPE
After 1815
SCALE OF MILES
0 50 100 150 200
0° 4° 8° 12°
52° 48° 44°
KINGDOM OF DENMARK
COPENHAGEN
SCHLESWIG
HOLSTEIN
Kiel
Lübeck
Hamburg
MECKLENBURG
Bremen
HANOVER
R. Elbe
RÜGEN
BERLIN
Brandenburg
Grossbeeren
Dennewitz
Amsterdam
Rotterdam
KINGDOM OF THE NETHERLANDS
Antwerp
Brussels
Louvain
Waterloo
Maestricht
Quatre Bras
Ligny
Boulogne
Ham
R. Seine
Laon
Luxemburg
Sedan
PARIS
R. Marne
Fontainebleau
Montereau
Arcis
Troyes
R. Aube
KINGDOM OF FRANCE
Dijon
Belfort
Lyons
Rhone R.
Grenoble
Uzes
Nismes
Avignon
Marseilles
Nice
Antibes
R. Rhine
Bonn
Aix la Chapelle
KINGDOM OF PRUSSIA
BRUNSWICK
HAN.
HESSE CASSEL
HESSE DARMSTADT
R. Saale
Leipzig
Lutzen
Wartburg
SAXONY
Dresden
Carlsbad
Prague
BOHEMIA
Frankfort
Hanau
HESSE
CONFEDERATION
GERMAN
Rastatt
Strasburg
Stuttgart
WÜRTEMBERG
BADEN
BAVARIA
R. Danube
Salzburg
AUSTRIA
ILLYRIA
TYROL
Basel
Zürich
Lucerne
BERNE
SWITZERLAND
Geneva
KINGDOM OF SAVOY
PIEDMONT
KINGDOM OF SARDINIA
Novara
Turin
Magenta
Como
LOMBARDY
Milan
Cremona
Verona
VENETIA
Custozza
Venice
Laybach
Trieste
R. Adige
R. Po
DUCHY OF PARMA
DUCHY OF MODENA
Alessandria
Genoa
Ferrara
Bologna
Rimini
LUCCA
Leghorn
DUCHY OF TUSCANY
ELBA
R. Tiber
STATES OF THE CHURCH
THE MARCHES
Ancona
UMBRIA
ADRIATIC
Civita Vecchia
ROME
KINGDOM OF NAPLES
KINGDOM OF SPAIN
MEDITERRANEAN SEA
Longitude East from Greenwich


16°
20°
24°
28°
32°
52°
48°
44°
SEA
R. Niemen
Vilna
Danzig
Thorn
Bialystock
RUSSIA
LITHUANIA
Vistula
Posen
Warsaw
POLAND
VOLHYNIA
Dniester
R.
Breslau
Fistula R.
GALICIA
PODOLIA
R. Bug
Troppau
Dniester R.
EMPIRE
Presburg
R. Pruth
MOLDAVIA
Komorn
Debreczin
Raab
Buda Pesth
Jassy
Odessa
EMPIRE
Nagy Sato
Akerman
Theiss R.
Villagos
TRANSYLVANIA
Agram
Drave R.
Temesvar
Maros R.
SLAVONIA
WALLACHIA
Bucharest
Rustendjeh
DOBRUTSCHA
BLACK SEA
BOSNIA
SERVIA
Belgrade
Widdin
Danube R.
Rustchuk
OTTOMAN
Nicopolis
Sistova
Shumla
Varna
Plevna
Tirnova
Alexinatz
Morava R.
Shipka Pass
Novibazar
Sofia
Kazanlik
Maritza R.
Philippopolis
Adrianople
CONSTANTINOPLE
ALBANIA
Antivari
Dulcigno

CHAPTER XXV

CENTRAL EUROPE (1815–1866)

250. German industry and trade during the great continental war. Germany derived several important advantages from the conflicts during the latter part of the eighteenth century. The war for American independence led to several measures for relieving the condition of German peasants and altering the antiquated restrictions on landed property. That war also stopped the export of tobacco from America, and consequently tobacco culture was successfully introduced into various German states, especially Baden, Thuringia, and the Palatinate. The French Revolution forced many nobles and other rich men to emigrate from France to Germany, taking with them much of their movable property; the French occupation of Holland also drove many exiles in the same direction, who thus helped to furnish Germany with artisans and capital. The large subsidies furnished Germany by England during the Napoleonic wars also stimulated trade and industry to a certain extent. The greater portion of these subsidies, it is true, was in the form of British manufactures, which were poured into Germany and Austria to supply the armies fighting against Napoleon; but these shipments swelled the trade with England, while the money subsidies encouraged German industry and agriculture to help feed and supply the armies. Furthermore, all the wars during the last quarter of the eighteenth century aided German agriculture by increasing the demand for German wheat

in the countries at war. During all these wars, also, the North German seaports developed a considerable trade, not only with England but with other countries. A direct trade sprang up between these cities and America, the West Indies, Russia, eastern France, the Rhine countries, Switzerland, and southwestern Germany. Hamburg profited more than any other German city from the exports of wheat, the imports of colonial products, the increasing trade with other continental countries and England, and the exiles from France and Holland; but other North German cities, like Bremen, Altona, Minden, and Lüneburg, also derived considerable benefit from the same sources. The capital accumulated by the increasing trade of the North German cities was loaned at low rates of interest, thus giving an additional stimulus to German agriculture and manufactures. The last quarter of the eighteenth century, therefore, was a very prosperous period in Germany: her commerce thrived and grew rapidly; her farmers produced increasing quantities of wheat, wool, flax, hemp, beets, tobacco, and chicory, and larger numbers of horses, cattle, and sheep; her chicory mills, pottery works, distilleries, tobacco manufactories, woolen, linen, and cotton factories were unusually active.

The Peace of Amiens (1802) was hailed with special delight in Germany, because it seemed to foreshadow an era of further progress; but the peace was soon ruptured, and the German revival, so well begun, was suddenly checked. The trade of Hamburg and Bremen was cut off by the French occupation of Hanover; these cities were no longer able to trade openly and directly with England, their best customer. Gradually Napoleon's continental system was built up until practically all the foreign trade of the North German seaports was made illegal, although much smuggling was carried on. The French occupation of

northern Germany (1805–1813) checked not only trade, but also manufactures and agriculture. Napoleon, especially after the conquest of Prussia (1807), levied very heavy taxes, and took enormous quantities of farm produce, horses, and cattle as spoils. Fortunately, central and southern Germany did not feel so sharply the thumbscrews of Napoleon's continental system and the French occupation; in fact these sections were in several respects directly benefited by the French occupation and Napoleon's policy. The growth of wool, flax, beets, chicory, and tobacco received a new impulse; the linen, lace, and woolen manufactures of Silesia and Saxony were stimulated; as long as raw cotton could be secured cotton manufactures also thrived; mines were successfully worked, especially the silver and coal mines; many sugar refineries, distilleries, tobacco factories, chicory mills, and pottery works prospered. Stimulated by the demands of the French people and Napoleon's armies, a good trade was opened between France, southern Germany, and the Rhine countries. The stimulus given to manufactures in central and southern Germany led also to wholesale smuggling; large quantities of German goods were thus exported to England, America, Spain, Portugal, Russia, and Poland, while many imports were smuggled into Germany in exchange.

251. German industry and trade after the continental war. After the overthrow of Napoleon the northern ports of Germany were again thrown open to foreign trade, and quite an active traffic was soon developed, especially through Hamburg, Bremen, and Lübeck; but foreign countries at first profited far more than Germany by this renewal of trade. German markets were flooded with English, French, and Belgian goods. The German cotton, iron, and steel industries suffered most, having to compete with English cottons, and hardware from both

England and Belgium. German woolens, owing to their fine quality and the extensive supply of raw wool in Germany, were better able to withstand foreign competition. On the whole, however, Germany was industrially far behind England and also inferior to Belgium and France; all these countries, especially England, were better supplied with the new machinery that was revolutionizing industry. Germany, therefore, for several years following the continental war witnessed a severe industrial depression. On the other hand, she now sold more and more wheat and raw wool to her industrial rivals, especially England, in spite of the English Corn Laws, and the merchants of the North German seaports derived considerable advantage from their share of the foreign shipping. At the same time Prussia again sought colonial empire and trade. In 1821 the Rhenish West India Company was organized at Elberfeld for the purpose of finding an outlet for Prussian agricultural products and manufactures. Spanish America was its chief field of activity at first, but a little later it extended its operations and even undertook commercial relations with China. In 1826 this company exported products worth $750,000, nearly half of which was linen, and the rest woolens, cottons, silks, iron, steel, arms, porcelains, and glassware. Outside of Prussia, one of the most prosperous German states was Saxony, whose agriculture and industry had not been checked seriously by the French occupation, but in some ways greatly stimulated. Leipzig still remained one of the greatest centers of German trade. Three important fairs were held there, each visited by from thirty thousand to forty thousand customers; goods worth about $4,000,000 were exchanged annually at each. A public school of commerce was established there in 1829, and this was destined to exert considerable influence. Throughout Germany the

development of the means of communication and transportation was beginning to attract serious attention: canals were projected; hard roads were built; steam navigation was opened on the Rhine and the Elbe; the states most interested began to regulate more systematically the navigation of the Rhine, the Elbe, and the Weser.

252. The formation of the Zollverein was far the most interesting and important fact in the commercial and industrial development of Germany during the period we are now considering. In order to appreciate its importance we must bear in mind the backward average condition of Germany's industry after the continental war; her inferiority in machinery; the numerous petty states still existing, each with its own system of tariffs; the poor means of communication and transportation; the keen industrial competition of foreign countries, the effects of which were accentuated by the English Corn Laws and the protective tariffs of France and other countries. The genesis of the Zollverein is to be found in the gradual formation of three smaller unions, one in southern Germany clustering around Bavaria, one in northern Germany under the leadership of Prussia, and one centering in Saxony and forming a connecting link between the other two. Prussia from the first pursued this policy of a customs union most aggressively. In 1818, as a result of the protective policy followed by England, France, and other countries after the continental war, Prussia retaliated by imposing a high protective tariff. In the same year she abolished all internal customs duties. The importance of this step will appear when we remember that there were at that time sixty-seven distinct commercial and excise systems within Prussian jurisdiction. Many of the German states opposed this policy at first, and tried to get the Prussian law nullified by the German diet, but fortunately they failed. The next step taken by

Prussia was the negotiation of commercial treaties with her neighbors and some distant foreign countries: in 1819 she formed a commercial alliance with Schwarzburg-Sondershausen; between 1818 and 1828 she also signed commercial treaties with Hesse-Darmstadt, Mecklenburg-Schwerin, Hamburg, Bremen, Lübeck, Denmark, Sweden, Norway, England and her colonies, Brazil, and the United States. Similarly, Bavaria, Würtemberg, Baden, and other South German states, which had opened commercial relations with France during the continental war, retaliated against her by forming commercial leagues among themselves when she bolted her gates against their goods after the overthrow of Napoleon. This commercial union in South Germany gradually extended itself northward, and the northern union under Prussian leadership gradually extended southward, until the two met in the third group that was forming around Saxony as a center. The increasing pressure of foreign competition, the cost of administering so many separate tariffs, the impossibility of commercial and industrial progress under such diverse systems, the difficulties of communication and transportation, and the increasing perplexities connected with the joint navigation of great rivers like the Rhine, Elbe, and Weser,—all these circumstances favored the formation of the Zollverein. On the other hand, the fear of Prussia, and an unwillingness to accept in full her system of union, were serious hindrances to the speedy union of the three groups. Finally, however, in 1833, the union was effected, and the German Zollverein became an accomplished fact; by 1836 it embraced nearly all the German states. In 1841 Brunswick joined the union; in 1842 Luxembourg; in 1851 Hanover. By 1854 it included every German state except Austria, Holstein, Mecklenburg, Lauenburg, and the three Hanseatic cities, Hamburg, Bremen, and Lübeck; by 1867

it controlled the commerce and industry of over thirty-eight million people.

The primary objects of the Zollverein were (1) the removal of all barriers to intercommunication and interstate transportation, (2) the abolition of all internal customs duties, and (3) the establishment of a uniform foreign tariff list with a common set of officials to administer it. The duties imposed on foreign goods were so high as to be almost prohibitive, so as to protect the domestic manufactures of the states included in the union, especially against English, Belgian, and French goods; at the same time raw materials were admitted free, or subject only to a very light duty. The proceeds derived from the customs duties were to be divided among the states according to population. Directly or indirectly, the Zollverein led to the construction of roads, canals, and railroads, the formation of steamship lines, better postal arrangements, many other internal improvements, a more rapid development of agriculture, manufactures, and commerce, and paved the way for the political union of the German states under the headship of Prussia.

253. The industrial and commercial development of Germany after the formation of the Zollverein was one of the remarkable facts during the latter half of the Age of Steam. Her agriculture continued to prosper and expand; her chemists discovered new fertilizers and otherwise shed much light upon methods of farming, thus helping to increase the quantity and improve the quality of farm products. Germany not only raised most of her own food supply, but continued to export large quantities of grain and cattle. At the same time her manufactures and foreign commerce became relatively more important than before. Germany soon ceased exporting chiefly farm produce and raw materials and began to send abroad an increasing

quantity of manufactured goods; her landlords lost their monopolistic control of governmental policy and shared their power with the manufacturers and merchants. Especially noteworthy was the development of the woolen industry and trade. It was not long before the home supply of raw wool was insufficient to feed the rapidly developing domestic manufacture of woolen goods, and German woolens not only supplied most of the home demand, but found their way into foreign markets. The silk and cotton industries likewise began to develop rapidly almost immediately after the formation of the Zollverein, owing to the introduction of machinery and the immigration of English foremen, thereby creating a strong demand upon other countries for the raw silk and cotton to feed these industries. The linen industry also developed, but somewhat more slowly until after 1850, when it too began to grow by leaps and bounds. The number of spindles engaged in the various German textile industries increased to two million five hundred thousand by 1869.

The increased demand for machines in the factories, for locomotives, rails, and other railroad equipments, and for fuel, led to a new development of the German iron, steel, and coal industries. In 1865 the iron smelted in Prussia alone was worth about $45,000,000; the same year one factory in Berlin turned out one hundred and forty-two locomotives. The Krupp cannon works at Essen were already beginning to attract attention; German metal workers constructed a colossal statue of William I for the Paris Exposition of 1867, which won the admiration of the world. At the close of the period we are considering, German industry supplied most of the home demand for sugar, beer, woolens, linens, cottons, hardware, glassware, paper, pottery, porcelain, dyes, chemicals, and considerable quantities of many other articles, as well as large quantities for export.

254. Numerous special causes combined to supplement and accelerate the industrial and commercial development following the formation of the Zollverein. The most important of these were: (1) the progress of science and its many applications to industry; (2) the abundance of gold following the discoveries in California and Australia; (3) the rapid development of roads, canals, railroads, postal communications, telegraphs, and other internal improvements; (4) the remarkable progress of education, — university, secondary, primary, agricultural, and technical; (5) industrial expositions, prizes, and medals; (6) commercial treaties, especially those with England, France, Holland, Belgium, and Austria; (7) the separation of Holland and Belgium, which drove the merchants of the former country to German markets for many supplies; (8) the freedom of trade in Holland, which allowed German goods to go down the Rhine to the sea for shipment; (9) the connecting of Belgium with Germany so that Ostend became almost a port of Germany. On the other hand, this development in Germany was not without serious hindrances: (1) the continual hostility of Austria, (2) the disturbances connected with the revolutions of 1848, (3) various European wars, (4) the Civil War in the United States, (5) the persistent retaliatory tariffs of neighboring countries, especially those of Russia and Spain, and that of France up to 1865.

255. The great continental war proved quite as disastrous to Austria's industry and commerce as it was humiliating to her political and military reputation. Napoleon's victories at Marengo, Austerlitz, and Wagram produced no more direful results in Austria than did his Berlin and Milan decrees, which withered the commerce and industry of the fated country. In Bohemia alone, the center of the linen industry, the number of flax spinners fell from three hundred and twenty thousand to forty thousand within a very

few years, and this instance is only typical of the general industrial decline. To make matters worse the Austrian government emerged from the war in a bankrupt condition, and for many years after Napoleon's overthrow the country was cursed by the reactionary and repressive policy of Metternich, which smothered progress in almost every line of activity. The Austrian states were badly split up by race, religious, and other differences, and the government seemingly did not know how to create any bonds of self-interest between them. These interstate differences were accentuated by the foreign and internal commercial policy of the government. There were as many distinct tariff systems as there were states in the empire; foreigners were positively prohibited to engage in commerce. Many of the leading industries, as, for example, the salt, tobacco, and gunpowder industries, were for many years after the continental war monopolized by the government. The duties on foreign textiles were absurdly high, — about $5 per pound on silks, $1.60 to $3.20 on linens. In almost every particular the commercial policy of the government was illiberal. The growth of the German Zollverein and the wars in Turkey checked the growth of Austrian industry and commerce by cutting off valuable markets; the Greek pirates inflicted serious losses.

256. In spite of all obstacles, however, Austrian industry and commerce made gradual progress after the continental war. The splendid agricultural resources of the country, together with the industries directly founded upon them, were more carefully developed. The Italian provinces, naturally very fertile, were better cultivated than before and yielded large quantities of raw silk, wines, fruits, and oils; silk spinning and weaving also prospered in these provinces. Bohemian and Moravian farmers devoted themselves very successfully to sheep farming, applying

more capital and paying more attention to proper breeding, thereby improving the quality and increasing the quantity of wool produced. The large supply of excellent wool produced in these states furnished a good basis for a flourishing woolen industry there. Bohemia yielded large quantities of flax and was again the center of a prosperous linen industry, and her fine glassware was still in great demand. The growth of the cotton industry along the lower Ems was quite rapid, and silk spinning and weaving flourished in the same region. Leather was tanned on a large scale in Hungary. The salt industry was still important in Bohemia, Hungary, and other parts of the empire. In 1840 the mines yielded seventy thousand ounces of gold, one million ounces of silver, and considerable quantities of copper and other metals. The coal output was comparatively small, but large quantities of wood, charcoal, timber, tar, turpentine, and potash were produced. Various parts of the empire also yielded large quantities of grains, potatoes, cattle, hogs, horses, tobacco, wines, and considerable amounts of other produce.

Although the foreign commerce of the empire was not at all commensurate with its splendid resources, there was a gradual growth up to the year 1836, when it reached a total of about $100,000,000, which was about evenly divided between exports and imports. This trade was chiefly carried on through the ports of Trieste, Fiume, Ragusa, and Venice, but a considerable quantity of Austrian products, especially Bohemian glassware, was sold at the fairs of Leipzig and Frankfurt, in spite of the Zollverein.

257. For several years, beginning in 1836, there was a serious industrial and commercial panic. The chief cause for this was the speculation in government loans and railroad shares, which absorbed the profits of trade and industry.

The effects of the panic may be judged fairly well from the following statistics of the foreign trade of Trieste, the chief seaport of the empire. In 1836 the imports of that city were about $31,000,000 and the exports about $29,000,000; by 1841 these figures had fallen off to $19,600,000 and $16,400,000, respectively.

258. In 1841 the country began to recover from the crisis, and during the remainder of the period we are considering there was a slow but somewhat steady development of foreign commerce. The policy of the government during most of this period remained repressive and illiberal; the finances of the government were badly managed; the tariffs were but slightly modified until 1860. In addition to the continuation of these retarding influences, Austrian industry and commerce suffered a great deal from the loss of the Italian provinces in the Austro-Sardinian War (1859–1860), from the cotton famine produced by the Civil War in America, and from the war with Prussia (1866). All these obstacles, however, were partly counterbalanced by certain favoring circumstances. There was an extensive development of roads, canals, railroads, and steamship lines; the steamboat service on the Danube was improved, the Austrian Lloyd, originally founded in 1827, now furnished steam connection with Venice, Alexandria, Constantinople, and other ports in Italy, Greece, and Turkey; a special direct train service to North Germany was established, connecting there with steamships to England and France. Markets were opened in the United States and Brazil, but especially in Turkey and Persia; Austria had already begun her commercial march eastward. In 1850 the Austro-German postal system was established. In 1853 a commercial treaty was made with the Zollverein; in 1865, with England; in 1867, with Italy. In 1860 the tariff rates were lowered sufficiently to cause a considerable

increase in trade. Parallel with these circumstances favoring commerce, there was a steady agricultural and industrial development. By the close of the period we are now studying the total foreign trade of the empire had increased to about $250,000,000, of which a little less than half were exports.

References. — *Rand*, Economic History since 1763, 86–109, 170–207; *Yeats*, Recent and Existing Commerce, 203–235; *Gibbins*, History of Commerce in Europe, 194–199; *Andrews*, The Historical Development of Modern Europe, 2 vols.; *Seignobos*, Political History of Europe since 1814.

CHAPTER XXVI

THE REMAINDER OF EUROPE DURING THE AGE OF STEAM

259. The countries to be considered in this chapter may be conveniently grouped into two classes: (1) those which, chiefly on account of their small size, were commercially important because of their geographical position or their development of manufactures; (2) those possessing splendid natural resources, hence not essentially manufacturing countries, but rather furnishers of foods and raw materials. The countries of the former class which we still have to consider are Holland, Belgium, and Switzerland; those of the latter class, Russia, Poland, Denmark, Norway and Sweden, Italy, Spain, Portugal, Turkey, and Greece.

260. Holland. The French occupation (1795–1813) proved very disastrous to "brave little Holland." The French levied her men and money; the English stole her colonies and much of her trade; Hamburg and Bremen also secured a considerable portion of her trade; what commerce she did continue to conduct was the prey of all the enemies of France; capitalists and merchants left the country, and industry consequently decayed; the East India Company and the Bank of Amsterdam failed. The Treaty of Amiens restored the Dutch colonies, except Ceylon and a few other much less important ones, and during the brief interval of peace her industries were revived and an active trade again developed. After the war reopened, however, Dutch vessels and cargoes were

captured on every sea and Dutch merchants in English ports were seized. Trade again declined rapidly and was finally almost destroyed by Napoleon's Berlin and Milan decrees. Little besides smuggling and a small coasting trade remained, and to make matters worse there was a serious inundation of the sea in 1809.

In 1815 Holland had some of her best colonies restored to her and received Belgium in lieu of Ceylon and Cape Colony, which remained in the hands of the English. For a time Dutch capitalists derived considerable advantage from their heavy investments in Belgian industries, and Dutch merchants profited by selling Belgian cottons, linens, woolens, leather, hardware, and coal in Holland and her colonies. But on the whole the acquisition of Belgium was a poor compensation for the loss of the profitable cinnamon trade with Ceylon, the industrial decline in the other colonies, and the consequent shrinkage in their trade. Furthermore, out of deference to his new subjects, King William allowed industrial Belgium to make the law for commercial Holland, and the resulting high tariff seriously injured Dutch trade by provoking retaliatory tariffs. The growth of Antwerp and Ostend during the period of union (1815–1830) was at the expense of Amsterdam and Rotterdam.

In addition to investing heavily in Belgian manufactures, Dutch capitalists soon began to make strong efforts to revive colonial industries and open new markets. In 1824 the Dutch Trading Company was formed for the purpose of reviving manufactures, commerce, and shipping. This company was at first chiefly successful in opening a market for Belgian manufactures, but it also paved the way for a revival of the trade and industries of the Dutch colonies, especially Java. At the same time Dutch home manufactures began to revive; Leyden and Tilburg again took

an honorable rank in the manufacture of cloths; Hilvershum and Deventer were noted for their carpets; Zutphen for leather; Amsterdam for porcelain; upper Brabant for linen.

The separation from Belgium in 1830 marked a new era in the agricultural, industrial, and commercial development of Holland. Land was reclaimed from the sea on a large scale, agriculture was again greatly improved, and large quantities of dairy products and cattle were exported. The manufacture of brandy, spirits, linens, cottons, sailcloth, leather, and other articles was developed. Railways were rapidly built. Commercial treaties were signed with nearly all the leading countries. But the most important factor in the renewed prosperity of Holland was the development of her colonies, especially Java. In 1831 Governor Van den Bósch planted 50,000,000 additional coffee trees in that island, and in ten years (1829–1839) the exportation of coffee increased from 375 to 1,000,000 hundredweight. The sugar and indigo industries were developed to such an extent that during the same years the exports of sugar increased from 98,500 to 1,000,000 hundredweight, those of indigo from 46,369 to 850,000 pounds. The production of sugar continued to increase so rapidly that in 1869 about 3,335,000 hundredweight were exported. At the same time many other industries were introduced or extended: the cultivation of cinnamon, cloves, nutmegs, cochineal, Peruvian bark, raw silk, tobacco, rice, pepper, ginger, and other products. The methods of cultivation in every industry were improved, as were also the organization of labor and the system of colonial marketing. Batavia became a great commercial center for the exports and imports of Java, and also an emporium for reshipping the exports and imports of other islands. The Javanese exports increased from about $6,000,000 in 1831 to about $31,000,000 in 1869.

The increased exports from the colonies naturally reacted very favorably upon the industry and carrying trade of the mother country. As Dutch manufacturers could not supply the increasing colonial demand for European goods, other countries sent their products to Amsterdam and Rotterdam for reshipment to the Dutch colonies, receiving thence a large part of their supply of colonial products. Holland was again one of the greatest intermediaries between Europe and the East Indies, and her dockyards could scarcely build ships fast enough to keep pace with the increasing commerce. In 1866 her imports amounted to about $200,000,000 and her exports to about $170,000,000.

261. Belgium profited more than Holland from the fifteen years of union. Dutch capital developed the manufactures of Ghent, Bruges, Liége, and Verviers; a bank was established at Brussels; Antwerp and Ostend became flourishing commercial centers. Belgian linens, cottons, woolens, leather, hardware, and coal found good markets in Holland and her colonies. On the other hand the high tariff provoked a retaliatory tariff in France and cut off the French markets. Furthermore, the differences between the two countries in language, race, religion, customs, and industry finally led to a war for independence which seriously injured Belgian industry and trade. In the bombardment of Antwerp property worth about $3,000,000 was destroyed. The Dutch gave another severe blow to Belgian trade by closing the mouths of the Scheldt and the Maas; Antwerp especially suffered from this policy. Belgium, after separating from Holland, also lost her profitable commercial relations with the Dutch colonies, and Holland for some time secured her coal, cottons, woolens, linens, and hardware from Germany rather than from Belgium. Many Belgian manufacturers removed to Holland, and Dutch capitalists withdrew their capital from Belgium to invest elsewhere.

Although Belgium felt these effects of her separation from Holland for some time, her industries gradually recovered and entered upon a new period of prosperity. Some of the most important factors in this new development should be noted. In the first place, Belgium had the densest population in Europe, hence a good supply of cheap industrial labor. She also had numerous and splendid roads and canals; she profited by a well devised and rapidly developed railway system under governmental control; her king was beloved and her government was well administered. In 1835 the Belgian National Bank was established; about the same time numerous joint-stock companies were formed for manufactures, mining, and railroads, most of which succeeded; government subsidies and loans made up for the deficiency of private capital; flax was more extensively cultivated; the abundant coal resources of the country were properly developed, thus supplying fuel for her factories; Belgian manufacturers shrewdly profited by the latest inventions and improvements in machinery. There was a commercial panic in 1837 and 1838, and the Belgian Bank suspended specie payments, but Belgian industry was too sound to be permanently injured. The crisis rather tended to stimulate a search for new markets. Commercial intercourse with France was gradually resumed and became very important within a few years; for some time before the extension of the French railroads to Havre, Antwerp was the chief northern outlet for the products of the French interior. Similarly, Antwerp for some time had almost a monopoly of the land trade of western Germany, on account of the splendid system of Belgian railroads, which were quite early extended to all the leading manufacturing cities of that region. Antwerp also had an extensive land trade with Austria and central Germany by means of the same railroad system, and quite an important maritime trade

with Trieste. Ultimately much of this land trade between Antwerp, on the one hand, and France, Austria, and Germany, on the other, was cut off by the completion of the railroads to Havre, Rotterdam, Hamburg, and Bremen. In another direction, Belgium gradually renewed commercial relations with Holland, to the mutual advantage of both countries; a commercial treaty was signed between them, and finally Holland opened the Scheldt River and freed it from tolls. This latter event gave a new impulse to the commerce of Antwerp. Ostend also became very important commercially during this period, though not so much so as Antwerp. In addition to her commerce, Ostend possessed extensive manufactures of lace, cotton goods, and leather, and was the great center of the Belgian fisheries. The other important industrial centers were too numerous to mention here. The foreign trade of Belgium at the close of this period amounted to $280,000,000, about evenly divided between exports and imports. She was essentially a manufacturing country; most of her trade was conducted in foreign bottoms, and she was dependent upon other countries for a large part of her food supply; her efforts at colonization were unsuccessful.

262. Switzerland. For several centuries before the French Revolution each of the most important Swiss towns possessed distinctive industries of its own. After the revocation of the Edict of Nantes (1685) many skilled French refugees settled in these towns, developed and improved the native industries, and introduced others. By the close of the eighteenth century the industries of Basel, Zurich, St. Gallen, and Geneva had become quite important; these towns were noted for their clocks, watches, silks, ribbons, linens, cottons, and calicoes. The French Revolution gave a rude shock to the prosperity of the Swiss. Their supply of raw materials, which had been

derived chiefly from English merchants, was cut off by Napoleon's continental system. The Swiss, however, encouraged a contraband trade through their mountain passes, and considerable quantities of goods thus passed to and fro among the countries bordering upon their territory. Much legitimate traffic between the various French possessions was also attracted through Switzerland on account of her fine roads and central position; and yet the French occupation was on the whole disastrous to Swiss industry. After the relaxation of Napoleon's blockade, Swiss industries gradually became more prosperous and extensive than ever. Steam power and machinery were introduced and large factories were created. Swiss prosperity was also aided by the introduction of free trade, the abolition of all internal taxes and duties on transit, and the building of railroads. By the close of the Age of Steam she was exporting considerable quantities of watches, clocks, jewelry, silks, ribbons, and cottons, besides cattle, cheese, wine, spirits, hides, straw plait, and hardware.

263. Russia. Turning now to those countries whose commercial importance during this period was due chiefly to their supply of agricultural produce and raw materials, we consider first of all Russia, a country which already showed unmistakable signs of that restless aggressiveness in her industrial and commercial development, as well as political policy, which was to be one of the most striking characteristics of the succeeding period.

We have already seen to what an extent Russian commerce and industry were developed by Peter the Great and Catherine II. Before the outbreak of the French Revolution Russia had already begun to export large quantities of grains — chiefly wheat — and various raw materials to many European countries. St. Petersburg, Riga, Revel, and the other Baltic ports thrived, and after the acquisition of the

Crimea and neighboring provinces, the Black Sea ports, especially Odessa and Kherson, developed an active trade with Marseilles, Genoa, and other cities of the western Mediterranean. During the continental war, the fear of the English navy prevented other countries from sending their ships to Russian ports, and the trade in Russian grains and raw materials gradually fell almost entirely into English hands, which fact also extended the use of English goods in that empire. But England's monopoly of Russian trade was not secured without opposition and interruptions. In the earlier stage of the continental war, Napoleon took advantage of Paul I's hostility to England and secured his assistance in forming the Northern Maritime Confederacy. The czar promptly closed the Russian ports against English trade, seized English vessels lying there, and imprisoned their crews. The Russian aristocracy, however, wanted to sell their grains and hemp to England, and this desire was an important cause of the assassination of Paul. Knowing this, the new czar, Alexander I, practically discontinued the blockade, and the Russian farmers again found an outlet for their produce in English markets. The Peace of Amiens also enabled Odessa and other southern ports to reopen their trade for a time. In the Treaty of Tilsit (1807) Alexander agreed to renew the continental system, but he never favored with good grace its rigid execution, because he soon discovered that it was ruinous to Russia's trade and industry. Her grains, hemp, timber, etc., which she had been in the habit of exporting, were altogether too bulky to smuggle easily, while the prices of colonial products and manufactured goods, which she needed to import, were made excessively high by the blockade. The impossibility of selling her staple exports made gold leave the country rapidly to pay for the high-priced imports. Russian paper money depreciated at an alarming rate, and

even the ruble fell one fourth in value during the years 1808–1810. After enduring the continental system for five years, Alexander became convinced that it was no longer endurable. Accordingly, in 1812 Russia broke the Treaty of Tilsit and again opened her markets to England. In the war with Napoleon that followed, Russia suffered severely for a time; the finances of the government were crippled, the paper money depreciated still further, commerce and industry were badly deranged. Peace, however, brought a revival of prosperity; domestic industries were again developed, and the exportation of staple products was resumed. England and Russia, in particular, were again drawn into close commercial relations, because each country needed the products of the other.

Russia, in 1815, considered the question of free trade, but, like most continental countries, she soon decided in favor of a protective policy. The bad harvests in 1816 and 1817 in England and on the continent led to an unusually large export of Russian grain, which caused a reciprocally large importation of manufactured goods. The export of grains decreased again after these bad harvests, but the manufactures continued to come in to feed tastes already acquired. This raised an outcry in Russia against foreign competition, and in 1821 an almost prohibitive tariff was adopted for the purpose of encouraging the use of home rather than foreign manufactures. Under this protective system some old Russian industries progressed and some new ones were called into existence, but this industrial growth proved artificial and the tariffs seriously hindered the growth of Russian commerce. In 1850, 1857, 1867, and 1869 Russia successively lowered her import duties, although they were still quite high. These concessions were made chiefly in order to open the West to her agricultural products and raw materials, and to

secure foreign capital for constructing railroads, which were very necessary to supplement her river system.

The territorial growth of Russia during this period had a very important influence upon her commercial and industrial development and must therefore be briefly traced. In 1815 Russia retained Bessarabia, Finland, and the Persian border provinces. In 1829, by the Treaty of Adrianople, Moldavia and Wallachia practically became appendages of Russia. At the same time she kept some islands at the mouth of the Danube; the Bosporus and the Dardanelles were opened to merchant ships; the navigation and trade of the Danube and the Black Sea were made free; and Turkey bound herself financially to Russia. The Treaty of Unkiar Skelessi, four years later, reduced Turkey almost to a dependency of Russia, and a secret article closed the Dardanelles to all but Russian vessels. These aggressions, however, soon aroused such hostility that in 1841 the Treaty of the Straits closed the Bosporus and the Dardanelles to all foreign ships in times of peace. Then came the Crimean War, which impaired the resources of Russia, injured her industries and commerce, confused her finances, destroyed her control of the Black Sea, and compelled her to surrender her protectorate over the Christians in the Turkish dominions and to restore some small strips of territory on the Turkish frontier. But although Russia was thus obliged to give up her hope of conquest in the southwest, and of dominion over Turkey, and was also obliged to withdraw temporarily from active participation in western affairs, she now hurled herself all the more vigorously towards the east and southeast; rebellions were vigorously put down in the Caucasian provinces; the Turcomans were subdued (1866–1868); the development of western Siberia was begun; the Treaty of Pekin, signed with China in 1868, gave Russia the left

bank of the Amur and the great arsenal of Vladivostok. The long arms of the Russian bear were thus reaching out eagerly for new territories and commercial opportunities in the East.

In spite of her losses Russia's position in Europe was only temporarily impaired by the Crimean War. At the close of that war she was on intimate terms with Prussia, the coming leader of Germany, on friendly terms with Sardinia, the future champion of Italian unity, and growing in favor with France. Furthermore, the failures of that war thoroughly aroused the Russian people, and the new czar, Alexander II, responded to their cries for reform. Various branches of the central administration and the system of local government were quite thoroughly reformed; in 1861 the abolition of serfdom, one of the most stupendous reforms in history, was effected. In short, a new régime seemed about to dawn. Unfortunately, a little later the Polish insurrection (1861–1863) brought a reaction. This insurrection was not only disastrous to the Poles, but destroyed Alexander's confidence in the party of moderate reform and gave the reactionists in Russia an opportunity to undo much that had been accomplished.

The industrial and commercial development of Russia during the decade following the Crimean War was much greater than during any previous period of like duration. In 1857 the great Russian Railway Company was formed with the aid of foreign capital; during the next thirteen years about four thousand miles of railroads were built. This extension of the railroad system, although it was still very defective, and the introduction of steam navigation upon her splendid river system were important factors in the development of Russia's foreign and domestic trade. The lowering of her tariff and the emancipation of the serfs also greatly aided in the new economic development. The

progress of Russia towards the East was another factor in her increase of trade. As a result of these and other causes, Russia's foreign trade increased very rapidly during the decade following the Crimean War. At the close of that decade and of the period we are now considering, her foreign trade amounted to about $260,000,000, the exports exceeding the imports by a few million dollars.

264. Poland. The fifteen years following the overthrow of Napoleon formed a period of unexampled industrial and commercial prosperity for Poland. Never did Warsaw shine so brilliantly; her population was 180,000. The population of the kingdom increased from 3,138,728 in 1815 to 4,139,222 in 1830. Roads were opened in every direction and Poland grew rich from agriculture and trade. German weavers settled in the country and improved the woolen manufactures. Alexander I took an interest in the pacification and progress of Poland, which was for some time very beneficial. The revolution of 1830 checked this prosperity, but Poland gradually settled down again to a steady development of her agriculture, manufactures, and trade. She exported wheat, flax, hemp, timber, turpentine, raw silk, furs, hides, tallow, horses, cattle, glue, horns, etc.; large quantities of wool were grown, and woolens, linens, cottons, silks, brandy, paper, glass, and agricultural implements were manufactured. About two thirds of her trade was with Russia, but large quantities of exports also passed down the river Vistula to the Baltic, whence came a considerable portion of her imports. The total foreign trade of Poland at the close of this period was about $64,000,000, the exports being a little greater than the imports.

265. Denmark prospered greatly by the wars of the latter part of the eighteenth century, especially the war for

American independence, and took advantage of them by engaging in an active trade with the East and West Indies. The decline of Holland under French occupation still further aided the development of Danish shipping and commerce. During the first half of the continental war most of the German trade with England and other countries was carried on through Denmark, and there was also a strong demand in both England and France for Danish agricultural produce. The bombardment of Copenhagen in 1801 was disastrous to Denmark, and that of 1807 was still more so; in the latter year England captured or burned seven hundred Danish ships because the Danes were suspected of intending to aid Napoleon. No sooner had England struck this blow than Napoleon struck another by forcing Denmark into his continental system. Although the legitimate trade of Denmark was greatly restricted during the latter part of the continental war, considerable smuggling was still carried on.

In 1814 Norway was taken away from Denmark, and this was another check to her development; but her agriculture gradually recovered its lost ground, and in ten years she was exporting as large quantities of grain, butter, horses, and rape seed as ever, chiefly to England, France, and Germany. Husbandry continued to develop and exports to increase, but in 1864 Denmark met with another serious loss when Schleswig and Holstein were wrested from her. These provinces had been very valuable agricultural and pastoral districts, had possessed considerably more than one half of the Danish marine, and Schleswig had been made doubly valuable by the digging of the Eider Canal. Besides, the war which Denmark waged in the attempt to hold these provinces cost her a good deal and proved quite destructive to her trade and industry. After thus losing a large part of her marine in

surrendering Schleswig, Denmark continued to lose her carrying trade, most of which was picked up by England. The Danish West Indies lost their importance; the trade with China and the East Indies was never regained; the Danish possessions in India went to England in 1845, those on the Guinea coast in 1850. In spite of all these losses, however, Denmark continued to prosper to a considerable extent; her finances were in a good condition; she devoted herself all the more attentively to agriculture, dairy farming, and cattle rearing, and exported a good deal of produce. There was no coal or iron in the country and few raw materials, and yet she developed a few manufactures, especially brandy, sugar, and coarse textiles, which were encouraged by protective tariffs. The total trade of Denmark at the close of this period was about $60,000,000, the exports constituting nearly two thirds of this.

A little should be said here concerning the peculiar claim which Denmark maintained for so long a time to the exclusive jurisdiction over the strait connecting the North and Baltic seas. Danish jurists based these claims partly upon ancient charters and immemorial prescription, and partly upon the expense incurred by Denmark in the maintenance of lights and buoys. For centuries, therefore, Denmark had levied Sound dues upon all shipping passing through the strait in either direction, a policy which gave rise to much trouble and several wars. In 1826 the United States obtained a reduction of the tolls upon her own shipping through the strait; in 1848 she offered $250,000 as a commutation for the Sound dues upon her shipping, but the offer was not accepted. Six years later (1854) this country notified Denmark that the convention of 1826 would be broken off the next year, whereupon Denmark proposed a plan for capitalizing the Sound dues, which the United States declined to accept.

Meanwhile England, in 1840, had entered into negotiations with Denmark and obtained some concessions. Finally, a congress representing all the interested nations met at Copenhagen in 1857 and agreed that the various states interested should pay to Denmark $17,500,000 as a compensation for the permanent surrender of the Sound dues and the maintenance by that country of lights and buoys. This sum was to be divided among the various countries in proportion to the extent of their commerce through the strait; the share of the United States was $397,011.

266. Norway and Sweden were also in a very prosperous condition during the latter part of the eighteenth century. Sweden as a neutral nation secured much of the carrying trade of the belligerents; she exported large quantities of timber, iron, and pitch to England for shipbuilding and machinery, and extended her commerce even to China and the West Indies. She, however, in common with Denmark and Norway, became involved in war with Napoleon from 1806 to 1815; also in one with Russia, which cost her Finland. These wars greatly depressed Scandinavian trade and industry; British trade and subsidies alone saved them from financial ruin. At the close of the continental war, Swedish Pomerania was taken away from, and Norway added to, Sweden. Although the Norwegians had been badly governed by Denmark, they did not desire to be united to Sweden, but the constitution that was drawn up for the two countries worked pretty well in practice and proved a source of commercial and industrial prosperity. Under this constitution the two countries lived together with a fair degree of harmony.

After 1815 Sweden was not involved in any European war and she had an opportunity to develop her agriculture, mining, manufactures, and trade. Up to 1840 her

agriculture was quite backward, owing to her poor soil, high latitude, and lack of capital, but gradually much of the land was bought by rich burghers, who applied capital and greatly improved the quality and quantity of agricultural products. By the middle of the century Sweden was able to export considerable wheat and wool and some other agricultural products. Waste lands were reclaimed; roads and canals were built; railroads were begun in 1854; the forests were cultivated and the mines developed; industrial and naval schools were founded. An almost prohibitive tariff was established soon after the continental war and was continued throughout the period we are now studying; reciprocal customs duties between Norway and Sweden were maintained up to 1873. Linen and woolen goods were manufactured in Sweden in large quantities, but chiefly on the domestic plan, rather than in large factories; ships were built both for home use and for foreigners; the wood-smelted iron and steel of Sweden was very superior for cutlery, and much of it was exported to England, North America, the East and West Indies, the Levant, and Australia. Norway was far behind Sweden in agriculture, mining, and manufactures; she was even obliged to import large quantities of butter, wheat, and meat. On the other hand, the fishing, timber, tar, pitch, shipbuilding, and ice industries of Norway were very prosperous. The total foreign trade of Sweden at the end of this period was about $61,000,000; that of Norway about $40,000,000. The imports of both countries were somewhat larger than their exports.

267. Italy was left in a deplorable condition at the close of the continental war. Her manufactures had suffered terribly and even her rich agricultural resources were neglected. Genoa's merchant marine and trade had been stolen by the English during the war. Venice had carried

on some trade with England, but she, too, was impoverished by the war, and when, in 1815, she became a possession of Austria she was overshadowed by the neighboring port of Trieste. Most of the other Italian cities were in a similar condition after the continental war, and for some time thereafter their commerce was constantly jeopardized by their proximity to the Barbary pirates. Leghorn was at that time the most prosperous city in the peninsula, partly because she was the outlet of Tuscany, the best governed state in Italy.

The reactionary political policy pursued in Italy after the continental war, the misgovernment of the various rulers, and the consequent revolutions were not conducive to a rapid revival, and it was not until about the middle of the century that Italy began to make much progress in industry and commerce. Finally, the success of the struggle for Italian unity under Victor Emmanuel and Garibaldi ushered in a new era of economic, as well as political, prosperity. Large quantities of raw silk, cotton, wool, rice, flax, olives, oils, and wines were produced, much of which was exported. The rich resources of Naples and Sicily were developed. In 1864 nearly five thousand vessels were engaged in the trade of Naples, and two years later the shipping of Sicily required nine thousand vessels. The agriculture of Tuscany and Lombardy was still more advanced than that of the Two Sicilies. Genoa profited greatly by the "cotton crisis," she being the chief outlet for the cotton grown in Italy and France; in 1862 her cotton trade amounted to over $80,000,000. The total foreign trade of Italy at the close of this period amounted to about $350,000,000, of which nearly $40,000,000 represented a transit trade. The imports for home consumption were considerably greater than the exports of home produce. The period therefore closed upon a happily united Italy

rapidly making ready to take again a leading position in the industrial and commercial world. The unification of the peninsula, the opening of the Suez Canal, the piercing of the Alps by great tunnels, and other favorable circumstances occurring about that time pointed the way to a brilliant future of industrial and commercial prosperity.

268. Spain also underwent a terrible crisis during the continental war. Almost all the good accomplished in the reign of Charles III (1759–1788) perished under the bad administration of Charles IV (1788–1808) and during the war against Napoleon. In 1795 Spain withdrew from the Coalition and was promptly punished by the English in the battle of St. Vincent (1797), which crippled the Spanish navy and left the Spanish colonies open to attack. For several years after this battle, England systematically captured Spanish ships, treasure, and colonies. In 1802, by the Treaty of Amiens, England restored the Spanish colonies, but in 1805 Nelson annihilated the naval power of Spain, as well as that of France, in the great battle of Trafalgar. When Napoleon invaded Spain in 1807, however, England upheld her independence and continued to do so until the French were driven back across the Pyrenees; but England's policy in defending Spain was to preserve her feebleness and thus take possession of her colonial commerce. Even while Spain, with England's aid, was driving back the French army of invasion, Mexico was moving towards independence, and the movement thus begun by Mexico in 1808 did not cease until all of the vast colonial domain of Spain in the New World, except Cuba and Porto Rico, was freed from her misrule and absurd colonial policy. The independence of the Spanish colonies, coming as it did about the same time as the detachment of Brazil from Portugal, was one of the most important commercial facts of the nineteenth century, for in this way a new world

was again thrown open to European competition. Nearly all of the European nations entered promptly and eagerly into this competitive struggle, each vying with the others in making commercial treaties with the new American republics, even before their independence was clearly established. England, however, had the advantage in this struggle from the very beginning, for, as we have seen, she had during the continental war and for some time before kept her eye single to the great advantages of trade with Spanish America, and had systematically stolen this trade from the mother country.

Spain, therefore, came through the continental war robbed of an immense colonial domain and with her own industry in a terrible state of decay. Neither did the close of this war bring prosperity to the unfortunate country, for no sooner was it ended than revolutions and civil war broke out which lasted intermittently for many years. For a long time there was a yearly governmental deficit; the rich mineral resources of the country were almost entirely neglected; manufactures continued to decay; agriculture alone furnished a few scant exports. During the reign of Isabella II (1833–1868), however, some industrial and commercial progress was made, in spite of the seven years of civil war at the beginning of her reign and the occasional outbreaks thereafter. Railroads were introduced to some extent by English capitalists, and these aided the development of a few cities, especially Bilbao; the vast mineral wealth of the peninsula was developed, chiefly by French and Belgian capital; considerable improvement was made in agriculture, especially in the production of wool; a few manufactures were developed under a highly protective tariff, chiefly the cotton, iron, and earthenware industries. At the close of the period, the total foreign trade amounted to about $160,000,000, the imports constituting about sixty-three per cent of it.

269. Portugal during the first half of the continental war experienced a temporary revival of prosperity. The insurrection in San Domingo and other circumstances had increased the European demand for Brazilian sugar; the troubles in Spain enabled Portugal to supply the Spanish American colonies with many products previously furnished by Spain; the wine trade with England was in a flourishing condition, on account of the rapid growth of that country. This period of prosperity, however, was suddenly cut short by Napoleon, who, in 1807, declared the Portuguese throne vacant when the regent refused to seize British merchandise. After that, Portugal suffered quite as much as Spain from Napoleon's armies and his efforts to rivet the continental system upon the country. England, to be sure, assisted Portugal with arms and subsidies amounting to about $95,000,000. Thus Portuguese industry was kept sufficiently active to produce some articles for export, but England was no more anxious for a revived and strong Portugal than for a strong Spain. After the continental war, therefore, English aid was withdrawn and Portuguese manufactures and even husbandry declined for want of capital to develop them properly, while England continued to monopolize the shriveled foreign trade of the country, gradually securing all the trade with the Portuguese colonies in Asia and most of that with the African colonies and Brazil. Civil wars distracted the country from 1820 to 1835, and during that period the valuable colony of Brazil was lost. After 1848 agriculture was improved and manufactures were developed with some success; the mineral resources of the country, however, were neglected, and the remaining colonies were not developed. At the close of the Age of Steam the total foreign trade of Portugal was about $30,000,000, nearly all of which was with England and conducted by English merchants in English vessels.

270. Turkey. With seemingly calm resignation, due to her Mohammedan doctrine of fatality, Turkey, during this period, saw province after province torn away from her once proud empire; yet the "Sick Man" lived on by the sufferance of the rival European powers and was still the possessor of extensive territories both in Europe and Asia. The commerce and industries of the Ottoman empire, however, had dwindled to a mere shadow of their former greatness and were altogether insignificant compared with the vast natural resources of the territories still ruled by the sultan; yet the remnant of the trade once centering in Constantinople and the Bosporus was still eagerly competed for by several rival nations, and the rich resources of the empire were exploited by all peoples except the Turks themselves. From the time of Francis I, France had taken the lead in the trade with Turkey, in spite of the vigorous competition of the English, Dutch, and Italians; but during the continental war the English and the Greeks had picked up most of the trade with that empire. After that war the English and the Greeks were able to retain most of the trade which they had gained and also to increase it, but other countries gradually entered the lists as competitors. Austria opened up a considerable trade with Turkey, and Germany and Belgium sent thither many of their manufactures, chiefly through the port of Trieste. France also again obtained important trading privileges in the Ottoman empire: her exchanges with Constantinople, Alexandria, and Salonica increased, and the capture of Algiers tended to make her the protector of the holy places and the oriental Christians; but she was unable to regain her ascendency in this region, except for a time in Egypt.

After the Crimean War the Danube was opened to the trade of all nations. This fact, the gradual increase of steam navigation on that river, and the digging of the

canal connecting its tributary, the Altmühl, with the Regnitz, a branch of the Main, led to a considerable increase in the trade along that river with Turkey and greatly benefited all the towns lying along the Danube, the Main, and the Rhine. After that war also there was a great increase in the maritime trade of Turkey, chiefly through the ports of Constantinople, Salonica, Smyrna, and Enos, the port of Adrianople which was the great grain market of the empire. The English and Greeks were still the leading traders with Turkey, but the Austrians, Italians, French, and Russians also played an important part in her foreign commerce. By the close of this period the foreign trade of Turkey amounted to about $135,000,000, the exports constituting about thirty-seven per cent of it.

271. Greece. What the Americans and Swedes, as neutral traders and blockade runners, did in the north of Europe during the great continental war, the Greeks did in the south. With their light, swift vessels they were well equipped to act alternately as merchants and pirates, and well did they master both these arts during the long period of the Napoleonic wars. Much of the commerce which France had previously carried on with the Ottoman empire was picked up by the enterprising Greek merchants, and many of the French commercial establishments in the eastern Mediterranean and the Orient which perished in the wake of Napoleon's Egyptian expedition, were promptly and shrewdly turned into valuable Greek colonies. By the close of the continental war the map of the Greek colonies in the eastern Mediterranean strangely resembled that of the fifth century B.C.; nearly all the coasts and islands of this region were lined with thriving Greek commercial settlements. During most of the remainder of the period we are now considering, the Greeks continued to ply

their combined art of merchant and pirate with remarkable success, eagerly profiting by all the rivalries of the French and English, and of the English and Russians in the eastern Mediterranean. By the close of the period a large part of the carrying trade of the Black Sea and eastern Mediterranean was conducted under the Greek flag. The imports and exports of Greece, however, were not at all proportionate to the extensive carrying trade of her merchant fleet, both together amounting to only about $23,000,000.

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TERRITORIAL GROWTH OF THE UNITED STATES

CHAPTER XXVII

THE UNITED STATES DURING THE AGE OF STEAM

272. Introduction. The industrial and commercial development of the United States may be conveniently divided into the following periods: (I) Period of Industrial and Commercial Planting, 1607–1763; (II) The Struggle for Industrial and Commercial Independence, 1763–1793; (III) Commercial Expansion during the Great Continental War, 1793–1815; (IV) Period of Industrial and Commercial Reorganization, 1815–1866; (V) The New Nation and its Industrial and Commercial Expansion, 1866–1902. The first period has already been partially considered in the chapters devoted to England and her colonies during the seventeenth and eighteenth centuries. We have thus far, however, considered the thirteen English colonies now embraced in the territories of the United States in connection with other colonies, and their economic development has been studied more from the British than the American standpoint, in order to understand better the part played by them in the commercial development of England, and the part played by her in the commercial development of the world. We must now, first of all, briefly reconsider the economic condition of these thirteen colonies at the close of the first period, as a basis for studying the commercial development of the United States as an independent nation. It will be noticed that the beginning of the second period, or the struggle for industrial and commercial independence, coincided approximately with the beginning

of the Age of Steam. James Watt patented his steam engine just a few years after Grenville inaugurated the new policy that crystallized American opposition into revolt, and several of the other important inventions that characterized the early stages of the Age of Steam were made during the great struggle of the thirteen colonies against the mother country. Although it is doubtful whether any connection between these particular events was perceived at the time, there was really a fundamental relation between the English industrial revolution and the American struggle for industrial and commercial independence, both of which occurred during the first part of the Age of Steam. At the other extremity of this great subdivision of commercial history, the close of the Civil War in the United States coincided approximately with the time of the laying of the Atlantic submarine cable. The commercial development of the United States during the Age of Steam will therefore embrace the second, third, and fourth of the periods named above, and these will be considered in the present chapter, while the fifth period will be treated in the chapter devoted to the United States during the Age of Electricity. As already stated, we must first review briefly the economic condition of the thirteen American colonies at the close of the first-named period. This review, as well as our treatment of the other periods, should be accompanied by a very thorough study of some of the works noted in the list of references.

I. Economic Condition of the Thirteen Colonies at the Beginning of the Age of Steam

273. Attitude of England towards the industrial and commercial development of the thirteen colonies. England's colonial policy, like that of other European colonizers, was based upon the erroneous doctrine of "mercantilism." In England this doctrine had been gradually developing as the ideal of national policy ever since the reign of Edward III. According to this doctrine the chief economic aim of any nation should be to increase as much as possible its supply of precious metals. Inasmuch as England had no gold and silver mines she could pile up this supply only by securing an excess of exports over imports, and by buying chiefly raw materials and selling chiefly manufactured goods. Hence it was the almost continuous policy of her rulers and statesmen to encourage first of all, in every possible way, manufactures and foreign trade, and secondarily, agriculture and other industries which helped manufactures and trade by furnishing food stuffs, raw materials, and articles for profitable exportation. On the other hand, all industries, either in England or the colonies, which seemed to interfere with the development of English manufactures and trade were to be repressed. In other words, "mercantilism" applied to the colonies meant that they should simply be feeders of the mother country, and there was a certain foundation for this view in the fact that many lives and much money were lost in the acquisition and protection of the colonies. It seemed only fair, therefore, for the mother country to derive all the profit she could from their exploitation. We can now see quite clearly that this policy was fundamentally defective in several ways, but we should remember that it was born of ignorance rather than

malice, and that England's colonial policy was far less cruel and absurd than that of Spain and some other European countries.

Acting upon this erroneous "mercantilist" theory, England, by her famous Navigation Acts (1651, 1660, 1663) and other statutes, undertook to restrict the colonists to the production and manufacture of such goods as did not interfere with her own landlords and manufacturers, and in order to protect her manufacturers, merchants, and shipowners she practically prohibited all direct trade with other countries than the British dominions, imposed duties on intercolonial trade, and required all colonial trade to be conducted in English or colonial vessels manned chiefly by English sailors. Some of these restrictions were quite effective, partly because of the laws themselves and partly because of natural conditions favoring their execution. On the other hand, many of the restrictions were quite ineffective, owing to the natural difficulties encountered in enforcing them and the lax system of administration prevailing during most of the colonial period. In general we can distinguish three periods as far as concerns the execution of these laws: (1) the period from 1607 to 1696, when the administration was lax because there was little or no machinery for executing the laws; (2) the period from 1696, when the Board of Trade was organized for controlling the colonies, and admiralty courts were created in the colonies, to 1721, when Robert Walpole became prime minister, — a period characterized by comparatively strict execution of the laws; (3) the period from 1721 to 1763, during which the policy of "salutary neglect," for the sake of encouraging colonial trade, was for the most part adhered to. By the close of the Seven Years' War, therefore, the colonists had become quite thoroughly accustomed to a very lax administration of many of the restrictive measures.

The extent to which England's colonial policy was effective will appear more clearly as we review the industries and commerce of the colonies at the beginning of the Age of Steam.

274. Colonial agriculture. The thirteen colonies, as a whole, were still predominantly agricultural at the beginning of the Age of Steam, farming being most important in the southern colonies and least important in New England outside the Connecticut valley. In the southern colonies large estates cultivated by slave labor prevailed; in New England small farms and a system of intensive culture; in the middle colonies small farms were the rule, but in some places, as for example along the Hudson, there were large estates, which were subdivided and leased to tenants. Primitive methods of farming were still used in all the colonies; there was little or no fertilization of the land; the varieties of animals and vegetable products were little improved by culture and breeding. On the other hand, the land was so rich in many places, especially in the South and parts of the middle colonies, as to yield much more than enough for local use, and consequently furnished a large surplus for exportation. The most important agricultural products of the various colonies were as follows: Georgia, rice and indigo; the Carolinas, tobacco, rice, indigo, considerable corn, and some cotton; Virginia and Maryland, tobacco; the middle colonies, wheat, rye, barley, corn, and flour. All the colonies yielded dairy products for home use, but dairying was especially important on the lowland meadows of New Jersey, where considerable quantities of butter and cheese were produced for the intercolonial trade and for exportation. Cattle raising was carried on quite extensively, not only in New Jersey but in the Carolinas and Virginia, all these colonies exporting large numbers of cattle and horses, chiefly to the

West Indies. In Virginia and the Carolinas this industry became most important on the frontiers. Large numbers of cattle, horses, sheep, and hogs were turned loose in the glades and forests, where they multiplied rapidly; herds numbering over one thousand were quite common on the frontiers of the Carolinas. Considerable quantities of wool, flax, and hemp were produced in various colonies for home use. Many of the vegetables and fruits known in Europe were introduced into the colonies at quite an early date, and continued to be grown wherever the soil and climate proved suitable. The potato, however, remained the most important vegetable, and was grown very extensively, especially in the southern colonies.

275. Although agriculture was the predominant industry, some manufactures were developed in the colonies in spite of English restrictions. As America was colonized during the period when the domestic system of industry prevailed in Europe, that is, when some manufactures were carried on in nearly every home in connection with agricultural pursuits, most of the colonists who came here brought with them a knowledge of various manufacturing processes, and many of them were quite skillful artisans. The hard conditions of pioneer life prevented the early colonists from devoting much time to domestic manufactures further than those that were absolutely necessary, and yet numerous attempts to establish various special manufactures were made in nearly all the colonies at quite an early date, and several of the colonial governments took measures to encourage such industries. In the southern colonies these attempts were never successful because the exceptionally fertile soil there made the growth of tobacco and other agricultural products much more profitable than manufactures. The people of that section, therefore, always imported practically all except the very coarsest kinds of manufactured

goods. In the northern and middle colonies, on the other hand, the knowledge of European methods of manufacturing took deeper root, and some manufactures were developed either in connection with agriculture or in addition thereto. In the case of New England the poor soil was one cause for this industrial development; but the principal cause, both in New England and in the middle colonies, seems to have been the fact that various statutes passed during the latter part of the seventeenth century in the interest of the English landlords prevented those sections from exporting to England their staple agricultural products, such as wheat, rye, barley, oats, peas, beans, salt beef, salt pork, bacon, butter, etc. Inasmuch as they could not sell these products in England, they not only sold them elsewhere, but they naturally tried to make more of their own manufactured articles than they otherwise would have done. Even in these colonies, however, England's policy of restriction was in the main effective. None of the colonial manufacturing industries ever produced much more than enough for home consumption, while most of them never produced enough to satisfy home demands, and many kinds of manufactures were never successfully established in the colonies. The colonial manufactures, therefore, never seriously interfered with English manufactures, either by furnishing articles for export or by preventing the importation of the manufactured goods which England was most anxious to sell in the colonies. How much the general effectiveness of England's policy regarding colonial manufactures was due to the laws which she passed, and how much to the natural conditions prevailing in the colonies, is somewhat difficult to determine accurately; but the latter factor was probably more important than the former in most cases. In New England, where, on the whole, manufactures took deepest root, their extensive development (except in

the case of shipbuilding) was checked by the greater profits to be derived from the fisheries, West Indian commerce, lumbering, shipbuilding, and shipping, by the scarcity of labor and high wages, and in some parts by the greater productivity of labor on new land. In the middle colonies also manufactures were checked by the high wages, scarcity of labor, and the greater profits to be derived from agriculture, cattle raising, dairy farming, lumbering, shipbuilding, fur trading, and West Indian commerce.

276. The textile industries. The manufacture of coarse woolens and linens for family use was conducted on a small scale in many homes throughout all the colonies even during their early history, but towards the close of the seventeenth century and in the first part of the eighteenth the northern and middle colonies began to develop this industry somewhat more extensively. Many of the later immigrants who came to America during that period were skilled in the textile industries, especially the Scotch-Irish, the Huguenots, and the fugitives from the Palatinate. By the beginning of the Age of Steam, therefore, the northern and middle colonies were making a much larger portion of their own woolens and linens than formerly and much more than the southern colonies. Taking the colonies as a whole, they probably made about three fourths of all the cloth used by them. This industry, however, never passed beyond the stage of home manufacture for home consumption, although some home-made cloths were sent to the frontier and from colony to colony, and some attempts were made to manufacture for the export trade. This industry, furthermore, was confined mostly to the making of coarse cloths; the northern and middle colonies, as well as the southern, continued to import large quantities of finer textiles, chiefly from England.

277. Shipbuilding was one of the most important manufacturing industries in the colonies. The large supplies of

lumber made shipbuilding very profitable, and this industry was accordingly begun quite early in New England and some of the middle colonies. The laws of Massachusetts and some other colonies encouraged shipbuilding, and it should not be forgotten that the Navigation Acts also stimulated the industry very greatly by including colonial-built vessels among the English vessels in which all legal trade had to be conducted. Shipbuilding, therefore, became a very important industry in New England and was also developed to a considerable extent in some of the middle colonies. During the years 1772–1775 more than two thousand vessels were built in the colonies, most of them in New England, the next largest number in Pennsylvania, with New York ranking third. At the beginning of the American Revolution three fourths of the vessels trading with New England were owned by men in that section. On the other hand, three fourths of the vessels trading with Virginia and Maryland were owned in England. Many of the vessels owned in England were built in the colonies, and large numbers were also exported to the West Indies.

278. The large supply of beaver and the consequent cheapness of fur favored the growth of a somewhat important beaver-hat industry in New England and New York. In 1731 a parliamentary investigating committee reported that about ten thousand beaver hats were being made annually in those colonies. Consequently, the next year Parliament passed an act prohibiting the exportation of hats and limiting the manufacture thereof, but the act does not seem to have been enforced very strictly. This industry, however, never interfered very seriously with English hat manufacturers, for they still obtained fur from the colonies, and the few hats which the colonial manufacturers exported to Spain, Portugal, and the West Indies did not compete to any great extent with English-made hats.

279. Mining and the hardware industries were also developed to some extent prior to the Revolution. Copper and lead were mined in small quantities in some colonies, but iron was the most important metal mined. This metal was obtained, chiefly from bog iron ore, in all the colonies from Massachusetts to the Carolinas. Not only were pig and bar iron and steel made in various colonies, but certain iron and steel manufactures were gradually developed, as, for example, scythes, rude plows, pitchforks, hoes, horseshoes, nails, stoves, pots, and other household utensils, wire, iron and steel work for carriages, fishhooks, anchors, iron and steel work for ships, various tools for artisans, guns, and cannon. The northern and middle colonies seem to have manufactured more iron wares, while the southern colonies exported more raw iron. The iron industry, especially the manufacture of iron and steel wares, was developed more in Massachusetts and Pennsylvania than elsewhere; in those colonies smelting and steel furnaces, forges, foundries, rolling mills, slitting mills, nail works, wire works, etc., were quite numerous. The somewhat rapid development of this industry in various colonies led Parliament in 1750 to pass an act prohibiting the further erection of mills for the manufacture of iron and steel wares, but allowing the free importation of bar and pig iron into England from the colonies. This act seems to have been somewhat effective in checking the further growth of iron and steel manufactures in the colonies and in stimulating the exportation of raw iron. In 1745 only 2228 tons of pig iron were sent from the colonies to England; in 1771 they exported over 7525 tons.

280. Various other manufactures were gradually developed in the colonies. The following articles were made in different colonies, mostly for domestic use: leather, harnesses, saddlery, gloves, boots, shoes, leather breeches and

other leather goods, cooper's wares of every kind, wagons, carriages, carts, furniture, cabinet wares, some kinds of rude wooden machinery for manufactures and husbandry, various kinds of paper, various copper and brass wares, ordinary tinwares, soap and candles, bricks, coarse tiles and potteries, cordage, twine, and sailcloth, spirits and malt liquors, salt, some refined sugar, and gunpowder. Some of the above articles were made in sufficient quantities for exportation and the intercolonial trade. During the eighteenth century New England developed the manufacture of rum on quite an extensive scale, this article, as already noted, being used chiefly in the fisheries, the African slave trade, and the West Indian trade. Bricks and tiles were manufactured in considerable quantities in various colonies during the latter part of the colonial period, and were shipped from colony to colony and even to the West Indies. Leather tanning was conducted on quite a large scale in numerous localities, and considerable quantities of leather and leather goods, especially boots and shoes, were made for the intercolonial trade. Cordage and sailcloth were also made in sufficient quantities to be quite important commercially. Printing presses and paper mills were established quite early in several colonies and increased in number and in their output during the colonial period; they were most successful in Boston and Philadelphia, some paper from these cities entering into the intercolonial trade.

281. The lumber industry. Turning now to the production of raw materials and half-manufactured goods in the colonies, let us consider first the lumber industry, which became quite important in many places, especially in New England and some parts of the middle colonies, and to a lesser extent in some parts of the South. At first forests were everywhere recklessly cut down and burned in order

to make clearings for agricultural purposes, but gradually there was also developed a systematic lumbering industry. Sawmills run by wind or water power became quite common throughout the colonies, and large quantities of boards, plank, scantling, timber, masts, spars, staves, headings, hoops, and poles were gotten out both for home use and for exportation. In 1770 the lumber exports from all the colonies were valued at about $690,000, most of which came from New England; the next largest amount was sent by the middle colonies; the southern colonies exported a little. Considerable quantities of soap ashes were also exported by most of the lumber-exporting colonies. In the early part of the eighteenth century Parliament provided that colonial lumber might enter England free of duty; but in spite of this act most of the lumber exported went to Spain, Portugal, and the West Indies.

282. Naval stores. Parliament made strenuous efforts to develop the manufacture of naval stores in the colonies by granting liberal bounties upon their production. This policy does not seem to have been successful in any of the colonies except the Carolinas. In 1770, 87,561 barrels of tar, 15,793 barrels of pitch, 41,709 barrels of turpentine were exported, most of which came from North Carolina. The bounties on hemp seemed to be almost wholly ineffective.

283. Flour industry. Nearly all of the colonies had local gristmills in large numbers, most of which were run by windmills, and some by water power. The middle colonies, which grew the largest amounts of grain, excelled in the flouring industry and even exported considerable quantities of excellent flour. The gristmills of Philadelphia alone exported nearly three hundred and seventy thousand barrels of flour in 1789. Two years later the colonies as a whole exported nearly six hundred and twenty

thousand barrels of flour, most of which came from the middle colonies.

284. Along the New England coast fishing was the principal occupation of the people. This industry was developed quite early and remained very profitable throughout the colonial period. Large quantities of fish were exported annually both from the New England coast and from the Newfoundland fisheries; the better grades were sent to the Catholic countries of Europe, the poorer grades to the West Indies.

285. Fur trading. The earliest English colonists who came to North America traded in furs with the Indians. In New England and New York fur trading was at first the most important industry and was for some time the chief basis of their foreign commerce. Gradually other industries became relatively more important in both sections, but the fur trade remained very lucrative and important. Eventually the English and Dutch traders pushed up the Hudson and Mohawk valleys to Lake Champlain, the Great Lakes, and the Illinois country, and in another direction across the Alleghanies. As they came into collision with the French traders there was naturally developed an intense rivalry, and it is not too much to say that this rival desire to control the fur trade was one of the principal causes of the French and Indian War.

286. Colonial commerce and shipping. Having formed our estimate of the condition and relative importance of the principal colonial industries and of the general effectiveness of England's restrictions upon manufactures and some other industries, let us now see how far her regulation of colonial commerce and shipping was successful. As might be expected, those provisions in the various restrictive statutes which gave a monopoly of colonial trade to English shipowners were generally well enforced during

the eighteenth century, and quite easily so, for the simple reason that they protected colonial shipowners and sailors, as well as those of England, and stimulated a thriving shipbuilding industry. On the contrary, those provisions in the statutes which sought to prevent the importation of European goods into the colonies, and the exportations of "enumerated" colonial goods to other countries than England, were not so well enforced. There was little illicit trading in the southern colonies, except in their trade with the West Indies during the War of the Spanish Succession and in their exportation of considerable tobacco to other colonies without paying the prescribed duties. There was, however, a large amount of smuggling in the northern and middle colonies, most of which centered in Boston, Philadelphia, New York, and the immediate vicinities of those cities. Quite large quantities of wines, brandies, and other European goods, together with tea, coffee, spices, and other East Indian products, which were obtained from the pirates of Madagascar, were smuggled into the colonies through those cities. New England also had quite an extensive illicit trade in fish with Spain and Portugal. But the largest amount of smuggling was practiced in connection with the West Indian trade. So general was the practice of smuggling that English governors and customs collectors, particularly in New York and New England, frequently connived at various branches of contraband trade. To correctly estimate this practice of smuggling, however, one must remember that England herself at that very time had an army of about forty thousand smugglers plying their arts along her own coasts. It is also important to note that, extensive as was the practice both in England and many of the colonies, few manufactured goods, other than those of English origin, entered the colonies. English merchants rather than manufacturers

suffered from the failure to enforce these restrictions. Likewise, in the main, the colonists sent their "enumerated" goods to England, as the law required.

In spite of all restrictions on colonial industries and trade, their foreign commerce increased quite rapidly during the eighteenth century, especially during the twenty-five years just preceding the Revolution. As already noted in a previous chapter, England's trade with her continental colonies in North America increased from $3,250,000 in 1698 to $10,000,000 in 1751, and to $27,250,000 in 1771. The total foreign trade of the thirteen colonies has been estimated at about $12,000,000 for the year 1750, and about $30,000,000 for the year 1771, their exports for the corresponding years being $3,800,000 and $11,000,000.

287. There was much barter throughout the colonial period both in the domestic and foreign trade. There was very little metallic money in the colonies, and for a long time such articles as tobacco, beaver, wool, and wampum were commonly used as currency. As Mr. Weeden says, "The modern fluidity of buying and selling, the movement through quick prices and ready money, was wanting in large as well as small transactions. Merchandise was present in negotiation, not only as symbolized in a money or currency, but in actual bulk and weight. Men bartered peltry, wampum, or corn in terms of money. Taxes were levied, not in solid coin or its paper representatives, but in farm produce, 'country pay.' . . . One of the pinching wants of the time was not only for quicker capital and more money, but for a better currency of that which they had." [1]

288. The means of communication and transportation in the colonies. It is very interesting to note the successive stages in the evolution of means of transit in the American

[1] Economic and Social History of New England, I, 314–315.

colonies: first, the paths of wild animals; then the Indian trails, which in the earlier pioneer days were followed by hunters and fur traders, and later by hardy settlers with axes as well as rifles. Along the coast, trails were gradually widened by the ax into roads for wagons, but such roads did not extend far inland until after 1750. As the roads during the colonial period were built under town or county authority they were mostly for purely local needs, and there was little or no thought of connecting the various local roads into a great system of colonial and intercolonial highways. Although there were some good roads between the principal cities along the coast, most of the others, even a short distance away from the coast, were very poor. There were few bridges until after the Revolution, and most rivers had to be forded, while the larger ones were crossed by badly managed ferries. The postal services in the various colonies were still very poor at the outbreak of the Revolution. Most letters and packages were carried by private couriers, and the service was very slow and expensive. One of the earliest and most important acts of the second Continental Congress was the creation of a general post-office department for all the colonies, and the appointment of Dr. Benjamin Franklin as postmaster-general. Franklin soon created quite an efficient postal system, and this was one of his greatest services to the American nation.

II. The Struggle for Industrial and Commercial Independence (1763–1793)

289. The economic basis of the American Revolution. We have the positive testimony of Benjamin Franklin and other reliable witnesses that the feeling in the American colonies towards the mother country at the close of the Seven Years' War was "the best in the world." Although there had been numerous protests and some more tangible demonstrations against various acts of the British government throughout nearly all of the colonial period, they had been fitful and local; nothing had occurred prior to 1763 that would have caused a revolution. Some of the laws restricting colonial industries and trade had been considered rather oppressive in certain parts of the country, but England's right to impose them had been quite generally admitted. At the same time that the legality of these restrictions had thus far been admitted, the colonists had not hesitated to break or evade those portions of the laws which interfered most seriously with their industrial and commercial development, and this had been rendered comparatively easy by England's adherence to Walpole's policy of "salutary neglect" in administering these laws. By 1763, therefore, the colonists had become so accustomed to regard many of the restrictions as dead letters to be systematically evaded that they expected a permanent adherence to this policy of "salutary neglect." Just then, however, England made a radical change in her colonial policy. Her victories over France in the Seven Years' War, together with the first impulses of her industrial revolution, were ushering in a new era of expansion for her industries and commerce. These and other causes made her more than ever anxious to monopolize the trade

of the world and to make her colonies feeders for her own industry and commerce. At the same time the debts incurred during the Seven Years' War, and the need for protecting the American frontier, made her try to raise a revenue from her colonies. Accordingly, Grenville, Townshend, and other ministers made numerous changes in the laws affecting the colonies, the details of which it is not necessary to state here. In general it may be said that the restrictions on colonial trade and industry were retained, some being removed and others added, while the duties on some imports were so revised as to be placed on a revenue basis. At the same time a policy of strict execution of the laws was determined upon. Armed vessels were sent to patrol the American coast; commissioners of customs were appointed to reside in the colonies; writs of assistance were employed to facilitate arrests and insure convictions of smugglers; a vice-admiralty court for all the colonies was established at Halifax. This systematic suppression of the industries and trade of the colonies, which greatly hindered their expansion in many ways, was undoubtedly one of the most important and fundamental causes of the American Revolution.

290. The economic situation in the United States just after the war for independence was truly distressing. The few manufactures which had been founded during the colonial period and extended during the Revolution, as well as the new ones stimulated by the necessities and high prices of the war, were injured seriously by the British manufactures that flooded the country after the war. The development of manufactures was furthermore hindered by the rigid execution of the English laws prohibiting the exportation of tools and machinery. The total manufactured product of the country was worth only about $20,000,000 in 1789. The close of the war also proved at first a

detriment rather than an advantage to agriculture, which was still by far the most important industry in the young republic; for her farmers could no longer sell their products at fancy prices to the British, French, and American armies. For a time, therefore, American agriculture suffered seriously in common with American manufactures. The fisheries had also been nearly broken up by the war and were not quickly or easily built up again. The commercial situation was no better. The only clause concerning commerce in the treaty of peace (1783) was a provision guaranteeing that the navigation of the Mississippi should be forever free to Great Britain and the United States. Jay had tried to secure from England some reciprocal provision, but had failed. In 1783 Pitt introduced into Parliament a bill providing for free trade between the United States and the British colonies, but he, too, failed and was obliged to resign. Instead of passing Pitt's bill, Parliament reënacted an orthodox navigation act of the seventeenth-century type, which imposed upon Americans practically all the restrictions that had been enforced against foreigners during the colonial period. Among other things, the British West Indies were closed to American traders, and American vessels in other British ports were subjected to heavy tonnage dues. It is to be noted that these restrictions in the British Navigation Act of 1783 were enforced far more stringently than any of the acts of the colonial period had been. Congress also failed to secure commercial treaties with France, Holland, Spain, and Portugal. Prussia and Sweden were the only countries at this time that would make treaties with us guaranteeing reciprocal commercial privileges. Spain was willing to make such a treaty provided we would surrender for twenty-five years the right of navigating the Mississippi, and it is to be lamented that the New England leaders seemed willing to make this

sacrifice for the sake of securing the much coveted privilege of trading with Spain and the Spanish colonies. Fortunately, however, their selfish aims were thwarted in time to prevent the execution of what would have been a grievous mistake in American policy.

What was needed to bring European nations to terms and grant us respectable trading privileges was effective retaliation, but this was prevented by the weakness of Congress under the Articles of Confederation. During the years 1783–1788, New Hampshire, Massachusetts, Rhode Island, Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, and Georgia did levy tonnage dues upon British vessels, but they were ineffective because they were not uniform. These states also imposed discriminating duties upon British goods entering them, but the duties varied from fifty to one hundred per cent, so that their effectiveness was thus neutralized; while some of the neighboring states allowed British goods to enter free of duty, whence they were carried over the border into other states, thus defeating altogether the efforts of the retaliating states. British goods, therefore, continued to flood the country either through the ports that were free or those which imposed the lightest tonnage dues and discriminating duties. As the tonnage duty imposed in the port of New York was only eight cents per ton, while that in the ports of other states varied from sixteen cents to one dollar, her harbor filled rapidly with foreign, especially British, ships during this period, and her commercial activity was greater than that of any other American city. American merchants, however, profited very little by this activity in New York, for her commerce was largely monopolized by foreigners. Consequently, foreign debts were contracted in addition to those already incurred during the Revolution, the country was drained of specie to pay for imports,

and the people suffered from a prolonged attack of "hard times." To make matters worse, most of the states yielded to the popular clamors and issued large quantities of paper money, which, in common with the continental paper money, depreciated rapidly almost to the point of utter worthlessness. Furthermore, the "repudiation fever" raged with full vigor. In order to appease the numerous debtor class certain state legislatures passed "stay laws," which delayed the collection of debts. "Tender laws" were also enacted, permitting debtors to offer goods at certain fixed prices in payment for their debts and requiring creditors to accept such payments. It is quite evident, therefore, that industrial and commercial progress was practically impossible under the Articles of Confederation.

291. The constitution adopted by the Federal Convention of 1787 was largely an outgrowth of the industrial and commercial needs of the country. One of the chief defects of the Articles of Confederation was the fact that they did not give Congress any effective control over either foreign or domestic commerce. This defect was gradually perceived quite clearly by the leading merchants, manufacturers, and financiers, and was their chief motive in trying to secure another constitution. This is shown very plainly in all stages of the evolution of the national government during that period. The Alexandria Convention (1785) was called to settle the disputes between Maryland and Virginia over the navigation of the Potomac and the Chesapeake. The Annapolis Convention (1786) was called to consider the advisability of making uniform commercial regulations for all the states. The Federal Convention (1787) was called for the purpose of making a general revision of the Articles of Confederation, but there is ample evidence showing that the question of regulating commerce was the dominant one and that an amendment of this sort was the main object in

calling the convention. There is no doubt that the new constitution was framed primarily in the interest of the industrial and commercial classes, and was finally ratified largely as a result of their active and intelligent work in its behalf.

292. The new constitution, thus framed and ratified, laid the real foundation for the industrial and commercial independence of the United States. We obtained our political independence in 1783 by the Treaty of Versailles, but we were still dependent upon England both industrially and commercially, and it would have been impossible to outgrow that dependence under the Articles of Confederation. On the other hand, as every one knows, the new constitution gave Congress ample control over both foreign and domestic commerce, and consequently the United States was able to retaliate more effectively against the restrictions imposed by foreign nations upon American commerce and shipping. Not only were several tariff acts passed during the years 1789–1793 for the purpose of raising revenue, retaliating against other countries, and protecting home manufactures, but in 1790 a tonnage act imposed a duty of fifty cents per ton upon foreign vessels entering American ports, a duty of thirty cents per ton upon vessels owned abroad but built in America, while the duty upon vessels owned and built by Americans was only six cents per ton. Later in 1790, a discriminating duty of ten per cent was levied upon all goods not imported in American vessels, and foreign vessels were excluded from the coasting trade. It was further suggested that vessels of countries not having commercial treaties with the United States should be subjected to heavier tonnage dues than those of countries which had such treaties, but the bill incorporating this suggestion was defeated. These retaliatory measures, together with Hamilton's public debt measures, the new national bank, and the increasing confidence in the new

government both at home and abroad, gave a great impulse to American commerce and shipping. It certainly is very apparent, therefore, that the new constitution laid the foundation for the commercial independence of the United States.

Although American manufactures did not at once develop as rapidly as our foreign commerce, the organization of the new government also helped to revive the manufactures which had already been started and which had languished during the period of the Articles of Confederation. We have seen what manufactures had been established in the colonies and that the war for independence had stimulated all the existing manufactures and certain new ones. In order to become industrially independent several notable attempts had been made during the Revolution to smuggle machinery into the colonies and to establish certain industries on a broader basis. Early in 1775, for example, a spinning jenny was brought to Philadelphia, and during the war the manufacturers of that city extended their enterprises by building mills of various kinds. Similar efforts were made during the Revolution by Massachusetts and some other states. The struggle for industrial independence was continued after political independence had been won by the treaty of 1783. In 1786, for example, the legislature of Massachusetts gave a bounty of $1000 to Robert and Alexander Barr to enable them to construct machines for carding, roping, and spinning wool and cotton, and the next year a textile factory was started at Beverly in that state. Other attempts were also made in Massachusetts, New York, Pennsylvania, Rhode Island, and a few other states. On the whole, however, manufactures languished during the years 1783–1789 on account of the fierce competition of foreign goods, which was not checked under the defective government created by the Articles of

Confederation. The total manufactured product of the country in 1789 was worth only $20,000,000; but the establishment of a better system of government under the present constitution and the partial checking of foreign competition during the great continental war, led to renewed efforts to extend American manufactures and establish them on a broader and sounder basis. The very next year after the organization of the new government, Samuel Slater, "the father of American manufactures," set up a factory at Pawtucket, Rhode Island, in which he constructed the first complete cotton machinery used in this country. It is interesting to note how Slater was able to reproduce in this country the new machinery then being used in England. For several years he had worked for an English manufacturer of cotton machinery and thus thoroughly fixed in his mind every detail in its construction. Then, accidentally seeing a notice in an American newspaper describing the efforts being made to establish such machinery in America and mentioning the bounties offered for its successful construction there, he promptly decided to emigrate. As he could not even bring models or plans of such machinery on account of the rigid enforcement of the English laws, he simply depended on his accurate remembrance of the details of construction, and successfully accomplished his purpose. His success paved the way for other similar establishments.

The scope of American manufactures at the close of the period we are considering may be judged from an enumeration given by Alexander Hamilton in his celebrated Report on Manufactures in 1791. The articles enumerated by him were substantially as follows:

1. Leather, shoes, harness, trunks, gloves, glue, etc.
2. Iron bars and sheets, steel, nail rods and nails, implements of husbandry, artificer's tools, household utensils, arms, etc.

3. Ships, cabinet and cooper's wares, wool and cotton cards, machinery for manufactures and agriculture.
4. Manufactures of flax and hemp, cables, cordage, sailcloth, twine, etc.
5. Bricks, coarse tiles, and potter's wares.
6. Ardent spirits and malt liquors.
7. Writing and printing paper, wrapping paper and pasteboard, paper hangings.
8. Hats of fur and wool.
9. Refined sugars.
10. Oils, soaps, tallow candles.
11. Copper and brass wares.
12. Tinwares.
13. Carriages of all kinds.
14. Snuff, chewing and smoking tobacco.
15. Starch and hair powder.
16. Lampblack and painters' colors.
17. Gunpowder.

After giving this enumeration the report continues:

"Besides manufactories of these articles, which are carried on as regular trades and have attained to a considerable degree of maturity, there is a vast scene of household manufacturing, which contributes more largely to the supply of the community than could be imagined without having made it an object of particular inquiry."

III. Commercial Expansion during the Great Continental War (1793–1815)

The period from 1793 to 1815 witnessed a somewhat rapid growth of agriculture in some sections, the gradual development of some manufactures, and a few important improvements in the means of transportation, but was characterized mainly by a remarkable expansion of our foreign commerce and shipping.

293. American agriculture. The most notable progress in agriculture during this period was made in the South and the newly settled Ohio valley. In the South tobacco,

rice, and indigo continued to be the most important staple products, but the period was also characterized by a quite rapid increase in the production of cotton. During the previous period (1763–1793), under the stimulation of the improved machinery for spinning and weaving, experiments in cotton culture had been made all the way from New Jersey to Georgia. As a result of thee experiments a very fine variety of long-fiber cotton, known as "sea-island cotton," was soon grown in the coast regions of the South Atlantic states, and an inferior grade of short-fiber cotton on the uplands in the interior of those states. Eli Whitney's invention of the cotton gin in 1793 gave a great impulse to the growth of cotton, especially by making the short-fiber cotton grown on the uplands available for the rapidly increasing English demand. So strong was the impulse that the value of the cotton crop of the country increased from $30,000 in 1792 to $15,000,000 in 1810. The rapid settlement of the Ohio valley led to a corresponding increase in the production of grains and some other agricultural products. The extent of the agricultural development in that valley may be roughly estimated from the growth of population. Kentucky's population increased from 73,677 in 1790 to 406,511 in 1810; that of Tennessee from 35,691 to 261,727. The populations of Ohio and Indiana in 1800 were respectively 45,365 and 5641; in 1810, 230,760 and 24,520. By 1810 Illinois had a population of 12,282. Although the production of grains and other food stuffs increased quite rapidly during this period there was only a slight increase in the exportation of wheat. This is easily explained by the larger home demand resulting from the rapid increase of population (3,929,214 in 1790 and 7,239,881 in 1810) and by the tendency to turn wheat into flour before exporting. The flour exports increased from about 720,000 barrels in

1790 to about 1,250,000 barrels in 1807. During the Embargo and the War of 1812 the exportation of grain and flour was almost completely stopped: in 1815, only 17,634 bushels of wheat and 62,739 barrels of flour were exported.

294. American manufactures. Although American capital found much more profitable investments in foreign commerce and shipping than in manufactures during the great continental war, the efforts already made in the direction of industrial independence were gradually continued. Slater's successful experiment at Pawtucket, Rhode Island, led to other similar ventures, and the outbreak of war checked the competition of British goods. By 1803 there were four cotton factories in the country and numerous mills for the manufacture of various other articles. The cotton gin, as already noted, gradually stimulated the growth of cotton in the South, and this naturally helped the cotton manufacturers of the North. The Embargo and the War of 1812 gave a very strong impulse to northern manufactures by keeping out foreign goods and compelling Americans to make goods for themselves or go without. In 1808 there were fifteen cotton factories in the country with eight thousand spindles. By 1811 the number of spindles had increased to eighty thousand, and by 1815 there were five hundred thousand spindles in operation. In 1800 the home manufacturers consumed five hundred bales of cotton; in 1815, ninety thousand bales. By 1815 the capital invested in the cotton and woolen industries was about $50,000,000. Just at the close of this period, in 1814, Mr. Francis P. Lowell paved the way for still further progress in manufacturing by introducing the power loom into his factory at Waltham, Massachusetts.

295. The means of transportation and communication were developed very slowly during this period, but some important improvements were made. Soon after the adoption of the

present constitution turnpike roads began to be built, and early in the nineteenth century these were extended quite rapidly, most of them being constructed by private corporations which charged heavy tolls. Gradually a sentiment was developed in favor of the construction of highways and other important internal improvements by the United States government, but this sentiment did not lead to the execution of many practical enterprises until after the War of 1812. The earliest important turnpike undertaken by the national government was the famous old Cumberland Road. When Ohio was admitted into the Union in 1802, provision was made for the expenditure by the United States government of two per cent of the proceeds of the sales of its lands lying in that state for a turnpike connecting the state with the seaboard. By 1805 about $12,000 had been thus raised, and surveys were then begun. Finally a route was selected extending from Fort Cumberland on the Potomac to Wheeling. When Indiana, Illinois, and Missouri were admitted, the United States government made similar agreements to that made in the case of Ohio. As the proceeds of some of these lands were not immediately available, the national government advanced money for the road on the strength of future sales of lands, and finally money was appropriated outright for the enterprise. By 1815 about one hundred miles of the road had been completed.

In the meantime the work of constructing canals had begun. The first canal in the United States was the Dismal Swamp Canal, twenty-nine miles long, begun by the state of Virginia in 1787 and opened in 1794. According to the original plan this canal was to be one link in a chain of canals designed primarily so that war vessels could defend the entire coast without undue exposure. There was to be a canal across Cape Cod, one from Newark Bay to the Delaware River, one from the Delaware

to Chesapeake Bay, one from that bay to the Dismal Swamp, and the Dismal Swamp Canal was to extend to Albemarle and Pamlico sounds. This chain of canals, however, was never completed. Many other canals were projected between 1790 and 1800. In fact, for several years after the adoption of the present constitution there seems to have been quite a fever for speculating in canal and turnpike enterprises. Many companies for such enterprises were formed in most of the states, especially in New York, Massachusetts, and Pennsylvania. Quite a number of canals were projected by various Pennsylvania companies, among which was one from the Schuylkill to the Delaware. The Northern Navigation Company of New York planned a canal from the Hudson to Lake Champlain, while the Western Navigation Company of the same state made several plans for canals connecting the Hudson with the Great Lakes. The Middlesex Canal was projected in Boston; work was begun in 1794, and it was completed in 1803. Few of the numerous other canals which were projected at this time were constructed; it was not until after the War of 1812 that the era of canal building really began in the United States. It is interesting to note that Washington, when a young man, pointed out the desirability of constructing canals connecting the Hudson River with the Great Lakes, and connecting Chesapeake Bay with the Ohio River. Several plans for important canals were also considered in Congress during this period.

Some progress was also made during this period in the navigation of our rivers and the Great Lakes. In 1794 the first regular packet line was established between Pittsburg and Cincinnati. Six years later the *St. Clair*, a sailing vessel rigged for both ocean and river navigation, went with a load of pork and flour from Marietta to New Orleans and on to Havana, thence taking a load of sugar to

Philadelphia. This voyage was a prophecy of what could be accomplished when steam was applied to navigation. Soon after Fulton's experiments in 1807, steamboats were placed upon various rivers running to the Atlantic seaboard and a little later upon some western rivers. In 1815 a steamboat named the *Enterprise* demonstrated the possibility of going against the current from New Orleans to Pittsburg.

296. Interstate commerce. There was very little overland interstate trade at the beginning of this period, and it developed very slowly thereafter. The older states had not yet developed manufactures sufficiently to ship extensively to the newer states, and the poor means of transportation interfered seriously with such trade even among the coast states, while the Alleghanies stood as an almost impassable barrier between the West and the East. In 1784 the freight charges by pack horse from Philadelphia to Erie were $249 a ton, and as late as 1821 the freight from Philadelphia to Pittsburg was $11 per hundredweight. So difficult was the interchange of goods that Ohio farmers were obliged to give twenty bushels of wheat for a pair of boots as late as 1820. On the other hand, a considerable coasting trade had sprung up before the Revolution, and it developed quite rapidly thereafter. In 1789 the tonnage engaged in this kind of trade was already 78,607 tons, and it increased to 477,971 tons by 1812. Even such bulky articles as lumber, bricks, building stone, lime, hay, oats, potatoes, furniture, and carriages were taken by water from New England to New Orleans. In 1776 Gibson and Linn went by boat from Pittsburg to New Orleans and brought back a load of gunpowder, carrying their cargo around the falls of the Ohio. This trip led to the development of a considerable flatboat trade along the Mississippi and Ohio. This trade, however, was conducted under such difficulties as to keep the freight rates quite high. In 1812 the

Louisiana legislature established freight rates averaging $112 per ton from New Orleans to Louisville, and half that rate for tonnage going down the river. The passenger rate was fixed at $125.

297. Growth of American foreign commerce and shipping during the great continental war. The foundation for industrial and commercial development having been laid by the adoption of the new constitution and by the important public measures of Hamilton, the United States was ready to avail herself of the first good opportunity for expansion. Such an opportunity was soon afforded by the outbreak of the great continental war, during which occurred the first great expansion of American foreign trade and shipping. During this war the United States was continually picking up the trade which European nations were losing, until she acquired a large part of the carrying trade of the world. During the years 1793–1801 our merchant fleet traded freely and extensively with the East and West Indies, and for several years American merchants and shipowners filled a very large part of the European demand for colonial products; Russia, Sweden, Germany, and even France and England employed our merchants and vessels as carriers and intermediaries. A typical instance of the rapid growth of colonial trade was the increase of our West Indian sugar shipments from seventy-five thousand pounds in 1791 to thirty-five million pounds in 1796.

Another branch of trade developed during this period deserves special mention. The voyage of the *Empress* to Canton stirred New England merchants to send direct to China for silks and tea, and a brisk trade with that country was soon developed; by 1787 five American ships were on their way to Canton. This trade grew quite rapidly, and during the decade 1821–1830 it averaged nearly $9,000,000 annually. As our country produced very little that the

Chinese wanted we had to take large quantities of specie with which to buy Chinese tea and silks. During the same period our exports of domestic products to China averaged only $277,741 annually, while our total imports from that country averaged over $5,000,000 annually. Consequently, this trade was necessarily a three-cornered one, the specie for buying Chinese goods being chiefly obtained from an intermediate trade with other countries. Furs from the Northwest soon became one of our most important exports to China, and the foundation for this branch of the trade was laid by the voyages of Captain Gray. He left Boston Sept. 30, 1787, rounded the "Horn," secured a cargo of furs on the northwest coast, sold it in Canton, and returned to Boston in August, 1790, with a cargo of tea. Next year he started on another voyage, which resulted in his discovery of the river named after his good ship *Columbia*.

Although European nations were very glad to employ our merchants and shipowners during the great continental war, several of them at various times tried to injure our commerce. England did everything in her power to check the growth of our commerce by countervailing duties and by signing treaties with Russia, Prussia, the German emperor, and Spain which discriminated against American products. France and Spain also passed laws bearing heavily upon our commerce. France in particular, offended at our policy of neutrality, openly insulted our government and envoys, annulled the treaty of 1778 which granted us commercial privileges in her ports, preyed upon our commerce, and during the years 1798–1800 was practically at war with us. While their hands were tied by the war, however, England, France, and other European nations could not prevent American commerce and shipping from making rapid progress. Our total foreign trade increased from $43,000,000 in 1791 to $204,000,000 in 1801; our

exports, from $20,000,000 to $93,000,000. The tonnage of American vessels engaged in foreign trade rose from 123,893 tons in 1789 to 848,306 tons in 1807. In 1789 only twenty-five per cent of the total tonnage engaged in American foreign trade was represented by our own vessels; in 1795, ninety per cent. Moreover, the United States exported not only her own products, but those of other countries; in 1807 over one half of our exports were reëxports. The yearly freight earnings of American vessels at this time were about $32,000,000, which represented a profit of about ten per cent on the cargoes carried. But this growth of trade was not without interruptions. The Peace of Amiens (1802) checked development for a little while. When the war reopened (1803), however, our trade again increased until 1807, when it reached a total of $247,000,000: imports, $138,500,000; exports, $108,500,000. Then came in rapid succession various English Orders in Council and Napoleon's Berlin and Milan decrees, which caused serious damage to American commerce and shipping. In a few years about sixteen hundred American merchant vessels were captured by British, French, Spanish, Danish, and Neapolitan war vessels and privateers. American property worth $30,000,000 was condemned as prizes by British admiralty courts, and still more was condemned by French courts. As a means of retaliation President Jefferson tried the Embargo Act (1807), but this only made the situation worse: in one year American exports fell from $108,500,000 to $22,400,000 (1808); American ships lost one hundred thousand tons of their foreign freight; the shipbuilding industry was reduced to one third of its size during the previous year. Not only commercial New England lost heavily by the Embargo, but the agricultural states, especially the South, suffered terribly. The surplus wheat could not be exported, and the price fell from two

dollars to seventy-five cents per bushel; the tobacco crop, the mainstay of the South, also remained unsold. So loud and numerous were the complaints that in 1809 the Embargo was replaced by the Non-Intercourse Act, which removed the barriers against trade with all countries except England and France. During the years 1809 and 1810, therefore, trade was resumed with most of the countries formerly visited by our merchants, and the Non-Intercourse Act scarcely impeded our commerce with England and France. An intermediary trade with these countries was carried on through Lisbon, Riga, and a few other ports, and a considerable direct trade with them was conducted under special licenses granted by their governments. The shipping engaged in foreign trade was now more prosperous and extensive than ever before. In 1810 our total foreign trade rose again to $152,200,000: imports, $85,400,000; exports, $66,800,000. In 1811 and 1812, however, trade again fell off, and in the latter year the United States hastily declared war against England under the pressure of the new political leaders from the West and South. This war inflicted serious losses upon American agriculture and commerce. Her surplus wheat flour, tobacco, and other agricultural products remained at home unsold, and even the farmers of the West and South, the very sections that had voted for war, felt the pinch of hard times. New England shipping, shipbuilding, and fisheries suffered very keenly. The imports fell to $12,000,000 in 1814; the exports to $6,000,000.

IV. Period of Industrial and Commercial Reorganization (1815–1866)

The War of 1812 taught the United States some very salutary lessons and created or strengthened economic forces of the utmost importance. It was followed by a new banking policy, a new tariff policy, extensive improvements in the means of communication and transportation, and a thorough reorganization of industry and commerce. In fact, the Treaty of Ghent closing that war ushered in a new era in the economic development of the country, an era characterized most of all economically by a great revolution in American industries.

298. The industrial revolution and the factory system. As we have already seen, there were numerous attempts to establish various manufactures in this country even during the colonial period, and some such industries were successfully planted in many of the colonies in spite of all restrictive British laws and other obstacles. During the war for American independence quite an impulse was given to the manufactures already planted, and some new ones were started under the stimulation of necessity and war prices. For a time after the treaty of 1783 there was an industrial reaction, but gradually the desire for industrial independence led to a renewal of the efforts to develop manufactures. For many years, however, even after the adoption of the present constitution and the passage of the first tariff act, the United States remained the client of European countries, chiefly Great Britain, for a very large part of her manufactured goods, except the coarsest kinds. Under the stimulation of the Embargo and the War of 1812 domestic manufactures were developed quite rapidly, and some factories were built in various industries,

particularly the cotton and woolen industries. But most of the factories built at that time were badly constructed and equipped, and turned out very coarse products. The industrial revolution, therefore, did not make much headway in the United States until after the War of 1812, and this movement was to be one of the most striking characteristics in the economic development of the North during the period between that war and the Civil War.

During the fifteen years following the War of 1812 the power loom was introduced into many factories, and the cotton industry was developed with remarkable rapidity in New England and some of the Middle Atlantic states. Factory towns like Lowell, Lawrence, Fall River, Holyoke, Cohoes, and Paterson suddenly grew up in these two sections. By 1831 there were about eight hundred cotton factories in the country, containing about twelve hundred and fifty thousand spindles and over thirty-three thousand looms, with an invested capital of nearly $41,000,000. The industry continued to develop quite steadily until the outbreak of the Civil War. Some idea of this growth may be obtained from the following brief tabular comparison between the years 1840 and 1860:

	1840	1860
Capital invested	$51,102,000	$98,585,000
Number of Spindles in Factories . .	2,284,000	5,236,000
Pounds of Raw Cotton consumed .	126,000,000	
Value of Manufactured Product . .	46,350,000	115,682,000

The woolen industry did not develop as rapidly as the manufacture of cotton goods. Some of the reasons for this are very apparent. There has never been a sufficient domestic supply of raw wool, while there has been a cheap

and abundant supply of raw cotton. During a large part of the period we are considering there were quite high duties on raw wool and these proved a hindrance for some time. Moreover, the woolen manufactures that grew up during the War of 1812 suffered much more than the cotton manufactures from the English competition following the Treaty of Ghent (1815). The woolen industry, therefore, did not make much headway until after 1830. Between 1840 and 1860 the capital invested in this industry increased from $15,765,000 to $42,849,000, the manufactured product from $20,696,000 to $80,734,000.

The iron industry in the United States was not affected very quickly by the revolution in the English methods of producing this article. Charcoal smelting and primitive methods prevailed until 1840, when a revolution was produced in the iron industry by the use of anthracite coal in blast furnaces, especially in Pennsylvania. In 1850 coke began to be used in smelting, and a little later uncoked bituminous coal was used. The product increased from 200,000 tons of pig iron in 1830 to about 920,000 tons in 1860, the value of the product in the latter year being nearly $21,000,000. Pennsylvania produced nearly one half of the total product, Ohio, Illinois, and Alabama ranking next in importance. In 1860 the steel product of the United States was not quite 12,000 tons, valued at $1,778,240. Up to 1860 we were supplied with iron and steel manufactures chiefly by foreigners. Our exports of such commodities never exceeded $1,000,000 until after 1840. Thus it appears that although the iron industry made considerable progress during the latter part of the period we are now considering, it was still in its infancy and the rich iron resources of the country had as yet scarcely begun to be developed. Nevertheless, in 1866 the English economist, Jevons, wrote: "It is impossible

there should be two opinions as to the future seat of the iron trade. The abundance and purity of both fuel and ore in the United States, with the commercial enterprise of the American manufacturers, put the question beyond a doubt." Here, therefore, was a prophecy of what this country would accomplish in this crucially important industry during the Age of Electricity.

We have chosen the growth of the cotton, woolen, and iron industries as the most fundamental and important examples of the industrial development of the United States during her industrial revolution. We must remember that other important manufactures were being developed rapidly during the same period, among which may be named leather, boots, shoes, and other leather goods, linens, silks, hats, soap, candles, oils, food products, essences, sugars, paper, pasteboard, glassware, earthenware, drugs, dyes, cordage, tobacco manufactures, and hardware. By 1860 the total yearly manufactured product of the country had increased to nearly $2,000,000,000 (census valuation), of which New York produced $379,000,000, Pennsylvania $290,000,000, Massachusetts $255,000,000, Ohio $122,000,000, Connecticut $82,000,000, New Jersey $76,000,000, California $68,000,000, Illinois $57,500,000, Virginia $50,500,000; the remainder was pretty well distributed over a large number of other states.

One of the most important factors in this rapid growth of manufactures was the application of various kinds of machinery to industrial processes, and it is to be noted that American ingenuity contributed very largely to this increase of mechanical applications to industry. Up to 1849 the number of patents taken out in the United States never exceeded six hundred annually, but from 1849 to 1860 the number fell below one thousand only three times and reached 4819 in 1860. Some of the most important of

these American inventions during this period were those relating to the improvement of looms for figured fabrics, to cooking and heating stoves, to musical instruments, sewing machines, firearms, rubber goods, printing presses, boot and shoe machinery. It is to be further noted that the industrial revolution in the United States did not produce anything like so much suffering as the similar movements produced in England and some other European countries, for the simple reason that there was not a large number of artisans at that time in the United States to be turned out of employment by every new application of science to industry.

299. Foreign commerce. Although American merchants and shipowners encountered much sharper competition after the great continental war than before, and although much commercial capital had been diverted to manufactures since the Embargo Act, it seemed for a time as if the Treaty of Ghent would usher in a new era of commercial prosperity, as well as rapid industrial and agricultural development. When our ports were thrown open to trade after the War of 1812, our merchants and those of other countries found ready for shipment the rich harvests of two seasons, which had accumulated during the stoppage of our foreign trade by the war. Short crops abroad increased the demand for American grains so that they brought better prices in foreign markets. While our farmers were thus ready with a large surplus of agricultural produce for shipment, foreigners were equally glad to dispose of their manufactured goods in our markets, and the development of our resources had greatly increased our own purchasing power. Accordingly, our exports rose from $6,000,000 in 1814 to $81,000,000 in 1816, and continued to increase rapidly until 1818, when they reached $93,000,000. Unfortunately for our manufacturers, our imports increased even more rapidly after the close of the

war; they rose to $147,000,000 in 1816, a point never before reached in our import trade, and about $100,000,000 of this sum represented foreign manufactured goods. The passage of the tariff act of 1816 and other causes reduced our imports to $99,000,000 in 1817, but they rose again to $121,000,000 the next year. Our total foreign trade in 1818, therefore, amounted to $214,000,000, a sum not so great as that reached during the three years of exceptional commercial prosperity just preceding Napoleon's continental system, but one which indicated rapid recovery from the effects of the war. These high figures, however, were only temporary. During the next few years our trade declined very rapidly and our country was afflicted with almost unexampled hard times. The panic of 1819 was one important cause for this commercial decline, and the tariff of 1816 made further inroads upon our import trade. By 1821 both our imports and exports had reached the low level of $54,000,000. There was a partial recovery after that until 1825, when both our imports and exports rose to $90,000,000; but the panic of that year proved another serious hindrance to the commercial development of the country, and our foreign trade made no substantial gains for several years thereafter. In fact, our foreign commerce on the whole steadily declined for about twelve years after 1818; our total foreign trade for the decade ending in 1830 amounted to only $1,600,000,000, about $100,000,000 less than during the decade ending in 1810. This decline of American commerce was all the more striking because England, France, Holland, Belgium, and Russia were extending their foreign trade very rapidly during the same period. This decline in our commerce is explained not only by the panics of 1819 and 1825, the tariff of 1816, and the consequent growth of our manufactures, but also by the more active competition on the part of foreign

merchants and shipowners, the smaller European demand for American breadstuffs, the hostile tariff legislation of European nations, and the difficulties involved in getting products to and from the interior of our country.

The next decade opened a little brighter, and for several years there was a steady increase in our foreign trade. Our exports rose from $71,000,000 in 1830 to $124,000,000 in 1836, our imports from $62,000,000 to $177,000,000, both of these figures being higher than we had ever reached before. This improvement was due to the rapid development of our means of communication and transportation, the growth of the West, the increased production of cotton, the larger European demand for American goods, the greater purchasing power of our people, more favorable commercial treaties with various nations, and several other circumstances. The whole country seemed again to be in the full tide of commercial prosperity when its progress was again checked by the panic of 1837, which inflicted serious injuries upon our trade and industries. By 1838 our foreign trade had fallen off one third from the high-water mark reached in 1836, and there was no great improvement until 1847. Then followed a period of unexampled commercial development lasting until the outbreak of the Civil War, except for the brief interruption during the panic of 1857. Many factors entered into the prosperity of this period, chief among which were (1) the rapid growth of territory and population; (2) the development of railroads, telegraphs, and steam navigation; (3) foreign wars, revolutions, and famines, which created a demand for our goods and furnished us many immigrants, who developed the country and enlarged our demand for foreign goods; (4) the discovery of gold in California; (5) the repeal of the British Corn Laws, which increased the English demand for American goods; (6) the Walker

Tariff of 1846, which greatly lowered the duties on imports; (7) the development of better banking facilities; and (8) the negotiation of commercial treaties.

300. American shipping, as compared with that of other nations, was not so exceptionally prosperous during the period between the War of 1812 and the Civil War as during the years 1790–1807. As already noted, about ninety per cent of the vessels engaged in our foreign trade in 1795 were American vessels, most of which were built at home. Our early mercantile marine had been developed rapidly by the exceptional opportunities afforded during the Napoleonic wars and by a system of governmental protection, which in various ways discriminated in favor of American-built and American-owned vessels. During the War of 1812 and the period of commercial restriction immediately preceding it, our shipping interests as well as our foreign commerce were injured considerably. Furthermore, after the restoration of peace in Europe, in 1815, we lost a part of the carrying trade of European countries. In 1840 our foreign trade employed no larger tonnage than in 1806, although our coasting trade employed ships with a tonnage of 1,176,000 tons. During the years 1817–1820 our navigation laws were made more severe against foreign ships. As it turned out, these laws did not materially help American shipbuilders, and they prevented Americans from purchasing foreign ships and entering them under the American registry. Consequently, American merchants frequently preferred to fly the British or German flag on the ships which carried their goods. Then, too, about 1830, England began to increase very rapidly the tonnage of her merchant marine, and this placed American shipping at a further disadvantage in the world's trade. In spite of these disadvantages, however, the tonnage of American vessels registered in foreign trade increased from 762,838 tons in 1840

to 2,496,894 tons in 1861. During the years 1840–1861, on the average about seventy per cent of our foreign commerce was still conducted in American vessels, while our ships had a large part of the world's carrying trade. American shipbuilders were unequaled in the manufacture of wooden sailing vessels, and their magnificent "clippers" were superior to all others. At the same time our coasting fleet had by 1861 increased its tonnage to 2,704,544 tons. Counting the tonnage of the vessels on our inland waters, our total merchant marine in 1861 was 5,539,813 tons, while that of England in the same year was only 4,500,000 tons. On the other hand, the last few years of the period we are studying witnessed the beginning of a serious decline in our shipping. While in 1856 about seventy-five per cent of our foreign commerce was still carried in American bottoms, the percentage had fallen to sixty-five per cent by 1861. One of the chief causes for this decline was the fact that the American shipbuilders did not accommodate themselves so quickly as the English builders to the changes from sailing to steam vessels and from wooden to iron and steel vessels. The American tariffs increased the difficulties of our shipbuilders in competing with the English builders, by raising the prices of iron, steel, hemp, and other ship materials. Unfortunately, the decline thus begun was accelerated by the Civil War. By 1865 only twenty-eight per cent of the vessels engaged in our foreign trade were American vessels, and the percentage decreased steadily during most of the remaining years of the nineteenth century, as we shall subsequently see.

Some of the most important factors entering into the development of American industries and commerce during the period between the War of 1812 and the Civil War deserve further consideration. We will first note those factors that were the most direct outgrowths of the War of 1812.

301. The new banking policy following the War of 1812. The first national bank, chartered in 1791 upon the recommendation of Hamilton, expired in 1811, and during the War of 1812 the country had been flooded with about $50,000,000 of state bank currency. In September, 1814, all the banks in the United States outside of New England were obliged to suspend specie payments. To make the situation worse, the United States Treasury was also in a very bad condition, chiefly because of the falling off of import duties, the revenue in 1814 being only $11,000,000. For a time, therefore, during and immediately following the war, there was widespread financial disaster which inevitably reacted seriously upon the business interests of the country. The need of a sounder banking system was thus revealed, and accordingly in 1816 a second national bank was chartered, which went into effect Jan. 1, 1817. At the same time the United States government imported $7,000,000 in specie, with which it was able to resume the payment of the interest on its bonds. The new bank and this importation of specie almost immediately gave an impulse to commerce, manufactures, and agriculture. This banking system remained in operation until it was suddenly and forcibly upset by Jackson's opposition to it. His "removal of the deposits," together with the "wildcat banking" that followed, was one of the causes of the panic of 1837, which produced such disastrous effects upon the business interests of the country for several years. Finally, in 1840, financial order was in a large measure restored by the establishment of the independent treasury; but the next year this was abolished by the Whigs, and it was not until 1846 that the subtreasury became a government fixture. After 1840 the state banking system, which took the place of the second national bank, gradually improved and became an important factor

in the rapid industrial and commercial growth of the country from that time until the Civil War.

302. The new tariff policy. As soon as peace was concluded in 1815 the country was again flooded with British manufactures, and northern manufacturers soon saw their markets for cotton, woolens, iron, and hardware slipping away from them. As they could not readily return to commercial pursuits on account of the increased competition of other maritime nations, now that the general European war was over, and as they could not transfer the capital invested in manufacturing plants to other enterprises without great sacrifice, they now appealed to Congress for a distinctively protective tariff which would secure the home market for their goods. The immediate result of these appeals was the passage of the tariff act of 1816, which was pushed through by such leaders as Henry Clay and John C. Calhoun, although opposed by Daniel Webster, who represented the shipping interests still dominating Massachusetts, and by John Randolph in behalf of the slaveholders. Even Jefferson now declared that the farmers and manufacturers must stand together. The new tariff imposed a duty of about twenty-five per cent on imported cotton and woolen goods, and provided that no duty on such goods should be less than $6\frac{1}{4}$ cents per yard; it also fixed specific duties on imported iron and salt. The minimum rate of $6\frac{1}{4}$ cents per yard really made the duty on coarse fabrics worn by slaves much more than twenty-five per cent, and the slaveholders of the South consequently considered the tariff of 1816 a great burden. On the other hand, the northern manufacturers, after having once tasted the fruits of protection, did not long remain content even with so favorable a tariff as that of 1816. They soon began to clamor for more and more protection, which they secured in subsequent revisions of the act of

1816 and in the new tariffs of 1824, 1828, and 1832. The general average of duties in the tariff of 1824 was thirty-seven per cent; in the tariff of 1828, about forty-four per cent. In securing these tariffs the manufacturers of New England and the Middle Atlantic states were aided by the representatives of the western states, who were won over by the "home market" argument and by the duties on hemp and wool introduced into these tariffs to please the western farmers. In the tariff of 1828 the duty on hemp was raised from $35 to $60 per ton, and the duty on coarse wool was more than doubled; the duties on raw material as a whole almost neutralized the protection afforded the manufacturers. In fact, this tariff, as John Randolph sarcastically remarked, "referred to manufactures of no sort or kind except the manufacture of a President of the United States." In other words, this Tariff of Abominations, as it was called, was the result of a political deal between certain southern leaders, who wanted to insert clauses which would defeat the bill while seeming to favor it, and the northern Jackson men, who favored protection in order to secure the election of Jackson. Contrary to the expectations of these southern leaders, the representatives of the manufacturing states voted for the bill, bad as it was, because they preferred something to nothing, and hoped soon to be able to remove some of the "abominations." Four years later, in the tariff of 1832, Congress practically returned to the rates of 1824 and removed many of the objectionable features of the act of 1828. But this was not enough to suit the leaders of the South, who by this time apparently wanted a complete abrogation of the policy of protection. South Carolina, therefore, feeling that the tariff of 1832 confirmed the national government in the policy of high protection, issued her celebrated Nullification Ordinance, and this

gave rise, in March, 1833, to Clay's Compromise Tariff, which provided for a return to the rates of the tariff of 1816 by a gradual scaling down of the rate during a period of ten years. In 1842, however, when the Compromise Tariff had nearly run its course of scaling down the rate, the Whigs, under the leadership of Clay, carried another tariff which considerably increased the duties. Four years later the Democrats passed the Walker Tariff (1846), which has erroneously been called a "free-trade" tariff, for it reduced the rates of 1842 only about one sixth. This Walker Tariff remained in force for eleven years, when the tariff of 1857 reduced the duties to a lower point than they had reached since the tariff of 1816. On the whole, therefore, it may be said that the War of 1812 set in motion a new tariff policy, which, though subject to some fluctuations, remained distinctively protective almost to the time of the Civil War. Then, in 1861 the Morrill Tariff, and in 1862 and 1864 the "war tariffs," pushed the rates up to the highest possible point. As the effects of these tariffs were not fully felt until the next period, we will reserve their consideration for a subsequent chapter.

303. Improvements in the means of communication and transportation. Another important lesson taught by the War of 1812 was the necessity of developing better means of communication and transportation. One of the chief difficulties in conducting the war had been the lack of good means for transporting troops and army supplies, and the question of good roads and other means of transportation now began to attract greater attention than ever. Furthermore, the sentiment, already started, in favor of national appropriations for roads, canals, and other internal improvements, now became much stronger as a result of the expanding influences of the war. Work on the Cumberland Road was continued, and by 1820 the road

was completed to Wheeling; then an extension through Columbus, Indianapolis, and Vandalia to Jefferson City, Missouri, was demanded. Work on this extension was begun at various places and carried on by congressional appropriations; sixty distinct appropriations, amounting to nearly $7,000,000, were made between 1806 and 1838. After 1840, however, a strong opposition was developed to federal appropriations for such enterprises, and by 1856 Congress had surrendered the various sections of the Cumberland Road to the respective states through which they extended for them to complete. This Cumberland Road is a typical instance of the method of building turnpikes in various parts of the country during the first half of the nineteenth century. Some short roads were built by private enterprise; others altogether by state aid; others, like the Cumberland Road, by combined aid from the national and state governments. Some idea of the influence of these roads upon the industrial and commercial development of the country may be formed from the following statement made in 1824 concerning the Cumberland Road by Congressman McLean: "Hundreds of families are seen migrating to the West with ease and comfort. Drovers from the West with their cattle of almost every description are seen passing eastward, seeking a market on this side of the mountains. Indeed, this thoroughfare may be compared to a great street through some populous city — travelers on foot, on horseback, and in carriages are seen mingling on its paved surface."

The era of canal building in the United States really began soon after the War of 1812. The most important and ambitious canal enterprise executed during this era was the famous Erie Canal, a plan for which had been suggested by several early statesmen and frequently considered in Congress during its early history. Finally, the

state of New York, under the leadership of De Witt Clinton, took up the work and completed it in 1825. Within a year the freight on grain from Buffalo to Albany fell from $100 to $15 per ton, and the rates from the Ohio valley to the seaboard were about one tenth as high as before; thus were the rich agricultural products of that region brought within reach of the world's markets. Other canals were built between Lake Erie and the Ohio River, between Lake Champlain and the Hudson, between the coal regions of northeastern Pennsylvania and the seacoast, between the Chesapeake and the Delaware River. Some short canals were constructed in various parts of the Appalachians, connecting the water courses on opposite sides of that range, and for a time crossing the mountains in canal boats was a favorite mode of emigration. Many other canals were projected in various parts of the country; some were carried through, but more were abandoned or fell into the hands of railroads. Most of the canals actually completed played an important part in the early development of industry and commerce before railroads were numerous enough to do the same work better and more quickly. In many cases the canals were not able to compete with railroads for a very long time; some canals, however, notably the Erie, were successful competitors and continued to exert an important and beneficial influence upon industry and commerce by tending permanently to lower freight charges. It is to be hoped that many other canals may come to be used more in connection with existing railroads and thus facilitate still further the nation's means of transportation. It would, furthermore, be very desirable to deepen the Erie and some other canals so as to accommodate larger vessels.

While turnpikes, "planks," and canals were being constructed, steam navigation was being developed quite

rapidly on our lakes and rivers and along the coast. In 1818 the *Walk-in-the-Water* started from Black Rock on Lake Erie and eventually reached Mackinac; by 1830 a daily line was running from Buffalo to Detroit; in 1832 the first steamboat visited Chicago. In 1823 Congress passed the first river and harbor bill, and soon entered quite actively into the work of improving western waters and harbors. Especially noteworthy was the fitting of the Mississippi and Ohio for steam navigation. It was not long, therefore, before traffic on the western rivers and the Great Lakes assumed large proportions. Hon. Levi Woodbury, after making a trip down the Mississippi in 1833, said, "At every village we find from ten to twenty flat-bottom boats, which, besides corn in the ear, pork, bacon, flour, whisky, cattle, and fowls, have a great assortment of notions from Cincinnati and elsewhere." Seven years later nearly forty-six hundred vessels passed Cairo, Illinois. By 1856 the steam tonnage of the Mississippi and her tributaries equaled the total steam tonnage of Great Britain.

The next stage in the development of means of transportation was the building of railroads. In 1828 the first spike was driven on the Baltimore and Ohio Railroad; by 1830 fifteen miles of the road were completed; in 1832 it was extended fifty-eight miles farther west to the "Point of Rocks." About the same time railroads were built from Charleston to Columbia, South Carolina, from Boston to Albany, from Albany to Saratoga, from Richmond to Chesterfield, Virginia. By 1835 there were 200 miles of railroad in operation in Pennsylvania, 137 miles in South Carolina, 130 miles in Virginia, and 100 each in Massachusetts, New York, and New Jersey, — total 667 miles. In 1840 the total number of miles in operation in the United States was 2755, practically all of which were still

in the Atlantic states. During the next decade railroads were extended very rapidly in New England, that section having 2600 miles of track in 1850. The road from Boston to Albany was completed during this decade, and Boston was thus directly connected with the West, by way of the Erie Canal. Railroads were also pushed into western New York, Pennsylvania, and Maryland, and roads were also constructed in the Mississippi valley. By 1850 the total railroad mileage of the country had reached 8571 miles, but there was not yet any railroad running from the seaboard through to the West. The most notable progress was made during the decade just preceding the Civil War, the total mileage reaching 28,919 miles in 1860. Railroads were pushed westward from the Middle Atlantic states, and remarkable progress was also made in the South. The railroad expansion, however, was greatest and most rapid in the Mississippi valley. St. Louis and Chicago were connected with the seaboard, and Ohio, Indiana, Illinois, southern Michigan, and Wisconsin were covered with a network of railroads.

While the rapid growth of railroads aided very greatly the industrial and commercial development of the country, it must not be forgotten that it also produced a mania for speculation, especially during the years 1836–1838. "Cities were staked out in the wilderness, town lots without any definite location brought extravagant prices, and companies were exploited for the most chimerical purposes. . . . Paper roads crossed the country in all directions, and 'terminal cities' were laid out in magnificent proportions." State legislatures caught the fever. Illinois, for example, planned 1300 miles of state railroads to cost over $1,000,000,000; Ohio, Indiana, Michigan, and Missouri took similar steps, and heavy debts were contracted by these and other states for railroads, canals, and

river and harbor improvements, most of which debts were unfortunately repudiated a few years after they were incurred. The United States government also, between 1830 and 1860, granted large tracts of public lands in Illinois, Michigan, Wisconsin, Iowa, Arkansas, Missouri, Alabama, Mississippi, Louisiana, and Florida, to aid similar enterprises, few of which were ever executed.

Ocean steam navigation was also developed quite rapidly during this period, especially the latter part of it. In 1819 the *Savannah*, an American sailing vessel with auxiliary steam power, crossed the Atlantic, and in 1838 (see p. 257), the first regular line of steamers was established between the United States and Europe. Before that, steamboats had been used quite extensively in the coasting trade, and after that time trans-oceanic steam navigation was rapidly developed.

The means of communication were also improved very greatly during this period. By 1860 there were about one hundred and eighty-six thousand miles of postal roads in operation. But the most significant and important improvement in the means of communication was the rapid introduction of the electric telegraph during the latter part of the period. At first, lines were extended up and down the Atlantic coast; then in 1846 a line was extended to Pittsburg. It was some time, however, before long-distance telegraphing was perfected to any extent. As late as 1849 the *New York Tribune*, in reporting President Taylor's inaugural address, was obliged to stop in the middle of a sentence and added in a paragraph the next day, "We shall issue the remainder of this address as soon as received." By 1858 the telegraph was extended from Kansas City to Leavenworth. In the same year an electric cable was laid under the Atlantic, but it was not successful.

304. The old Santa Fé trail. In connection with the development of the means of communication and transportation we should note the unique caravan trade that was extended across the Great American Desert during this period. In 1806 Lieutenant Pike had been directed by General Wilkinson to explore westward to the headwaters of the Arkansas and Red rivers. He went to the Arkansas, ascended to its headwaters, and proceeded thence to the Rio Grande at a point just a little above Santa Fé. Believing that he was within the territory of the United States he built a small fort, but he was soon captured by Spaniards and sent back to the United States by way of Mexico. Pike's expedition soon led to the organization of a caravan trade through the desert, which was quite similar to the caravan trading in Asia and Africa. The first actual trading expedition from the United States to Santa Fé was in 1812, but the traders who went out at that time were imprisoned for nine years. In 1821 Bicknell and certain other traders went from Franklin, Missouri, to Santa Fé, and returned with great profits. Up to that time the goods consumed in New Mexico had come from Vera Cruz, and Bicknell now quickly seized this commercial opportunity. Quite an extensive trade was soon developed. During the years 1829 and 1830 the United States government furnished a military escort, but after that traders organized and protected themselves. Each caravan was composed of about one hundred men and forty or fifty wagons. During the first fifteen years the yearly trade amounted to about $100,000. All sorts of goods were taken out and buffalo robes, furs, skins, wool, gold, and silver were brought back. St. Louis was the real eastern terminus, but the caravans started at first from Franklin, Missouri, then from Independence, and finally from Kansas City (Westport Landing). The route as finally developed was by steamer from

St. Louis to Kansas City and by wagon thence to Santa Fé, a distance of eight hundred miles. For a short time during the Civil War the starting point was changed to Leavenworth, and after the war was again changed to Kansas City. The last caravan train left Kansas City in 1866, and then the eastern starting point gradually moved westward, following the progress of railroads. About fourteen years later a railroad reached Santa Fé, and thus was ended this unique form of trade that had existed for over a half century.

305. Commercial treaties. As we have not yet specifically considered the commercial treaties negotiated by the United States during the previous periods, let us at this point briefly summarize them in connection with the most important ones negotiated during the period we are now considering.

I. *Commercial treaties with Great Britain (1789–1866).* The Jay Treaty of 1794 was notoriously unsatisfactory to the American people, and it really was not fair or equitable, for the English merchants were guaranteed greater commercial privileges than the Americans. But although the commercial privileges were not really reciprocal, and although the treaty was unsatisfactory in other respects, it was undoubtedly the best that could be secured at the time. The Treaty of Ghent closing the War of 1812 was also unsatisfactory in many ways. It left many important commercial questions to be decided by future negotiations. In 1815 such negotiations were begun, and a treaty in that year opened a small portion of the British West Indian trade to American vessels and contained an important provision designed to secure the abolition of discriminating duties and charges in either country against the vessels and goods of the other. This arrangement was limited to four years, but was renewed for ten years longer in the

treaty of 1818. But England pursued pretty much the same colonial policy after the signing of these treaties as before, and American shipping was almost completely shut out of West Indian ports. Congress, therefore, in order to gain admission to these ports, retaliated by imposing an extra tonnage duty of two dollars per ton upon foreign vessels and an additional duty of ten per cent upon merchandise imported in foreign vessels. Another act of Congress closed the ports of the United States against British vessels coming from any colonial port of Great Britain which was closed to American vessels. Congress also prohibited the importation of West Indian products by way of Nova Scotia and Canada. These laws, passed during the years 1817–1820, instead of serving their intended purpose, were undoubtedly largely responsible for the failure of John Quincy Adams to secure concessions from Great Britain. During his administration the British West Indian ports were closed altogether to American vessels. In 1827, however, Canning, the British foreign minister, died and was succeeded by the more conciliatory Lord Aberdeen; so Jackson was more fortunate than Adams, and in 1830 Great Britain agreed to open the West Indian ports to the commerce of the United States. At the same time Congress aided Jackson in securing this concession by removing many restrictions upon British commerce with the United States. The great advantage of this treaty is shown by the fact that our imports from the British West Indies increased from $168,579 in 1830 to $1,048,165 in 1840, while our exports to those islands jumped from $1901 to $2,965,585 during the same decade. The Reciprocity Treaty with Great Britain, negotiated in 1854, will be considered in the next paragraph.

II. *Commercial treaties with France (1789–1866).* During the earlier years of our history as an independent

nation our relations with France became strained, as we have already seen, and in 1798 the treaty of 1778 was abrogated. Two years later Napoleon restored amicable relations and concluded a treaty of commerce and navigation. Articles VI and XI of this treaty placed the commerce of the two countries upon a basis of reciprocity as far as duties and tonnage dues were concerned. Our commercial relations with France, however, again became strained when Napoleon issued his Berlin and Milan decrees, although Napoleon did not want war with the United States, but rather desired to force this country into war with Great Britain. A new treaty in 1822 placed the shipping interests of the two countries upon a common basis, and the treaty of 1831 only slightly modified that of 1822. These treaties remained the basis of our commercial relations with France until 1892.

III. *Commercial treaties with Spain (1789–1866).* Spain until quite recently adhered to her policy of excluding the products of other countries from her ports and those of her colonies, when not carried in Spanish vessels. A limited commerce had developed between Spain and the American colonies long before they won their independence, although it was largely of a contraband character. After the American Revolution the United States developed a more extensive trade with Spain, but it was seriously hindered by the highly protective duties imposed by the latter country. None of our early treaties with Spain (1795, 1819, or 1834) established rules for commercial intercourse between the two countries. The American merchants were very anxious in the early history of our country to gain admission to the ports of Cuba and Porto Rico, but it was not until 1809 that Spain allowed Cuba to trade with foreign countries. After that date the trade between Cuba and the United States developed so rapidly that Spain in 1832 imposed

discriminating duties upon the vessels of the United States trading with Cuban and Porto Rican ports. It has been estimated that under this Spanish law American merchants paid $2,000,000 extra tonnage dues in the single port of Havana. The United States finally retaliated, and for a time commercial relations were seriously checked. In 1852 Spain allowed American vessels to enter her West Indian ports, but the discriminating port and tonnage duties, which she still maintained (in some cases as high as one hundred per cent), were almost as bad for American shipping as complete exclusion. The United States government vainly continued for many years to urge a policy of commercial reciprocity upon the Spanish government; but it was not until 1884, 1886, and 1887 that a series of agreements removed all discriminating duties, and it was still later before a genuine commercial treaty was negotiated between the two countries.

IV. *Commercial treaties with other countries (1789–1866).* The legal basis of our commercial relations with Prussia was quite satisfactory almost from the first. The treaty of 1785 provided reciprocal duties and tonnage dues, and was regarded as a model treaty of its kind. This treaty was renewed in 1799, but expired in 1815. In 1828 a new treaty was made which guaranteed "reciprocal liberty of commerce" and declared that there should be no discriminating duties on the vessels of either country. Similar treaties were signed with Hamburg, Bremen, Lübeck, Sweden and Norway, in 1827; with Austria in 1829; with Russia in 1832; with Portugal in 1840; with Holland in 1839 and 1852; with Belgium in 1845, 1858, and 1875; with Switzerland in 1855; with Italy in 1871. Denmark agreed upon partial reciprocity in 1797, and in 1826 made a treaty which was somewhat more favorable to the United States, but this latter treaty was abrogated by our country

in 1856. The next year, when the question of the Danish Sound dues was settled, the treaty of 1826 again became operative. In 1833 a somewhat favorable commercial treaty was negotiated with Siam. Trade with China was facilitated by the treaties of 1844 and 1858; with Japan in 1854.

306. Commercial relations with Mexico and with Central American and South American states. During the years 1821–1826 the commerce of the United States with these countries increased quite rapidly. In 1821 they furnished only three per cent of the total imports of the United States, and took only four per cent of our exports; by 1826 these percentages rose to thirteen and eighteen respectively. During this period about ninety per cent of our trade with those countries was conducted in American vessels. When the question of sending delegates to the Panama Congress of 1826 was under discussion in Congress, President Adams sent a message to that body recommending the proffer to South American republics of disinterested good will and reciprocity. He also recommended the making of treaties with those countries similar to the Prussian treaty of 1785. As is well known, the delegates from the United States arrived too late to take any part in the Panama Congress, and nothing was done by that body regarding commercial reciprocity. Thus the United States threw away a great opportunity, and as a result the commerce of the South American republics, which might have been largely secured for American merchants, passed into other and unfriendly hands. It was not long, however, before commercial treaties were signed with some of these southern states: Colombia, 1824; Argentine Confederation, 1827; Chile, 1832; Peru, Bolivia, and Venezuela, 1836; Ecuador, 1839. After the Mexican War another series of similar treaties was concluded: New Granada, 1846; Mexico, 1848; Guatemala, 1849; San Salvador, 1850; Costa

Rica and Peru, 1851. But these treaties simply insured freedom of commerce and navigation without any special privileges. Unfortunately, little was done during this period towards securing more complete commercial reciprocity between these countries and the United States.

307. The beginning of reciprocity. None of the earlier treaties to which we have thus far referred were reciprocity treaties in the modern sense of the term, that is, they did not make any exceptional concessions to the goods or ships of the United States which other nations having treaty relations did not secure. In 1844, however, Mr. Wharton, our minister to Germany, negotiated a treaty with the German Zollverein which was much more like the modern reciprocity treaty. In these negotiations the United States agreed to favor imports from Germany by reduced duties, and Germany agreed to favor American lard, rice, and cotton. This form of treaty being a novelty at the time, the Senate rejected it on the ground that Congress, and not the Executive Department, was the proper body to regulate commerce. Ten years later the Senate took a different view and agreed to the famous Reciprocity Treaty with Great Britain (1854), by which a long list of articles, if grown or produced in either country, were to be admitted into the other free of duty. This treaty led to a rapid increase of trade between Canada and the United States. The imports into the United States from Canada rose from $6,700,000 in 1851 to $22,300,000 in 1856; the exports from the United States into Canada increased from $12,000,000 to $29,000,000 during the same period. As our imports from Canada increased much more rapidly under this treaty than our exports to Canada, our people concluded that they were the losers, and in 1866 terminated the treaty. Thus after only a very brief trial the policy of commercial reciprocity was dropped for a time, to be resumed later in the next period.

308. The increase of territory and population was undoubtedly one of the principal causes of the rapid development of our industries and commerce during this period. Louisiana had been acquired during the previous period, but it had not been developed to any extent. Between the War of 1812 and the Civil War, Florida (1819), Texas (1845), Oregon (1846), the Mexican Cession (1848), and the Gadsden Purchase (1853) were acquired. Thus the area of the United States was increased from 849,145 square miles in 1789 to 2,933,588 square miles at the outbreak of the Civil War. Furthermore, the development of these territories went hand in hand with their acquisition. Even before we won our independence, as we have seen, Americans had begun to cross the Alleghanies into the Ohio and Mississippi valleys. The tide of emigration rose higher after the American Revolution, and the work of winning the soil from the Indians and the straggling French settlers was seriously begun. The development of turnpikes, canals, river and lake navigation, and later of railroads, greatly aided the growth of the new territories. The extent of the development in these new territories may be estimated from the growth of their population. The total population of the Ohio and Mississippi valleys in 1810 was only 1,078,316. By 1840 the population of Ohio, Indiana, Illinois, Michigan, Wisconsin, Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Missouri, Arkansas, and Iowa was 6,374,972. By 1860 the population of the same states had reached 13,948,252, while the population of other new states and territories in the West was as follows: Texas, 604,215; California, 379,994; Minnesota, 172,023; Kansas, 107,206; Oregon, 52,465; Colorado, 34,277; Nebraska, 28,841; Nevada, 6857. Thus by the close of the period we are considering there had grown up a new nation in the West, with its splendid addition of resources and products to those of the older nation in the

East, and with its many wants which had to be fed by our manufactures and by our foreign and domestic commerce. At the same time the population of the East was also increasing, though not relatively so fast as that of the West. The total population of the country increased from 3,929,214 in 1790 to 7,239,881 in 1810, to 17,069,453 in 1840, and to 31,443,321 in 1860. No wonder that with such an increase of territory and population our industries and commerce developed very rapidly!

309. Foreign wars, revolutions, and famines also played an important part in the industrial and commercial development of this period. They not only created strong demands, which were supplied by American exports, but they helped swell the tide of emigration from Europe to this country. During the years 1790–1820 less than two hundred and fifty thousand immigrants came to this country. On the other hand, there was a steady flow of foreigners in this direction during the years 1820–1860. From 1830 to 1860 there was unparalleled distress and disorder in Europe; revolution after revolution and famine after famine occurred. From all parts of northern and western Europe emigrants came to this country. But it was not until the European disturbances and famines in the "forties" that the flow became a torrent. The famine of 1845 drove the Irish here in crowds; the great scarcity produced by the bad harvests throughout most of Europe in 1847 and 1848 extended this tendency to the continent; the revolutions of 1848 and disturbances at other times accelerated the tendency. The discovery of gold in California, the prospect of making fortunes rapidly in this country, the perfect religious toleration prevailing here, the benefits of free institutions, the peace and tranquillity of this country, the absolute liberty and political equality which every citizen enjoyed here, the similarity of the American climate to

that of Europe, — all these were magnets which supplemented the forces driving people away from the Old World. As a result of these combined forces the United States was enriched by about 2,400,000 immigrants during the years 1820–1850, and by about 2,500,000 during the single decade 1850–1860. The great majority of these immigrants became farmers, and helped to an enormous extent to develop the agricultural resources of the country. The increased agricultural production furnished the principal contingent of the exports which this country was able to hurl into Europe. At the same time this army of immigrants swelled the demand in this country for manufactured goods, and thus furnished not only a larger home market for our increasing manufactures, but also a market for foreign manufactures. Consequently, American manufactures were expanded, and exchanges between Europe and America were multiplied by every fresh exodus from the Old World. Furthermore, these hosts of immigrants furnished no small amount of profit to the various maritime and railroad transportation companies that brought them here.

310. The discovery of gold in California. Every one knows how rapidly the news of this discovery spread to almost every part of the world, and produced everywhere a contagious desire for migrating to this new eldorado. Americans and Mexicans went from southern California and Mexico, almost depopulating San José and Monterey; soldiers and cooks deserted from the California forts; thousands of Chinese were brought over from the Sandwich Islands, twenty-seven vessels leaving Honolulu within four months of the first news of the discovery; Americans quickly crowded down from Oregon, and soon from all the states and territories of the Union; there was hardly any country in the Old World that was not "afflicted" with


180
160
140
120
100
80
60
40
20
Grant Land
80
ARCTIC OCEAN
Pr. Patrick I.
Parry Islands
North Devon
Banks Land
Victoria Land
Baffin Land
ALASKA
Arctic Circle
60
DOMINION OF CANADA
GREAT BRITAIN AND IRELAND
Vancouver I.
Vancouver
Quebec
Montreal
NEWFOUNDLAND
St. Johns
Halifax
Chicago
40
San Francisco
UNITED STATES
New York
ATLANTIC
Bermuda Is.
OCEAN
Midway Is.
New Orleans
Bahama Is.
Tropic of Cancer
20
Hawaii
Puerto Rico
PACIFIC OCEAN
Barbados
Trinidad
BRITISH GUIANA
GAMBIA
SIERRA LEONE
Howland I.
Baker I.
Fanning I.
0
Phoenix Is.
Equator
Union Group
Samoan Is.
Ascension
Tonga Is.
St. Helena
20
Tropic of Capricorn
Kermadec Is.
40
Chatham I.
Falkland Is.
South Georgia
60
ANTARCTIC OCEAN
South Shetlands
Graham Land
180
160
140
120
100 Longitude 80 West 60 from 40 Greenwich 20


ARCTIC OCEAN
Arctic Circle
GERMANY
Malta
Cyprus
Port Said
Bahrein
Kuria Muria Is.
Aden
Socotra I.
Maldive Is.
Seychelles Is.
Zanzibar
Amirante Is.
Mauritius Is.
Port Elizabeth
Tropic of Capricorn
INDIAN OCEAN
Equator
Calcutta
Bombay
Ceylon
Andaman Is.
Nicobar Is.
Malacca
Singapore
Weihai-wei
Kiao-chau
Shanghai
Hongkong
Philippine Islands
Manila
Pelew Is.
Caroline Islands
Marcus I.
Tropic of Cancer
Ladrone Is.
Wake I.
Guam
Marshall Is.
Bismarck Archipelago
Solomon Is.
Fiji Is.
Santa Cruz Is.
New Hebrides
AUSTRALIA
Perth
Adelaide
Melbourne
Sydney
Brisbane
Norfolk I.
Tasmania I.
Hobart
Auckland
New Zealand
Wellington
Auckland Is.
PACIFIC OCEAN
ANTARCTIC OCEAN
TERRITORIES OF THE
THREE LEADING COMMERCIAL NATIONS, 1903
GREAT BRITAIN
UNITED STATES
GERMANY
0 1000 2000 3000 4000 5000
Scale of Miles along the Equator
20 Longitude 40 East 60 from 80 Greenwich 100 120 140 160 180

the "California fever." By the end of 1848 there were six thousand men in the gold fields; one year later over seventy-seven thousand had arrived by the various land and sea routes. "No such exodus had taken place within recorded history." From the industrial and commercial standpoint this great discovery is chiefly significant because (1) it led to the rapid settlement of a new nation in the Far West, which soon developed sufficient wants to prove an important feeder for commerce and an important outlet for agricultural and manufactured products; (2) it proved a magnet which, directly and indirectly, drew many thousands of immigrants to other parts of this country, thus producing additional wants to be fed by our foreign and domestic trade; (3) it was a powerful factor in the creation of the first transcontinental railroad; (4) it quickened commerce and industry by providing an ample supply of specie, thus raising the general level of prices; (5) it increased very rapidly the wealth and purchasing power of the American people; (6) it furnished a very lucrative article for our export trade; (7) it aided very greatly the various transportation companies by furnishing them passengers.

311. The panics of 1837 and 1857. In tracing the commercial development of the country from 1815 to 1860 we have already alluded to several commercial and financial panics, the most important of which occurred in 1837 and 1857. Both of these panics were preceded by a period of exceptional prosperity, and the speculative trading carried on during those periods was one of the most important causes of the crash and hard times that followed. In the case of the panic of 1837 there had been an extensive speculation in western lands, which took volumes of paper currency to the West; in 1837 this currency was thrown back upon the East for redemption, where there was

already an excess of this kind of money. At the same time our imports increased from $62,000,000 in 1830 to $177,000,000 in 1836, much faster than our exports, and considerable amounts of specie had been sent abroad to meet balances. Furthermore, the modification of the tariff of 1833, and the change of the place of deposit of the funds of the national government in the same year, had brought about much business embarrassment. This embarrassment was greatly increased by the specie circular of July 11, 1836, directing land agents to take nothing but specie in payment for public lands. The act providing for a distribution of the surplus in the treasury also helped bring on a panic by stimulating the already excessive speculative tendencies of the people. It was only natural, therefore, that the country should suffer a serious financial and commercial reaction, from which it did not recover for several years. The panic of 1857 was preceded by a longer period of even greater prosperity than in the case of the panic of 1837. The underlying causes were much the same, — too much speculation, too rapid railroad building, too much capital invested in mills and factories, too great an expansion of bank credit followed by a sudden contraction. This panic was precipitated much more suddenly than the previous one. On the morning of Aug. 24, 1857, scarcely any one, even among the most watchful and conservative financiers, had any idea of impending stringency. Consequently, the failure of the Ohio Life Insurance and Trust Company on that date was a complete surprise, and was correspondingly ominous. Soon followed in rapid succession the failures of numerous railroad, insurance, banking, and mercantile companies. In October the New York City banks suspended specie payments, and other banks were glad to follow. Then came a hard winter. About half the furnaces and forges

of the country were closed; factories and machine shops shut down; shipbuilding collapsed, and the ocean carrying trade for a time was almost annihilated. Fortunately, however, the country recovered much more quickly than in 1837. Our commerce felt the effects of this panic for scarcely more than a year, and then began to recover quickly; by 1860 our foreign trade was much greater than ever before.

312. The industrial effects of slavery. Unfortunately, the economic progress during this period was not evenly distributed over the whole country. The South had not felt the many strong impulses that had been throbbing through all the industrial veins of the North; or perhaps it would be more strictly correct to say that she had felt them, but had been unable to act upon them. As Woodrow Wilson tersely says: "They [the Southerners] planned railways to the Pacific; they invited the coöperation of the western states in devising means for linking the two sections industrially together; they hoped to be able to run upon an equality with the other sections of the country in the race for industrial wealth. But in all that they said there was an undertone of disappointment and of apprehension. They wished to take part, but could not, in what was going forward in the rest of the country."[1] The reason for this industrial helplessness of the South was the baneful institution of slavery. Some writers have maintained that the immediate industrial effects of slavery were advantageous to the South, enabling the early settlers in that section to subjugate the eastern portion of the southern wilderness more rapidly than they could have done without servile negro labor. This view is probably correct, but, on the other hand, there can be no doubt that the ultimate effects of slavery upon southern industry were

[1] Division and Reunion, p. 164.

very injurious. Slave labor was for the most part unprofitable and wasteful, because the slave worked much more slowly, stupidly, and carelessly than the free laborer. This reacted upon the whites themselves, and made them lazy, unenterprising, and scornful of work. Slave labor prevented the South from profiting to any extent from foreign immigration. Slavery evidently limited and checked the natural growth of white population in various ways, as well as the growth by immigration; the population of the South, therefore, increased much more slowly than did that of the North; the total population of the slave states in 1860 was only 12,315,374, of which number 3,953,696 were slaves, while the population of the free states was 19,083,927. But perhaps the most important industrial injury inflicted upon the South by slavery was the fact that it imposed numerous obstacles in the way of developing manufactures and mining in that section. Slavery made the Southerner oblivious to the unprofitable nature of his wasteful system of agriculture and to the exhaustless stores of mineral and forest wealth in his section, its splendid water powers, and its opportunities for developing wealth more rapidly and safely by combining other industries with agriculture. It was not until the scales were removed from his eyes by the terrible Civil War that the Southerner was really prepared for industrial progress.

313. The Civil War came like a thunderclap to American industry and commerce. For a time everything was unhinged, and it seemed as if all economic progress would be stopped. This was wholly true of the South during the war, but later events showed that the war was to be a great industrial blessing to this section, although it necessarily entailed much suffering and loss for a time. In the North, on the other hand, while the war was a great burden, drained the

labor supply, and deranged business and finance, it was soon noticeable, before the war had lasted very long, that it also served as a great stimulus both to agricultural and industrial development. The prices of agricultural and other products suddenly rose very high, the export of grains therefore increased rapidly, and many great manufactures were developed under the combined encouragement of high prices and the new tariffs which the war brought. Nevertheless, in this section also there was great suffering; the burdens of the direct and indirect taxes, of the depreciated paper money, and of the high prices fell chiefly upon those who were least able to bear them. In Europe also much suffering was caused, especially by the stoppage of the American cotton exports. The war cost the United States as a whole about $10,000,000,000 and left a public debt of over $3,000,000,000 (counting that of the states and the nation), but the country quickly recovered, and it should never be forgotten that the Civil War, terrible as it was, was the beginning of such an industrial awakening as the world has seldom seen; in many ways it fitted the United States to take her true place among the great industrial and commercial nations of the earth.

For references, see Part V, chap. xxix.

Part V—The Age of Electricity

CHAPTER XXVIII

INTRODUCTION

314. Importance of electricity in the new age. We now enter upon the golden age of commerce, an age ushered in by the laying of the great Atlantic submarine cable in 1866, and also marked off from the preceding age by several other epochal events occurring about the same time. In choosing this date, 1866, as the beginning of the new age, we do not wish to give the impression that there are any hard and fast lines drawn in economic any more than in political development, for industrial and commercial progress as well as political institutions are the result of gradual evolution rather than sudden change. Nevertheless, it is plainly recognizable that the commerce and industry of to-day is radically different in many ways from that of forty years ago, and if we are to study intelligently the chief characteristics of the present age, we can do so more conveniently by drawing some arbitrary line of demarcation between this and the preceding age. We have therefore chosen the laying of the Atlantic cable because we think it marks the contrast between this and the preceding age more clearly than any other single event, and because certain other decisive events occurred almost at the same time, which helped to make the contrast more striking. We have also chosen the title "The

Age of Electricity" for the present age because we believe that it has been marked economically by the many and wonderful applications of electricity more than by any other one new characteristic. How our modern industry and commerce would dwindle without our telegraphs, cables, telephones, and the many other applications of electricity to our practical everyday life! We would not minimize the importance of steam in the present age, for it is still a very necessary and vital force in the world, but we would emphasize the fact that electricity is already rivaling in importance the power of steam in industry and the "new commerce" which has grown up during the new age, and that electricity is constantly becoming more and more important on account of its almost daily application to new industrial processes, and is even beginning to rival steam as a motive power. Strictly speaking, it is perhaps more correct to say that steam and electricity have been supplemental forces during the present age, but it still remains true that electricity is the most important new force in the commerce and industry of to-day. Just as steam during the latter part of the eighteenth and the first part of the nineteenth century caused a great industrial revolution in every country which felt its power, so electricity and steam in the present age have gone hand in hand in producing gigantic results in industry, commerce, and all the elements of civilization, of which no one would have dreamed forty years ago.

315. Three other great events occurring about the same time as the laying of the Atlantic cable helped to mark the beginning of the Age of Electricity. These were the close of the Civil War in the United States, the Franco-Prussian War, and the completion of the Suez Canal.

The close of the Civil War in the United States at once relieved the cotton famine in Europe, and in other ways

stimulated the industry and commerce of the whole world. Since that war this country has become more and more a great force for the leading European nations to reckon with in their industrial problems, and stands to-day among the foremost competitors in the world's commerce.

The Franco-Prussian War likewise brought to the front another important competitor for commercial supremacy by creating the great German empire. This new nation under the inspiration of victory has engaged enthusiastically and vigorously in the development of her agriculture, mining, manufactures, and trade. The entry of the old Hanseatic cities, Hamburg and Bremen, into the German Zollverein, about the same time, gave an additional impulse to the commercial development of Germany.

The completion of the Suez Canal in 1869, thanks to the energy and perseverance of Ferdinand de Lesseps, the active coöperation of the Egyptian government, and the use of European, especially French, capital, was also destined to exert a very great influence upon the world's commerce by furnishing a shorter route from Europe to the Far East, thus displacing to a certain extent the route by way of the Cape of Good Hope. This canal, one hundred and twenty-one miles long, shortened the route to Bombay from Liverpool, Amsterdam, and Bordeaux, twenty-eight days; from Hamburg, twenty-nine days; from Marseilles, thirty-one days; from Genoa, thirty-two days; from Trieste, thirty-seven days; from Alexandria, forty-three days. It is easy to see, therefore, how the cape route has been dethroned during the present period. As a result of this wonderful achievement the Mediterranean powers have been able to recover much of their former fortune. Thus far, however, England and Germany have profited more by this canal than any other countries. In 1892 England sent two thousand five hundred and eighty-one ships through it;

Germany, two hundred and ninety-two; Holland, one hundred and seventy-seven; France, one hundred and seventy-four; Italy, seventy-four; Norway, sixty-six; Austria-Hungary, sixty-one; Turkey, forty-three; Spain, twenty-six; Portugal, twenty-three; Russia, twenty-two; Greece, six; Belgium, four; Japan, three; China and the United States, two each. Thus it appears that French capital and energy in this great enterprise aided England vastly more than France herself. It should also be noted that the Suez Canal aided very greatly the rapid transformation of the merchant marines of the nations using it from sailing vessels into steamships; for the inconveniences and dangers of navigation in the Red Sea necessitated the employment of steamships, while the greater length of the cape route had been an impediment to steam navigation on account of the difficulties of coaling for so long a trip. It should be added that the political as well as the commercial interests of all the nations having establishments in the Far East have led them to guarantee the neutrality of this canal.

316. The development of every means of communication and transportation has been much more rapid and extensive during the Age of Electricity than ever before. There have been great improvements in the postal services of most countries; all the leading nations of the world have made great progress in road making; the network of railroads has been extended in every direction in almost every country in Europe, America, Asia, Australia, and even in Africa; better wagons, carts, and carriages are used than ever before; there are better coaches and cars, more frequent trains, more rapid engines, and safer signal systems on nearly all railroads. There has been a similar improvement everywhere in water navigation and in the construction of war and merchant vessels; the tonnage, speed, and safety of ocean steamers have steadily increased. Numerous

canals of international importance have been completed or undertaken, as, for example, the Suez Canal, the Panama and Nicaragua canals, the Kaiser Wilhelm Canal, and the Corinth Canal. Some ambitious projects for combining transcontinental railroads with transoceanic steamship lines have been carried through, and still others are now being planned or prosecuted. International postal, telegraphic, and express companies and rates have been established. Many countries have also made great improvements in their interior water communications. Rivers have been enlarged and freed from obstructions; old canals have been deepened and new ones dug; all the important ports of the world have been greatly improved by the enlargement and deepening of harbors, the removal of dangerous obstacles, the construction of quays, docks, and warehouses. Canals have been freed from tolls and other charges, and, in many countries, have become the auxiliaries rather than the rivals of railroads. The improvement and enlargement of rivers and canals has led to larger and more comfortable boats for river and canal traffic, and has increased very greatly the importance not only of towns and cities at the mouths of rivers, but also of inland cities situated on these rivers. Many inland cities have also been connected with the sea by great canals, as, for example, Manchester and Rotterdam.

317. There has been a steady colonial expansion of all the leading nations throughout the present age, and a constant outflow of emigrants from the most thickly populated to the least developed regions of the world. Africa is no longer the "Dark Continent." South America and the islands of all seas have been peopled and developed by the leaders of civilization. Even the walls of China have been penetrated by western energy and methods, and that empire has submitted to industrial and commercial colonization.

318. The improvements in agriculture, mining, and manufactures during the Age of Electricity. Agriculture in many countries has been greatly improved by the application of newly discovered fertilizers, such as guanos, nitrates, and phosphates. A more rational system of cultivation has been adopted and fostered by agricultural schools and associations and by the circulation of agricultural treatises and pamphlets. All kinds of domestic animals have been improved by judicious selections, breedings, and crossings. There has been much greater specialization in farming than ever before. Mining likewise has been revolutionized; new mechanical appliances have made it much less dangerous than formerly and far more productive. Geology has revealed mineral repositories hitherto unknown, and the production of gold, silver, iron, coal, and all the leading minerals has increased enormously. One new mineral product, petroleum, hitherto overlooked, has suddenly become very important. Manufactures have undergone no less a metamorphosis through the more minute division of labor, the continued applications of steam and electricity, and the greater centralization of industry.

319. Some other important factors in the economic development of the world during the present age should be briefly noted. Banking facilities have been wonderfully developed and the system of national and international checks and bills of exchange perfected. There has been a strong tendency towards an international system of weights and measures. Persistent efforts have been made for a single system of time. International conventions have been held for arbitrating international difficulties, thus averting the many dangers that would otherwise have resulted from wars. Treaties have been made guarding international commerce against injuries from the sudden closing of markets. The regular publication of crop reports, market

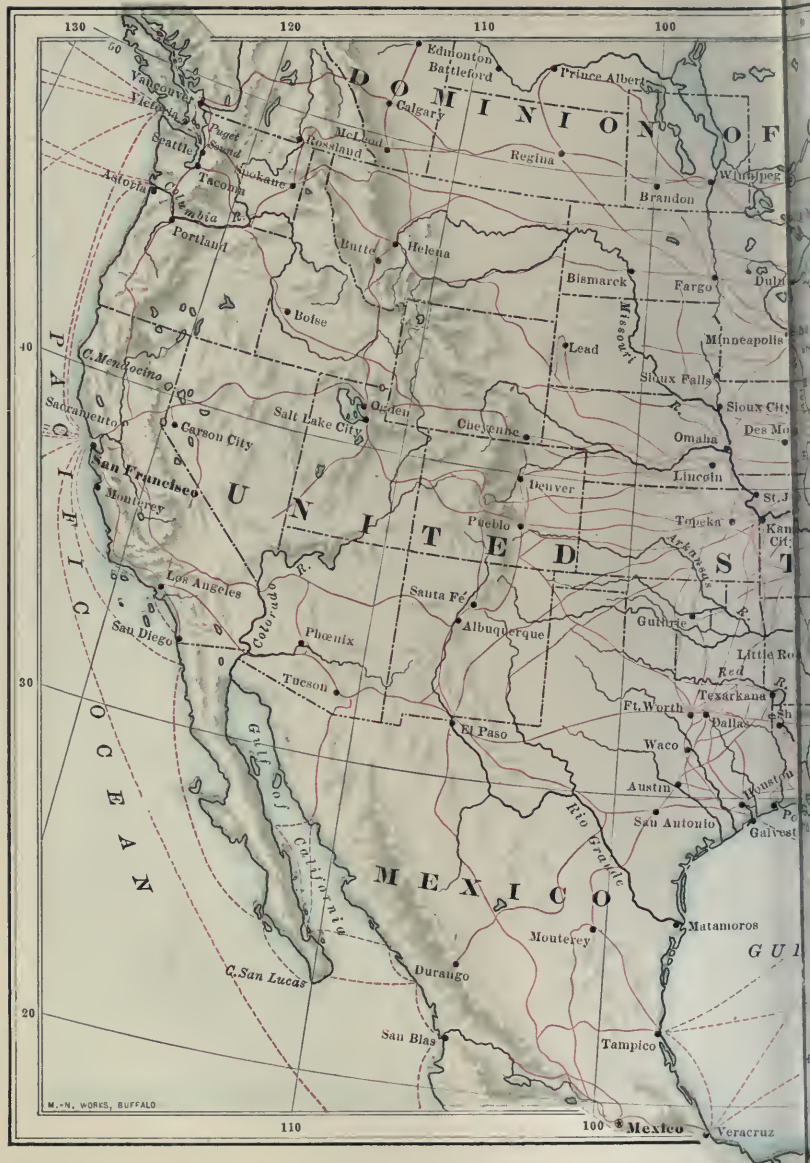
reports, financial reports, price lists of numerous articles, the results of marine observations, and the systematic dissemination of various other kinds of valuable industrial and commercial information by both public and private agencies have all had a considerable influence upon the economic development of the period. The work of many geographical societies, boards of trade, chambers of commerce, and various mercantile trade associations has been especially valuable and fruitful in recent years. The chemical and other applied sciences have made remarkable contributions to industrial and commercial development. Neither should we overlook the very great benefits derived by several countries from their excellent agricultural, technical, and commercial colleges and schools.

320. The "new commerce" of the Age of Electricity. The many improvements in the means of communication, transportation, and exchange, the enormous increase in production of all kinds, the steady development of new continents by colonization and immigration, and the other forces noted, have brought into existence a "new commerce" that is vastly more extensive and conducted by entirely different methods than in any preceding age. They have brought cheaper freights and passenger fares, enlarged the area of commercial relations so that business houses regard the whole world as the legitimate field for their operations, developed a remarkable solidarity of international interests, made necessary new methods of conducting business, and lessened the liability of wars, thus increasing very greatly the opportunities for peaceful production, competition, and commercial expansion. In one word, electricity and steam have been the primary forces in producing an international division of labor on a scale never dreamed of before, and this necessitates a vastly greater and different commerce than formerly. This international division of labor

on a world scale compels all kinds of producers in all countries to seek not only home markets, but others in every part of the world, where they can secure the best bargain. The supreme importance of international and domestic commerce in distributing the world's products to-day, and its relatively greater importance to-day than formerly, may be shown in a very interesting and striking manner by comparing the total amount of energy consumed in distribution with that consumed in production. It has been estimated that 174,120,000,000 foot-tons of power were used daily, in 1895, in the world's production, while 266,840,000,000 foot-tons were used in distribution. In 1840 the corresponding figures were 73,700,000,000 and 50,300,000,000. In other words, in 1840 the amount of energy consumed in the world's production was about fifty per cent greater than that used in distribution, while in 1895 the amount used in distribution was about fifty-four per cent greater than in production, and the amount used in distribution in 1895 was over five times as great as in 1840.

321. The neo-protectionist tendency of the new age remains to be briefly noted. While the latter years of the Age of Steam revealed a strong tendency towards commercial treaties and free trade, and while great progress was made by some countries under that régime, the early years of the Age of Electricity, on the other hand, witness the revival of the protectionist policy on the part of certain leading countries. This neo-protectionist movement started in the United States during the Civil War, but soon after the Franco-Prussian War, for many reasons, it spread to Austria, Germany, Italy, France, and other countries. Throughout the present age, thus far, the underlying tendency of governmental policy seems to be towards this neo-protectionism. Even England, the apostle of free trade, has

recently shown signs of a revival of some portions of her protective system. It is well to note, however, that the neo-protectionism is coupled with the policy of liberal and numerous reciprocity commercial treaties between countries most intimately connected by trade.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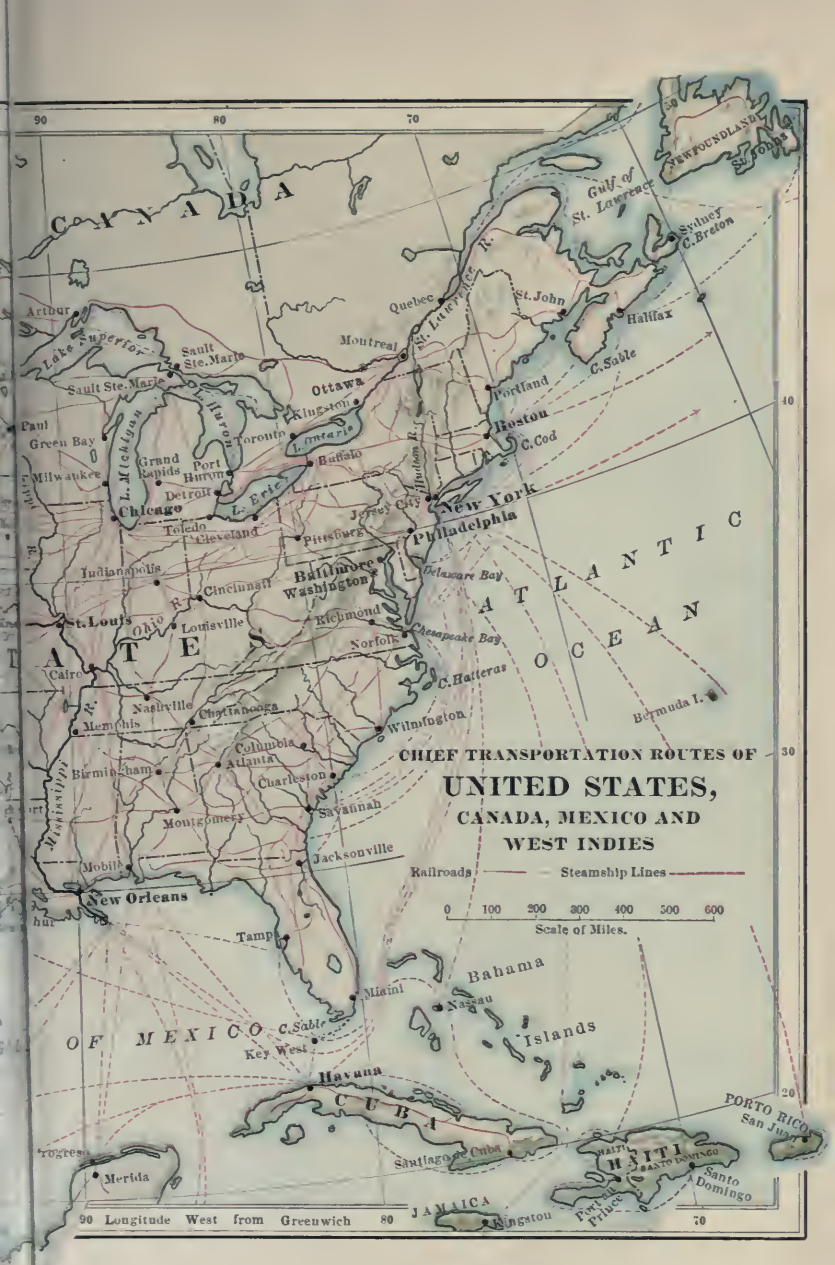
Edmonton
Battleford
Prince Albert
Calgary
DOMINION OF
Vancouver
Victoria
Puget Sound
Seattle
Rossland
McLeod
Regina
Winnipeg
Astoria
Columbia R.
Tacoma
Spokane
Brandon
Portland
Butte
Helena
Bismarck
Fargo
Boise
Lead
Minneapolis
C. Mendocino
Sacramento
Ogden
Salt Lake City
Cheyenne
Sioux Falls
Sioux City
Carson City
Omaha
San Francisco
Monterey
Denver
Lincoln
UNITED
Pueblo
Topeka
Los Angeles
Santa Fé
Albuquerque
Guthrie
San Diego
Colorado R.
Phœnix
Arkansas R.
Tucson
Texarkana
Ft. Worth
Dallas
El Paso
Waco
Austin
Houston
San Antonio
Galveston
Gulf of California
Rio Grande
MEXICO
Matamoras
Mouterey
C. San Lucas
Durango
San Blas
Tampico
Mexico
Veracruz
PACIFIC OCEAN
M.-N. WORKS, BUFFALO


CHIEF TRANSPORTATION ROUTES OF
UNITED STATES,
CANADA, MEXICO AND
WEST INDIES
Railroads
Steamship Lines
0 100 200 300 400 500 600
Scale of Miles.
Longitude West from Greenwich
CANADA
NEWFOUNDLAND
St. John's
Gulf of St. Lawrence
Sydney
C. Breton
Halifax
Quebec
St. John
Montreal
St. Lawrence R.
Lake Superior
Sault Ste. Marie
Ottawa
Portland
C. Sable
Boston
C. Cod
Kingston
Toronto
Lake Ontario
Buffalo
Hudson R.
Green Bay
Milwaukee
Grand Rapids
Port Huron
Detroit
L. Michigan
L. Erie
Chicago
Toledo
Cleveland
Jersey City
New York
Philadelphia
Pittsburg
Indianapolis
Cincinnati
Baltimore
Washington
Delaware Bay
Richmond
Norfolk
Chesapeake Bay
C. Hatteras
St. Louis
Ohio R.
Louisville
Cairo
Nashville
Chattanooga
Memphis
Wilmington
Bermuda I.
Columbia
Atlanta
Charleston
Birmingham
Savannah
Montgomery
Jacksonville
Mobile
New Orleans
Tampa
Miami
Bahama Islands
Nassau
C. Sable
Key West
Havana
CUBA
Santiago de Cuba
PORTO RICO
San Juan
HAYTI
Santo Domingo
Port au Prince
JAMAICA
Kingston
Merida
ATLANTIC OCEAN
OF MEXICO
90
80
70
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CHAPTER XXIX

THE UNITED STATES SINCE THE CIVIL WAR

322. The close of the Civil War was the beginning of a new era in the industrial and commercial history of the United States; it brought a new South, a new North, a new Nation. The fever of work and speculation now took hold of all sections and gave a prodigious impulse to enterprises of all kinds. This impulse found expression in new tariffs, new financial customs, new business methods, a multiplication of banks and clearing houses, an extension of credit money, a greater stock exchange activity, the growth of powerful corporations, the concentration of capital, legislation regarding capital and labor, increased immigration, a marvelous development of the means of communication and transportation, a revolution in the labor system of both the North and the South, and a wonderful extension of the use of machinery and labor-saving devices. There has, consequently, been a rapid growth of population, a vast increase in the agricultural and industrial production of the nation, and a great expansion of our foreign and domestic commerce. The total wealth of the nation increased from $16,000,000,000 in 1860 to about $82,000,000,000 in 1900.

323. The means of communication and transportation have been developed on a gigantic scale during the present period. Railroad building was checked only temporarily by the Civil War, and after 1866 it was carried on more rapidly and extensively than ever. The earliest important enterprise of this sort in the present period was the

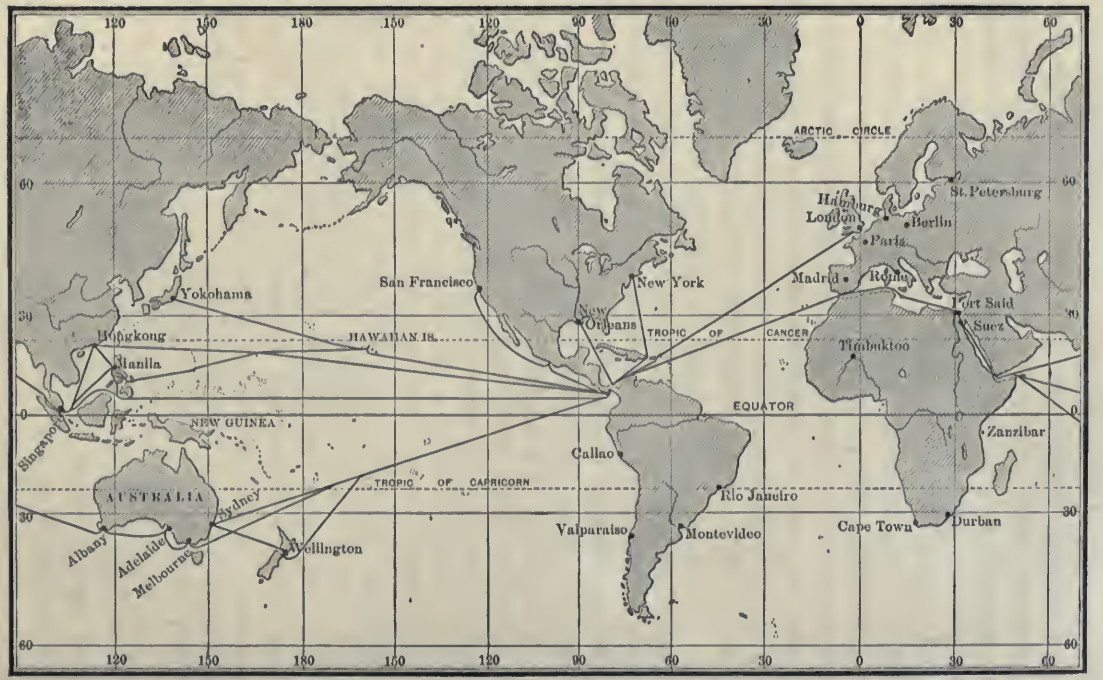
construction of great trunk lines connecting the Pacific coast with the rest of the Union. As early as 1834 newspapers had proposed a railroad from New York to the Pacific. In 1849 Asa Whitney petitioned Congress for a strip of land sixty miles wide, from Lake Michigan to the Pacific, the proceeds of which were to build a transcontinental railroad. The discovery of gold in California furnished new arguments for the scheme, but diversity of opinions and interests regarding the proper route, the supposed barrenness of the country, and the preference for a canal across one of the isthmuses between North and South America, proved more serious arguments in the other direction. It was not until the secession of the southern members that anything could be done. Then the rumor that the Pacific states intended to secede, and the invasion of New Mexico by the Confederates, led Congress in 1862 to grant $55,000,000 to two companies, the Union Pacific and the Central Pacific. The Union Pacific Company began to build westward from the Missouri River, to which point the Hannibal and St. Joseph Railroad had already been extended in 1859; the Central Pacific Company began to build eastward from Sacramento, which was already connected with San Francisco. In seven years the line was completed from Omaha to San Francisco, a distance of 1917 miles. Thus were the industrial and commercial interests of the Far West united to those of the East, and the Union was made more intimate by the wires of the electric telegraph running along the railroad. But this giant work was but a prophecy of still grander achievements in railroad building. The first transcontinental railroad of 1869 was soon followed by others running not only east and west but north and south, until the country was belted with numerous great trunk lines and covered with a minute network of shorter lines. By 1873 the railroad mileage of the United States was already 68,484

miles, and this had increased by 1899 to about 191,000 miles. Unfortunately, railroad building during the past twenty-five years has proceeded faster than the real needs of the country required; some railroads have been mere speculative enterprises which have had no immediate prospects of becoming paying investments. On the other hand, the construction of many of these lines has led to the very rapid development of the regions through which they have run. Furthermore, the present period has witnessed the gradual consolidation of a large number of long and short lines into a few great continental railroad systems. The competition between these large railroad systems for through traffic finally became so fierce as to lead to "railroad wars," in which rates were often lowered below the actual cost of transportation. These rate wars were followed by "pooling agreements," by which rates were raised and the profits divided between the railroads included in the pool. This led Congress in 1887 to prohibit pooling and to create the Interstate Commerce Commission to regulate interstate traffic and to remedy certain abuses in railroad administration. Nevertheless, the great railroad systems have frequently succeeded in maintaining rates by more or less secret traffic agreements. It was undoubtedly for this reason that President Roosevelt in his first message to Congress recommended an amendment of the present law.

The building of railroads has been accompanied by the rapid development of the telegraphic, telephonic, and postal systems. In 1899 there were about two hundred and fifteen thousand miles of telegraph lines in the country. In 1900 the Bell Telephone Company, which practically controls the telephone business of the country, had over one million five hundred thousand miles of telephone. In 1900 nearly fourteen billion pieces of mail matter were handled by the United States Post Office Department. Recently

there has also been a rapid extension of street railways and traction lines, — city, suburban, and interurban; in 1898 there were nearly eighteen thousand miles of such lines in the country, over sixteen thousand miles of which were run by electricity.

324. Various projects for an isthmian canal connecting the Pacific with the Gulf of Mexico have been made at various times. Some of these projects have favored the route across the Panama isthmus, some the Nicaraguan isthmus, some the Tehuantepec isthmus. For example, when the first transcontinental railroad was under consideration in 1849, there were many who favored a canal instead of a railroad, each of the above routes having its partisans. These various projects for a canal at that time led to the conclusion of the Clayton-Bulwer Treaty in 1850 between Great Britain and the United States, by which a joint Anglo-American protectorate was established over any interoceanic canal that might be cut through any of the above isthmuses. It was more than thirty years after that treaty, however, before any such ship canal was seriously attempted. Finally, a French company began digging a canal across the Isthmus of Panama, but the canal has not yet been completed. In the meantime an American company proposed to dig another canal across the Isthmus of Nicaragua. The agitation in favor of national aid to such a canal has been kept up during the present period, and it received a new impetus from the recent war with Spain and the consequent increased importance of American interests in the Pacific. In 1897 a Nicaragua Canal Commission was appointed to consider the feasibility and cost of a canal across Nicaragua, and in December, 1898, President McKinley recommended the construction of such a canal, to be controlled by the United States. Congress at that time, however, failed to give effect to the President's



New Routes to be created by the Panama Canal

recommendation and contented itself with appropriating $1,000,000 for further investigation of the various practicable routes. In May, 1899, the commission recommended the route by way of Lake Nicaragua and estimated the cost of the canal at $118,000,000. In February, 1900, a treaty was signed by representatives of Great Britain and the United States by which the former nation "renounced all right to joint construction, ownership, or maintenance" of an isthmian canal, while agreeing to join with the United States in guaranteeing the neutrality of the canal. Opposition to this "neutralization" feature of the treaty hung it up in the Senate, and consequently negotiations were reopened with Great Britain on a different basis. Finally, early in 1902, a treaty satisfactory to both countries was agreed upon and ratified. This treaty abrogates the Clayton-Bulwer Treaty and removes all legal obstacles to the construction and control by the United States of such a canal. After much discussion of various routes Congress has decided upon the Panama route (June, 1902), and it is to be hoped that the work of construction will be pushed to completion as rapidly as possible.

325. The growth of population. The total population of the country increased from 31,443,321 in 1860 to 75,620,859 in 1900, not including the population of our various dependencies. Counting the population of these colonies, the total population of the United States in 1900 was about 85,000,000. The effects of such an enormous and rapid increase of population upon the productive power of the nation and upon the demands to be fed by our commerce and industries are very evident. Even more significant in many ways is the rapid relative increase of our urban as compared with our rural population during the present period. The rapid increase in urban population during this period will appear the more striking by

comparing the relative increase during each decade from 1790 to 1900, as follows:

The percentage of the total population residing in towns and cities of 8000 or more inhabitants

DATE	PER CENT	DATE	PER CENT
1790	3.35	1850	12.49
1800	3.97	1860	16.13
1810	4.93	1870	20.93
1820	4.93	1880	22.57
1830	6.72	1890	29.20
1840	8.52	1900 (approx.)	33.35

The percentage of urban population remained stationary during the decade 1810–1820 chiefly because the War of 1812 and other circumstances turned many from commerce, shipping, and the fisheries to farming. The steady increase from 1820 to 1860 was due to the growth of manufacturing towns, to foreign immigrants who lodged in the cities, and to the construction of canals and railroads, which built up cities at terminal and junction points. The slower increase from 1870 to 1880 was due chiefly to the panic of 1873, which closed factories and drove many laborers to western farms. The remarkably rapid increase since 1880 has been due primarily to the multiplication of manufacturing plants in the cities and to extensive immigration.

326. Immigration. Nearly as many foreigners came here from 1861 to 1870 as during the previous decade, in spite of the Civil War. This was due chiefly to the passage of the Homestead Act, which attracted many foreigners to the West, and the growth of manufactures under the stimulation of the "war tariffs." After the country had recovered from the injurious effects of the war, immigration assumed larger proportions than ever, especially after 1878. The

high-water mark was reached in 1882 when 788,992 foreign immigrants arrived here, the total for the decade 1881–1890 being 5,246,613. The depression of 1892–1894 caused a decrease in the number of arrivals, but in 1898 the number again began to increase very rapidly. Much has been done during the present period to attract foreigners here and very little to restrict them. The West has welcomed them, bureaus have been established to aid them, transportation companies have lowered their passenger rates and made systematic efforts to induce foreigners to come here. Whatever may be said pro and con about the wisdom of practically unrestricted immigration, the constant influx of foreigners has undoubtedly been a very important factor in the industrial growth and prosperity of the present period. Their labor and in many cases their enterprise and capital have greatly aided the development of our industrial and commercial resources.

327. Colonization. The development of an American colonial system has already begun to exert a profound influence upon the industrial and commercial development of the United States, and this influence is certain to be much greater in the future. Alaska was the first new territory to be acquired during the present period (1867), but for a long time this colony did not seem to add anything useful to the public domain. Just thirty years after its purchase, however, came the Klondike discoveries in 1897, and Alaska suddenly became commercially important. The next year the Spanish War brought two new colonies, Porto Rico and the Philippines, and one protectorate, Cuba. In July, 1898, Hawaii was annexed by joint resolution. In January, 1900, the partition of the Samoan Islands gave the United States the island of Tutuila and the other islands in that group east of 171° east longitude. Thus the United States suddenly finds herself in possession of a vast colonial

UNITED STATES
and
Dependent Territories
Shown in Black.

NOTE.—The total distances from San Francisco to Manila, via Hawaii and Guam, is 8100 Statute Miles, and to China 8400 Statute Miles.

domain scattered in widely separated parts of the earth, with a total area of 700,000 square miles and a population of about 11,000,000. Although there are still divergent opinions about the wisdom of acquiring and keeping these colonies, and no one yet seems to be quite clear as to the exact mode of governing them, it seems pretty certain that all, or nearly all, of these colonies have come to stay. Some of these colonies will undoubtedly be of increasing commercial and industrial value to the United States by serving as outlets for our goods and as sources of supply for some much needed raw materials and other products, and by giving us several very valuable bases for extending our commerce into remote parts of the world. Such colonies as Alaska, Hawaii, and the Philippines will rivet the attention of American merchants and manufacturers much more firmly than ever before upon the Pacific, its islands and adjacent territories, as the great field for their commercial and maritime enterprise. Whatever may be said, therefore, concerning the exact future value of this or that colony as a market or source of supply, the colonial system as a whole is bound to exert a potent influence upon the economic development of the United States in various ways. And it would seem that the acquisition of these colonies was made at an opportune time, just when the enormous increase of American production is beginning to reveal the need of outlets other than the home markets. The commercial importance of these acquisitions will appear more fully in several subsequent paragraphs.

328. The Pan-American Congress and reciprocity. As we have seen, the policy of reciprocity did not make much progress during the previous period, the treaty with England in 1854 being about the only genuine reciprocity treaty negotiated before the Civil War, and even that treaty being abrogated in 1866. President Grant tried to secure a full

reciprocity treaty with Mexico similar to the English treaty of 1854; the Senate approved the treaty, but the House of Representatives failed to carry it into effect. In 1884 Mr. Foster signed a treaty with Spain abolishing discriminating duties and introducing many articles of American production into Cuba and Porto Rico free of duty or at a reduced rate, in return for special favors to be granted to Spanish sugars in American ports. This treaty, however, was withdrawn, and negotiations for a similar treaty with Great Britain regarding the British West Indies were broken off. In 1875 a treaty was signed with Hawaii and carried into effect, by the terms of which certain American products and certain Hawaiian products, notably sugar, were to be mutually free from duty. As a result of this treaty our trade with Hawaii increased in eight years from $2,100,000 to $11,444,000. This was about the only real reciprocity treaty of modern type in force when the Pan-American Congress agitation began.

In 1884 a very important act provided for the appointment of three commissioners to "ascertain the best modes of securing more intimate international and commercial relations between the United States and the several countries of Central and South America." Messrs. Sharpe, Thacher, and Curtis were the gentlemen who finally acted on the commission. The commission recommended an invitation by the United States to the several governments of America to join in a conference at Washington "to promote commercial intercourse and to prepare some plan of arbitration." Congress carried out the recommendation, and delegates from eighteen Central and South American countries met at Washington Oct. 2, 1889, and adjourned April 19, 1890. Among other things this Pan-American Congress recommended an intercontinental railroad, better steamboat, telegraphic, and postal communications between

the United States and Latin America, an international American monetary union, an international American bank, a permanent bureau of information, international trade marks and patents, a uniform code of commercial nomenclature, and reciprocity treaties. Several of these recommendations were made the bases of new laws. One of the most important of these laws was the tariff act of 1890, which gave the President authority to enter into treaty relations with other countries on a basis of full reciprocity. By virtue of this act the President, in June, 1892, was able to announce reciprocity treaties with Brazil, Cuba, Porto Rico, San Domingo, Salvador, Nicaragua, Guatemala, Costa Rica, Honduras, British West Indies, France and her colonies, Austria-Hungary, and Germany. The basis of these treaties was that the United States would accept, free of duty, the sugar, molasses, coffee, and hides of the several countries, while they in return would receive, free of duty or subject to diminished duties, the breadstuffs, provisions, lumber, coal, and numerous other products of the United States. Evidently this was real reciprocity.

329. Tariff policy. Just at the close of the previous period a new tariff policy was inaugurated by the Morrill Tariff Act of 1861, which greatly increased the duties on iron and wool, largely for the purpose of attracting Republican votes in Pennsylvania and the West. But the policy of high protection once renewed could not be dropped. From that time until the close of the war hardly a month went by without some increase in the import duties. The motives for these repeated increases were various: (1) the need of greater revenues, (2) retaliation against Europe for certain injuries, (3) the protection and stimulation of home industries, (4) the desire to consolidate the Republican party, and (5) the desire to offset the internal revenue acts. By the tariff act of 1862 the

average rate of duties was raised to thirty-seven and two tenths per cent; the act of 1864 increased it to a little over forty-seven per cent. Thus the most extreme protective system that our country had ever known resulted from the Civil War, and the "war tariffs" practically remained the basis of our tariff policy for over a quarter of a century. Of course the tariff was frequently amended, but for about twenty years the tendency was to increase rather than lower the duties. The act of 1870, for example, made some reductions, but these were almost entirely on purely revenue articles. The only important exception was the reduction of the duty on pig iron from nine to seven dollars per ton. On the other hand, the act of 1870 increased considerably the duties on some protected articles like steel rails, marble, nickel, etc. Two years later the situation was somewhat more favorable for "tariff reform," and accordingly the tariff of 1872 made a "horizontal" reduction of ten per cent on all manufactures of cotton, wool, iron, steel, metals in general, paper, glass, and leather. This tariff also reduced still more the duties on salt and coal, and admitted some raw materials and tea and coffee free of duty, the latter clause being inserted so as to give the laboring classes a "free breakfast table." This horizontal plan of reduction proved to be a very crude and impracticable method of tariff reform. The panic of 1873 which followed and the great decrease in imports led to the easy repeal of the ten per cent horizontal reduction and the placing of nearly all duties back where they were before 1872. Various further attempts at tariff reform were made from 1875 to 1883, but none of them ever had the slightest chance of success. Nothing further was done, therefore, until the tariff of 1883, which, as it turned out, made very little reduction in the duties. The war tariff was still practically the basis of our policy, and the duties

on many important protected articles were even higher in the act of 1883 than they had been in the very highly protective tariff of 1864. In the meantime, however, the idea of reciprocity had been growing, and some commercial treaties had been signed with leading countries on the basis of reciprocal concessions. The Pan-American Congress of 1889 emphasized this policy of reciprocity. Accordingly, in 1890 the McKinley Tariff Act was passed, which sought to retain the protective system and at the same time to reduce the surplus in the treasury by reducing the revenue duties. The bill levied high protective duties upon foreign goods which came into competition with home products, and placed on the free list many articles produced exclusively abroad. The Senate amended the bill so as to introduce the increasingly popular principle of reciprocity, which authorized the President to use considerable discretion in making reciprocal duty discriminations for or against other countries according to their policy towards us. As we have seen, quite a number of reciprocity treaties were signed soon after the passage of this act; but the first material reduction in the war tariff was made in 1894 by the so-called Wilson Tariff Act, which placed wool, copper, and lumber upon the free list, reduced the duties on many protected commodities, and reimposed a revenue duty upon raw sugar. The victory of the Republicans in 1896, however, led to another revision of the tariff, and in 1897 the Dingley Tariff Act was passed. In general we may say that this was a compromise between the tariffs of 1890 and 1894. It left copper on the free list, but placed wool and lumber back on the dutiable list. It lowered the duty on steel rails, but increased considerably most of the other duties and levied a tax on hides, which had long been on the free list. Some of the duties, notably those on wool, were made higher than ever before. The average rate of duty in this

tariff was about fifty per cent. This law also substituted many specific duties for *ad valorem* duties. This Dingley Tariff is the one now in force (1902), but some exceptions to it were made in the so-called Porto Rican Tariff of 1900. In December, 1899, the President's message declared it to be "our plain duty" to "abolish all customs tariffs between the United States and Porto Rico." A bill was therefore introduced providing for free trade between the two; but the bill as finally passed made the duties in the case of Porto Rico fifteen per cent of the existing rates, limited the operation of the act to two years, and appropriated to the immediate needs of the island "all money collected or to be collected as duties on products of Porto Rico in the ports of the United States." Much discussion is going on at present as to the proper method of regulating the tariff relations between Cuba and the United States, but no satisfactory solution has yet been reached.

330. The panics of 1873 and 1893 were serious interruptions to trade and industry. Extravagant railroad building was undoubtedly the principal cause of the first. Many railroads had been built in parts of the country where they did not pay interest on the cost of building them. The disputed presidential election of 1876 made the situation still worse, and consequently the country did not recover from the effects of the panic until about 1879. The panic of 1893 has been charged to various causes, such as the change of administration in 1893, the expectations of tariff tinkering resulting from that change, the Sherman Silver Act of July 14, 1890, and overproduction. Whatever may have been the most important cause, for there were undoubtedly several, the panic came very suddenly, and during the summer of 1893 banks and many business houses failed daily; money was hoarded and became scarce; factories were shut down and thousands of laborers were thrown out of

employment. For a time, therefore, industry and commerce were almost paralyzed, but fortunately the country gradually recovered and entered upon a new era of prosperity.

331. The new national banking system established during the Civil War has proved on the whole very beneficial to the industrial and commercial development of the country. By the time of the outbreak of this war the older and more conservative states had placed such restrictions upon banks chartered within their limits as to compel the banking business to be conducted on an honest and sound basis. During the war, however, the difficulties encountered by the national government in floating its bonds led it to create a new national banking system based on the New York system. In February, 1863, an act was passed creating a new system of national banks, but this act was unsatisfactory and incomplete in many ways, and banks were consequently organized slowly under it. The revised act of June, 1864, proved more satisfactory, and banks were formed quite rapidly under its operation. This act allowed national banks to issue notes under the following conditions: (1) each bank was required to report its condition to the comptroller of the currency five times annually and was subject to supervision by federal examiners; (2) the minimum capital required for the organization of a national bank was $50,000; (3) stockholders were made ratably responsible for the debts of the bank "to the extent of the amount of their stock therein at the par value thereof, in addition to the amount invested in such shares"; (4) one third of the capital stock of each bank, and not less than $30,000, had to be invested in United States bonds and deposited in the United States Treasury; (5) notes could be issued to an amount not exceeding ninety per cent of the par value of the security bonds deposited in the treasury, but the comptroller could require additional security if the bonds

fell below par; (6) each bank was required to keep a reserve of lawful money varying in size in different cities; (7) banks were required to redeem their notes on demand in legal-tender money; (8) banks were taxed one per cent on the average amount of their notes in circulation, one half per cent on the average amounts of their deposits, and one half per cent on their capital stock not invested in United States bonds; (9) the notes of state banks were taxed ten per cent, a rate high enough to make their issue unprofitable.[1]

The establishment of this new banking system made the bank-note currency thoroughly uniform throughout the country and absolutely safe. The national bank acts have been strictly enforced and the banks created under them have generally been administered very honestly. Moreover, the excellence of the national banks has compelled the state and private banks to conduct their business more honestly and safely. It is very evident, therefore, that the establishment of the new national banking system has been very beneficial to the business interests of the country.

332. There have been some notable changes in the currency during the present period. During the Civil War, as is well known, it was deemed necessary to resort to a large issue of "greenbacks." Gold soon sold at a premium, which in 1864 reached one hundred and eighty-five per cent. Prices and rents naturally went up, and by the end of the war they averaged about ninety per cent more than in 1861. Wages and salaries also rose, but not more than sixty per cent; hence the burdens of the war fell chiefly on the poorer classes. This government paper money, together

[1] The act of March, 1900, reduced the minimum capital required to $25,000, reduced the rate of taxation on national bank-note circulation to one half per cent, and allowed the issuing of notes to the full extent of the par value of the security bonds instead of ninety per cent of the same.

with the new bank notes, continued to be the only money in general use until 1879, when specie payments were resumed. By that time, however, the government paper money was equal in value to gold, so that most people continued to use it instead of redeeming it with specie. In the meantime the general decrease in the value of silver, due partly to the enormous production of the western silver mines, had led Congress in 1873 to "demonetize" silver, that is, prohibited the coinage of silver dollars. But in 1878 the Bland-Allison Act had partially "remonetized" silver by requiring the government to purchase $2,000,000 worth of that metal each month and to coin it. The effect of the Bland-Allison Act may be judged from the fact that, while only eight million silver dollars had been coined from 1789 to 1873, about four hundred million were coined during the years 1878–1890. The next change in the currency was made by the Sherman Law of 1890, so named because Mr. Sherman was chairman of the committee which reported the bill, although he himself was opposed to it. This law repealed the Bland Act and went a step nearer to "free silver" by requiring the national government to buy four million five hundred thousand ounces of silver monthly at the market price, and, with this as a basis, to issue as many legal-tender treasury notes as the silver was worth in gold. As the law provided that holders of these treasury notes could exchange them for "coin," treasury officials, when asked, exchanged them for gold coin. Thus the effect of the law was to greatly deplete the stock of gold in the treasury. Consequently, in the midst of the panic of 1893 the Sherman Law was repealed (November, 1893). A few years later came the prolonged silver agitation connected with the presidential campaign of 1896, which was followed by the appointment, in 1897, of a monetary commission to secure favorable international

action in the direction of bimetallism. The commission failed to accomplish its purpose, but in the meantime (January, 1897) a conference of prominent financiers had met at Indianapolis to consider the advisability of refunding the gold bonds and changing the national banking law so as to increase the issue and circulation of bank notes. The war with Spain and the active opposition of silver men prevented further action for a time. In framing the war revenue act the silver question was compromised by providing for the coinage of one million five hundred thousand dollars' worth of silver per month and the suspension of the further issue of silver certificates. In March, 1900, an act was passed declaring the gold dollar to be the unit of value, establishing a gold reserve of $150,000,000 for the redemption of greenbacks and treasury notes, and providing for the refunding of the national debt, for the gradual replacement of treasury notes by silver certificates, and for the extension of the national banks' privilege of issuing notes.

333. Several important international expositions have been held during the present period. At the Centennial Exposition held in Philadelphia, 1876, and at the Columbian Exposition held in Chicago, 1893, were collected magnificent displays of the productions, manufactures, and arts of every country. These were at once an evidence of and a stimulation to the industrial and commercial development of the country. The Pan-American Exposition held in Buffalo, 1901, was unique in being the most magnificent display of electrical appliances the world has ever seen, all worked by the unrivaled water power of Niagara. Although this exposition was primarily an electrical exhibit, magnificent displays of the productions of all America were made, and it is to be hoped that one effect of this exposition may be the drawing of the various American countries into much closer commercial relations with one another.

334. The growth of labor organizations has been a prominent characteristic of the present period. Many of these organizations have gained enormous strength in the United States, and have undoubtedly benefited the laboring population in various ways. On the other hand, it is to be feared that some of them have recently patterned a little too closely after the "new trade-unionism" of England, which among other things seemingly tends to reduce the per capita production of the laborer to a minimum, on the erroneous supposition that this policy will benefit the laborer by creating a larger demand for labor. At the same time some of these organizations have apparently been too much inclined to foster hopeless and useless strikes, and have thus injured rather than helped their members. Some of the strikes of the present period have caused an enormous decrease in production, a great loss of wages, and the destruction of large amounts of property by riotous strikers and their sympathizers. Many billions of dollars have thus been lost during this period, and trade has been seriously interrupted. Some of the most important strikes have been (1) the railroad strikes of 1877, which were attended with numerous riots, especially in Pittsburg, Chicago, and St. Louis; (2) the Homestead, Pennsylvania, strikes in 1892, which provoked so much violence as to necessitate martial law in quite a large district; and (3) the Pullman strike centering in Chicago in 1894, which completely paralyzed all western traffic for some time and required national interference.

335. Trusts and anti-trust legislation. Beginning with the formation of the Standard Oil Trust in 1882, the growth of trusts has been very rapid and extensive. By many, such organizations were viewed with great alarm, and the popular discussion of their dangers led to many attempts to regulate and even suppress them by law. Between 1888 and 1892 many states passed "anti-trust laws," some of

which were very severe. In 1890 Congress also passed an anti-trust act, and in 1897 the Supreme Court of the United States decided that the law applied to railroads as well as manufacturing and trading corporations, and that it made illegal any combination in restraint of trade and commerce whether the restraint were reasonable or not. But neither this act of Congress and its accompanying Supreme Court decision nor the laws of the states have thus far checked to any extent the growth of trusts. Indeed, the growth has been so rapid and extensive, in spite of all efforts to check them, that nowadays we occasionally hear of the formation of "billion dollar trusts." So many large organizations were formed in 1889, mostly under the laws of New Jersey and Delaware, which are quite favorable to them, that popular opposition was strongly revived and efforts were made to make the trust question a leading issue in the presidential campaign of 1900. In June, 1900, the Senate debated an anti-trust amendment to the Constitution of the United States, but dropped the question by referring it to a committee; during the same session the House of Representatives passed a bill to amend the act of 1890 so as to give the United States increased control over trusts, but the bill was not carried through the Senate. President Roosevelt, in his first annual message, while favoring such organizations to a certain extent, recommended Congress to pass an act placing them under more thorough governmental control and supervision. Nothing more of consequence has thus far been done, and there the matter rests to-day.

336. The industrial commission of 1898. The question of creating a national non-partisan industrial commission was pending in Congress for many years. A bill for that purpose was vetoed by President Cleveland, but another one was signed by President McKinley, June 18, 1898.

This bill provided for a commission consisting of nineteen members, nine of whom were to be appointed from civil life by the President, five senators appointed by the Vice-President, and five representatives appointed by the Speaker. As the congressional members are generally very busy attending to their legislative duties, the routine work of the commission must be performed almost entirely by the President's appointees. The duties of the commission as declared in the law creating it are "to investigate questions pertaining to immigration, to labor, to agriculture, to manufacturing, and to business," and "to suggest such laws as may be made the basis of uniform legislation by the various states of the Union, in order to harmonize conflicting interests and be equitable to the laborer, the employer, the producer, and the consumer." At first glance it seems as if a wholesale and almost impossible task had been imposed upon the commission, but further reflection shows that there is a very important and imperative field of work lying open for just such a body as this. The creation of this commission seems to be very timely just now when the United States is entering upon a new industrial and commercial era. The very great diversity of state laws concerning most economic subjects makes it very desirable that the recommendations of this commission should lead to wise and uniform laws on such subjects. The very diversity of state laws, however, renders it probable that it will be much easier for the commission to make recommendations than to secure their adoption by the states, and it must be remembered that most of the subjects to be investigated are those over which the states have exclusive control under the constitution.

337. The new department of commerce. One of the most timely recommendations of President Roosevelt's first message to Congress was his urgent request for the creation of

a national department of commerce and industry. This was directly in line with the organization of the Department of Agriculture, which has proven so beneficial to the country in many ways, and was a logical outgrowth of the industrial commission created in 1898. In February, 1902, the Senate acted favorably upon the President's recommendation, and it now seems quite likely that the House will soon pass the Senate bill with some slight modifications. The new department, if wisely organized, will undoubtedly aid and foster the industrial and commercial development of the expanding nation.

338. Commercial education in the United States. For some time the need of a better system of commercial education in this country has been keenly felt by many, and recently a few leading individuals and schools have taken decisive steps towards the creation of such a system. The value of such education in certain European countries has already been demonstrated, and it is certainly time for the United States to provide proper training for her people who wish to engage in commercial pursuits. Indeed, if we are to maintain the commercial position already attained or progress in the face of the present international competition, we must establish commercial schools of various grades to train our future commercial leaders, as well as expert employees, in every line of commercial activity. To this end our universities, colleges, and secondary schools should provide this kind of instruction, and they are, fortunately, beginning to do so.

339. Recent relative commercial decline of New York City. During the great continental war, Boston became the leading commercial city of the country and retained this position for many years. Gradually, however, and largely as a result of the construction of the Erie Canal, the superior natural advantages of New York City as the great outlet

and inlet for our foreign trade asserted themselves and this city assumed first place. The closing of the southern ports during the Civil War gave New York a still more important commercial position. But there can be no doubt that New York has recently been suffering a serious relative commercial decline. The New York Commerce Commission in its recent report (p. 135) says: "The decline in New York's commerce has been steady and continuous for many years, and has now reached serious proportions in an actual loss of exports. This loss has been largely in exports of grain and flour. While New York has been steadily losing, Montreal, Boston, Baltimore, Newport News, and the Gulf ports of New Orleans and Galveston, have made substantial gains." We cannot even outline the main features of this notable report, but the question covered by the report is one well worthy of careful study, and this brief paragraph is inserted simply to call the student's attention to this important subject.

340. Financial progress of New York City. While New York has been suffering a commercial decline she has been gaining very rapidly upon the other great money centers of the world. This is shown by the enormous increase in her banking business. The loans of the New York banks doing business through the clearing house increased from $420,406,000 in 1889 to $780,607,700 in 1899; the deposits from $442,684,000 to $914,810,300. The combined gold holdings of New York banks, including the gold held by the United States Treasury for New York banks, are more than twice those of the Bank of England and equal to the holdings of the Bank of France. These and other facts make it likely that New York will soon become the financial leader of the world.

341. Agricultural development. The United States has developed her agriculture on a prodigious scale during the

present period and she is to-day the leading agricultural nation in the world. The area under cultivation doubled during the years 1860–1890, and there was an enormous increase in the total agricultural product of the country. The increasing scarcity of land in the more thickly settled portions of the country and the rapid rise in the average price of land compelled farmers to give much more attention than formerly to the question of methods of cultivation; consequently, in many places far more scientific methods have been employed. The establishment of numerous agricultural schools throughout the country and the creation of a Department of Agriculture in the national government have exerted a very beneficial influence upon agriculture in many ways. The increase in agricultural production, however, has not been so great as during the years 1860–1890, nor relatively so great as the increase in the manufactured output.

The most important agricultural products of the United States to-day are grains, raw cotton, and meat products, and she makes larger contributions to the world's supply of all these products than any other nation. Maize, or Indian corn, is our most important grain, and about two billion bushels were grown in 1900, this being seventy-six per cent of the world's crop. The United States is also the largest producer of wheat, the crop in 1900 amounting to about five hundred and twenty-two million bushels, which was about twenty per cent of the world's crop. Our crop of oats in the same year was eight hundred and nine million bushels, or about twenty-five per cent of the world's crop. The United States also produces considerable quantities of barley and rye, but she is surpassed in both of these crops by Russia, Germany, and Austria. We are not only the largest producers of wheat and corn, but also the largest exporters of the same. Cotton is still one of the most

important agricultural products of the United States and is the largest single item in our list of exports. Our cotton crop in 1899 was over eleven million bales, or about seventy-one per cent of the world's crop. Cattle raising has been important in American agriculture ever since the colonial period, but it has assumed gigantic proportions during the present period. The total value of farm animals in this country reached its climax in 1893, when it amounted to nearly $2,500,000,000. By 1897 the value had decreased to $1,655,000,000, but in 1899 it rose again to nearly $2,000,000,000. The most important farm animals in the United States to-day are cattle and hogs. In 1900 we had nearly forty-four million cattle and nearly thirty-nine million hogs, more than any other country in the world, and we consequently exported the most beef and pork.

Although grains, cotton, and meat products are the most important agricultural products of the United States, many others are raised in large quantities. Billions of gallons of milk and nearly one billion five hundred million pounds of butter are produced annually, but most of these dairy products are consumed at home. Large amounts of wool are clipped, but not nearly enough to supply the home demand. We produce over ten billion eggs annually, much more than any other country, but we export comparatively few. Tobacco is still a very important agricultural product, and we are the largest grower and exporter of this product, the value of this export ranging between $25,000,000 and $35,000,000 annually. The United States is also one of the largest producers of flaxseed, but not of flax fiber. Hay is one of the largest agricultural products of the country, its value being about the same as that of the wheat crop, but it does not enter largely into our foreign trade. Considerable progress in the production of fruits and wines has also been made during the present period.

Our California wines are driving French wines out of some of the markets of the Far East; we are sending "Rhine wine" to Germany; our fruits are shipped in refrigerators in increasing quantities to many European markets.

342. Forest industries. Possessed of one of the largest and finest forest areas in the world, the United States has become the foremost producer and exporter of forest products. We cut about forty billion feet board measure from our forests every year. Of this total, the forests of the Great Lake region furnish thirteen billion feet; those of the South, ten billion feet; those of the New England and North Atlantic states, six billion; those of the Central states, five billion; those of the Pacific states, four billion; those of the mountain states, two billion. Our wood exports in 1900 were valued at $39,000,000, and our wood imports at $15,000,000, making our net export $24,000,000. The manufactures based upon our forest products have assumed gigantic proportions during the present period, the total value of the wooden products of the country being about $2,000,000,000. These forest industries are about equal to the combined woolen, cotton, and leather industries in the number of persons employed and the values produced. It is to be feared, however, that the development of these forest industries may ultimately be checked quite seriously unless we give much more careful attention to the art of forestry in the future than we have done in the past. Our wholesale cutting of forests has been extremely reckless and wasteful. Such considerations as these led President Roosevelt in his first message to emphasize very clearly the importance of better forestry regulations, and it is to be hoped that his recommendations will be carried out.

343. Mining industries. All of our varied mineral resources have been developed quite systematically during this period. The total annual value of our mineral

products is about $1,000,000,000, which is usually more than twice the value of our wheat crop. Coal is our most valuable mineral, the annual coal product being worth about $275,000,000. We are now the foremost producer of this mineral, and produce about one third of the world's supply. We are also the foremost producer of iron, the value of our pig iron product in 1900 being $245,000,000. As coal and iron have been of such fundamental importance in the development of our manufactures, we will reserve the further consideration of them for a subsequent paragraph. The United States is also the largest producer of copper, our mines turning out over one half of the world's supply; the value of our copper product in 1899 was $104,000,000. During the present period the United States has vied with Russia in the production of petroleum. This industry in the United States practically dates from 1859, the product in 1860 being less than one million gallons. Russia now produces more crude petroleum than we do, the respective production in 1900 being seventy-seven million two hundred thousand barrels and sixty-three million three hundred thousand barrels. On the other hand, we produce a much greater quantity of refined oil and export vastly more than Russia. In 1900 we exported mineral oils worth about $76,000,000, which went to nearly every country in the world. Until 1898 we were the largest producers of gold, but in that year the South African Republic overtook us. Since 1898, however, we have again attained first place, owing to the rapid increase in our own production and the interruptions to the gold industry of the Transvaal during the war with Great Britain. The value of our gold product in 1900 was over $78,000,000, or more than one third of the world's supply in that year. The United States has for some time been the world's foremost silver producer, her mines turning out about one third of the world's

supply. The value of our silver product in 1900 was about $36,500,000. The United States also produces large quantities of lead, zinc, natural gas, and salt, and considerable quantities of quicksilver, aluminium, cement, and other minerals.

344. The fisheries. In 1899 the United States ranked next to the United Kingdom in the value of fish landed. In that year our catch was worth $40,000,000. Of this total our ocean and coast fisheries furnished over $27,000,000, our river fisheries nearly $9,000,000, and our lake fisheries about $4,000,000. Oysters are our most valuable fishery product; more than half of the oysters entering into foreign commerce come from our fisheries. Canned salmon, however, is the most important item in our fish exports.

345. Growth of manufactures (1860–1890). Under the stimulus of the war tariffs and other causes there was a quite steady development of manufactures in this country during the years 1860–1890. The capital invested in mechanical and manufacturing industries increased during those years from about one billion to about six and one half billion dollars, and the value of the manufactured product of the country rose from $1,885,861,676 to $9,372,437,283.[1] The increase in the volume of the manufactured product was even greater, for there was a material decline in the prices of such articles during that period.

The most remarkable growth was in the iron and steel industries. The amount of pig iron produced increased from less than one million tons in 1860 to over nine million tons in 1890. The increase in the production of steel was relatively still greater during the same period, the amount produced in 1860 being less than twelve thousand tons, and in 1890 four million two hundred thousand tons. There was a similar increase in the value of iron and steel

[1] Census estimates.

manufactures. The principal causes for this remarkable growth of the iron and steel industries were the cheapening of the cost of producing pig iron by improved blast furnaces which saved much fuel, the use of improved appliances and more scientific methods in every stage of production, and the strong demand for locomotives, rails, iron machinery in factories, and other iron and steel products.

There was also a very extensive development of the textile industries during the years 1860–1890. The total capital invested in these industries increased from about $150,000,000 in 1860 to nearly $740,000,000 in 1890; the value of the textile product rose from about $215,000,000 to nearly $722,000,000. These industries were still concentrated chiefly in New England and the Middle states, but by 1890 the cotton industry was beginning to make considerable progress in the South. The increased use of the sewing machine led to a revolution in the tailoring and ready-made clothing industries during this period. The capital invested in these industries rose from $26,400,000 in 1860 to $203,800,000 in 1890; the yearly product from $80,750,000 to $446,200,000. There was also a very extensive development of the boot and shoe industry, the yearly product increasing from about $92,000,000 to over $280,000,000. Next in importance to the iron and steel, textile, and clothing industries stood the manufacture of various food products. In 1860 the total value of these products was $323,000,000; in 1890, over $1,647,000,000.

These few statistics, together with those stated in previous paragraphs, give a fair idea of the extent of industrial development during the years 1860–1890; but great as was this development, it was not relatively so great in most industries as during the decade which followed. The industrial development of the decade 1891–1900, however, may be studied best by comparing it with that of the other

two leading manufacturing nations of the world during the same period, viz., Great Britain and Germany.

346. The relative industrial progress of the United States, Great Britain, and Germany (1891–1900). During this decade the United States made such rapid relative industrial progress, as compared with that of the other leading nations, as to overtake all her rivals. For several years, therefore, the United States has been the leading manufacturing nation in the world. In 1890 she had already surpassed Great Britain, hitherto the leading industrial nation, in the production of iron and steel, and the advantage thus gained has been more than maintained; in 1899 the United States produced nearly four million tons more pig iron than the United Kingdom, and over twice as much steel. Similar advantages have been scored by the United States in other industries. The coal industry may perhaps be taken as a crucial test of our industrial efficiency. In 1890 the United Kingdom still produced thirty per cent more coal than the United States, but in 1899 we surpassed her for the first time and have continued to outrank her in this product. Even in the manufacture of cotton goods, which has long been England's chief industry, we have made enormous gains during the past decade. While the English consumption of raw cotton increased only one hundred and forty-six million pounds during the years 1890–1899, the American consumption increased about six hundred and fifty-four million pounds. In 1899 the United States consumed about three hundred and sixty million pounds of raw cotton more than the United Kingdom; but the value of our manufactured cotton product is still less than that of the United Kingdom because the latter country makes more of the finer grades of goods. Germany has also made remarkable industrial progress during the past decade, but her total iron, steel, and coal product is still

far behind that of the United States. A comparison of the values of the total manufactured product of the three nations will show their relative industrial progress in a still more striking manner. According to the twelfth census the total value of the manufactured product of the United States in 1900 was $13,039,279,566. In 1896 the British manufactured product was valued at $4,239,000,000, and that of Germany at $3,339,000,000. We may safely assert that the present value of our manufactured product is considerably greater than that of the United Kingdom and Germany combined.

Another evidence of the relative gains of the United States in manufacturing is found in the growth of our manufactured exports and the decrease of our manufactured imports. In 1890 our exports of manufactured goods were valued at only $151,000,000; in 1900 nearly $434,000,000. On the other hand, the average annual value of our manufactured imports for the three years ending March, 1896, was $155,000,000, and for the three years ending March, 1900, only $103,000,000.

Can the United States hope to retain the industrial supremacy she has won? In answering this question we must remember that the crucial test of the future industrial efficiency of any nation is its possession or non-possession of cheap and abundant raw materials and fuel supply. Applying this test we find that the United States has the most abundant and the cheapest raw materials and fuel of any nation in the world. According to the twenty-second annual report of the United States Geological Survey, for example, we have a total coal area of 280,397 square miles, exclusive of Alaska, and this is many times the total coal area of all Europe. At the same time it is worth noting that the mine price of European coal in 1899 was $1.96 per ton, while that of American coal was $1.10 per ton.

Our advantage over the other manufacturing nations in the supply of most raw materials is equally as great. At the same time it may be claimed that we have a splendid supply of intelligent and skilled laborers. We may, therefore, reasonably expect to continue to manufacture more cheaply than other countries, and consequently retain our industrial supremacy.

347. The industrial revolution in the South. Before the Civil War the whirl and rush of progress had encompassed the South on every side, but had not touched her. "Alone in all the world she stood unmoved by it; in government, in society, in employments, in labor, the states of the South in 1860 were substantially what they had been in 1810." The Civil War changed all this. For several years after the war the South did little else than grow cotton, as it had done for generations before. In 1865 the southern soldier went home to bare and impoverished fields; but he at once set to work, and in that very year over 2,250,000 bales of cotton were grown. This was not quite one half as much as had been produced in 1860, but the planter received one dollar per pound for his cotton when the war closed. The high price stimulated production, and the cotton area, as well as the acreage in the existing cotton belt, was rapidly extended. By the time the production reached the limit attained before the war, however, the price had fallen to ten cents. This was in 1876. Although the price had gone down to five cents several times before the war, the Southerner now found cause for discouragement in the fact that there was a steady downward tendency in the price. But in spite of the low price the production of cotton went on increasing until 1899, when it reached 11,199,000 bales. In the meantime, however, when the price of cotton decreased, thinking Southerners began to rotate crops and reclaim waste

lands; in this way they soon produced much larger quantities of grains, hay, butter, cheese, cattle and other stock, grapes, wines, and fruits than ever before. In 1880, for example, they produced 431,000,000 bushels of grain; in 1899, nearly 737,000,000. Much more significant was the fact that enterprising planters began to invest their savings in forests, mines, and manufactures. In this way, and with the aid of northern capital and investors, was brought about that most remarkable industrial revolution in the South which has been so characteristic a feature of the material development of the United States during the past fifteen or twenty years.

As a result of this industrial revolution the total yearly value of the manufactured products of the South increased from $457,400,000 in 1880 to $1,500,000,000 in 1899; the capital invested in southern manufactures increased from $257,200,000 to $1,000,000,000 during the same period. This industrial development has been most remarkable in the Carolinas, Georgia, and Alabama, and it is interesting to contrast the recent progress of these states with the contemporary decline in several New England industries, a decline characterized by numerous cuts in wages, strikes, and shut-downs. The scope of the industrial revolution in the South may be further judged from a few statistics of leading industries in that section. The greatest strides have been made in southern cotton manufactures. The cotton mills of the South increased the number of their spindles from 667,000 in 1880 to 5,000,000 in 1899; their consumption of cotton rose from 233,886 bales to 1,231,000 bales during the same period; the amount of capital invested in the southern cotton mills increased from $21,900,000 to $125,000,000. The great cotton mill centers of the South are Raleigh, Greensboro, and Winston in North Carolina; Abbeville, Newberry, and Gaffney in South Carolina;

Augusta, Columbus, and West Point in Georgia. The production of southern pig iron increased from 397,000 tons in 1880 to 2,500,000 tons in 1899; the southern coal product from 6,000,000 tons to 40,000,000. Iron foundries, steel plants, and car factories are rapidly transforming many southern towns into thriving cities. Ten years ago Southerners secured ninety per cent of their pork from Kansas City, Cincinnati, and Chicago; to-day they not only raise their own pork, but are establishing packing houses for shipment of their surplus. Every year sees many new flour mills erected in various parts of the South; a million-bushel wheat elevator was recently constructed in Galveston. The manufacture of naval stores has taken on an altogether new development. Pressed bricks are being manufactured on a very large scale in Georgia, Alabama, and Florida, and are sold in large quantities even to foreigners; Georgia also has extensive terra-cotta works. The vast stores of phosphates in the South are being developed; marble is being quarried in Georgia and Tennessee; the rich marine resources (sponges, oysters, and other fish) along the six thousand miles of southern littoral are beginning to be developed; ostrich farming and fruit growing are being prosecuted vigorously in Florida; forestry is being studied and the lumbering industry developed as never before. In these ways, then, is the South atoning for her past indolence and mistakes, and finding compensation for the beggarly prices which foreign agricultural competition has brought about for her former staple products, — cotton, tobacco, and rice. It would seem that this remarkable industrial development of the South, together with her situation, would make her in the near future the natural provider of manufactured goods for the West Indies and northern South America. Such ports as Savannah, Jacksonville, Tampa, Pensacola, Mobile, Newport News, New

Orleans, Port Arthur, and Galveston ought to secure an increasing portion of the commerce of those countries.

348. Growth of foreign trade. The Civil War seriously interrupted for a time the growth of our foreign trade. Our exports fell from $334,000,000 in 1860 to $191,000,000 in 1862, our imports from $354,000,000 to $189,000,000, and our foreign trade continued to languish throughout the war. But the close of the war brought a speedy resumption of foreign and a rapid extension of domestic commerce. In 1866 our exports suddenly mounted to $349,000,000, and our imports reached $435,000,000. The next few years did not witness quite so large a trade, but after that, with only a few interruptions, there was a steady increase up to the present time. In 1870 our imports were $436,000,000; in 1880, $668,000,000; in 1890, $789,000,000; our exports for the same years were $393,000,000, $836,000,000, and $858,000,000, respectively. The most rapid increase in our foreign trade, however, has been during the past few years, especially since 1895, our total foreign commerce reaching $2,283,000,000 in 1901. This rapid increase during the past few years has been due chiefly to the phenomenal growth of our exports, which rose from $883,000,000 in 1896 to $1,460,000,000 in 1901, while our imports increased only a very little.

I. *One of the most gratifying features in the recent progress of our foreign trade has been the great increase in the export of our own manufactured goods.* In 1860 we exported only forty million dollars' worth of domestic manufactures; nearly all of our exports at that time were agricultural products. As late as 1895 our exports of domestic manufactures amounted to only $183,600,000. Since then our exports of this kind have increased so rapidly that in 1900 they amounted to nearly $434,000,000, or about thirty per cent of our total exports. The most important exports of

this class are iron and steel manufactures, which amounted in 1900 to about $138,000,000 and consisted chiefly of steel rails, locomotives, bridge materials, agricultural implements, and machinery of all sorts. As a recent writer forcibly says: "American locomotives, running on American rails, now whistle past the pyramids and across the long Siberian steppes. They carry the Hindoo pilgrims from all parts of their empire to the sacred waters of the Ganges." Our bridge builders are at work on every continent; our reapers and threshing machines are running in every part of the world where there are large fields of grain to be harvested; our cutlery competes successfully with British cutlery even in Sheffield, hitherto considered the chief center of that industry; our sewing machines, typewriters, typesetting machines, printing presses, electrical apparatus, bicycles, windmills, cash registers, and many other manufactures of this class are either monopolizing or competing successfully in markets in every part of the world. Our next largest manufactured export is that of mineral oils, which amounted in 1900 to about $76,000,000. We also exported in that year copper and copper manufactures worth about $59,000,000. We are even beginning to export considerable quantities of cotton goods, which find their way into nearly all the markets of the world, — in Africa, the Far East, and even in Manchester; in 1900 the exports of this class amounted to about $24,000,000. Our other leading exports of manufactured goods are oil cake and oil-cake meal, vegetable oils, leather, boots and shoes and other leather goods, wooden ware, tobacco manufactures, rubber goods, chemicals and drugs, clocks and watches, paper and paper manufactures, books and engravings, musical instruments, marble and stone manufactures.

II. *In spite of this very rapid increase in the exportation of our manufactured goods, about fifty-seven and one half*

per cent of our total exports in 1900 consisted of agricultural products, the exports of this class amounting to nearly $836,000,000 in that year. Of this total, breadstuffs were $263,000,000; raw cotton, $242,000,000; provisions, comprising meat and dairy products, $184,500,000; animals, $44,000,000; tobacco, about $30,000,000; fruits and nuts, $12,000,000. The remainder of our exports consists chiefly of coal, lumber, timber, naval stores, crude oils, salted and canned fish, and other products of our mines, forests, and fisheries.

III. *Turning to our imports we find that there has been a constant decrease during the present period in the proportion of manufactured imports to the total imports.* In 1860 about forty per cent of our total imports were manufactured goods, while in 1900 only fifteen per cent were of this class. The value of our leading imports in 1900 was as follows: manufactured goods, $129,000,000; sugar and molasses, $101,000,000; hides and skins, $58,000,000; chemicals, drugs, and dyes, $53,700,000; coffee, $52,500,000; raw silk, $45,300,000; wool and hair, $20,300,000; vegetable fibers, $26,400,000; wines and spirits, $12,800,000; tea, $10,600,000.

IV. *About one third of our total foreign trade is with the United Kingdom.* Our exports to that country in 1900 were $602,200,000; our imports from that country, only $151,600,000. The most noticeable feature in our recent trade with the United Kingdom is the fact that our exports to that country are increasing very rapidly, while our imports are decreasing. During the six years 1896–1901 our imports from the United Kingdom decreased about $16,000,000, while our exports to that country increased $244,000,000. In other words, in 1896 we sold to her two hundred and twenty-eight million dollars' worth more than we bought from her, while last year the excess of exports over imports

was $488,000,000. And we are sending to England not only breadstuffs, cotton, and other raw materials, but increasing quantities of our manufactured goods. "We send to England in a single year one hundred locomotives. We have sent numberless stationary engines of all types and sizes, and with them, boilers, pipes, pumps and pumping machinery, car wheels by the thousand, wire and wire nails, metal working machinery of every type, and great shipments of electrical dynamos and appliances." We also send to her large numbers of printing presses, typesetting machines, paper, tobacco manufactures, matches, and great quantities of other articles. This increasing excess of exports over imports in our trade with Great Britain is rapidly reducing our indebtedness to her.

V. *Next to Great Britain our largest trade is with Germany, and we have recently increased our trade with her quite rapidly.* In 1900 our exports to Germany were $197,600,000; our imports from Germany, $103,500,000. As in the case of England, we are invading Germany not only with our breadstuffs and raw materials but also with our manufactured goods. Many German factories are run largely by American labor-saving machinery, and Germany imports from us considerable quantities of other manufactures.

VI. *Our trade with other European countries.* Our next largest trade is with France, but we are not increasing our commerce very rapidly with that country. Our exports to France have increased only $18,000,000 during the past ten years. One important reason for this is the high French tariff, which keeps out many American goods. In 1900 our exports to France were $82,600,000; our imports from France, $72,800,000. Although a very small country, the Netherlands takes a large amount of our products, but

more raw materials and food stuffs than manufactured goods. Our exports to that country in 1900 were $83,700,000; our imports from her, $17,300,000. After the Netherlands our next largest trade is with Italy, the exports to that country in 1900 being $36,700,000, the imports from it, $27,000,000. Our exports to Belgium in 1900 were $46,900,000; our imports from that country, $14,600,000. Our trade with the other European countries is as yet quite small. One of the chief reasons for this is the fact that most of these countries, especially Russia and Austria-Hungary, have high tariffs, which tend to keep out our goods. Our total trade with Europe in 1900 was $1,470,000,000: imports, $441,000,000; exports, $1,029,000,000.

VII. *Next to Europe our largest trade is with Asia, and our trade with that continent has increased quite rapidly during the past six years.* In 1900 our total trade with Asia was $205,000,000: imports, $140,000,000; exports, $65,000,000. On that continent our trade is increasing most rapidly with Japan and China. In 1900 our trade with Japan was $61,700,000: imports, $33,000,000; exports, $29,000,000. Our trade with British India was $48,500,000: imports, $43,300,000; exports, $5,200,000. Our trade with China, in spite of the recent troubles there, was $34,000,000: imports, $23,000,000; exports, $11,000,000. A large part of our exports to Asia are manufactured goods.

VIII. *Our trade with Africa has been increasing during the past few years, especially our exports.* In 1900 our exports to that continent were $24,500,000; our imports from it, $11,200,000. A very large part of our exports in this direction are manufactured goods.

IX. *Our trade with our own islands in the Pacific is increasing and seems likely to become quite important.* In 1897 our exports to the Philippines were only $94,000; in

1900 they were over $3,500,000. In 1900 the total foreign trade of these islands was $40,400,000; our total trade with them, $9,600,000. It is to be hoped that under our rule their rich resources will be better developed, their foreign trade greatly expanded, and our trade with them increased still further. Their hemp, raw sugar, tobacco, cocoanuts, and copra should be very profitable articles for our merchants to handle, and we ought to find there larger and larger markets for our manufactured goods. The total trade of the Hawaiian Islands in 1900 was nearly $42,000,000. A very large part of their imports comes from the United States and consists chiefly of lumber, wearing apparel, dry goods, and tobacco manufactures. Their chief export is cane sugar, most of which goes to California refineries. Rice and bananas are their next largest crops. The cultivation of coffee has recently been introduced into the islands. Considerable attention is being given to tropical fruits and the breeding of domestic animals. All these industries are capable of considerable development. As these islands lie at the crossroads of trade in the central Pacific, they ought to increase in commercial importance quite rapidly and consequently prove very beneficial to the United States. This will undoubtedly be the case when the isthmian canal is constructed. The islands of Guam and Tutuila are chiefly important to the United States as coaling stations and as bases for our growing commerce in the Pacific, but copra seems likely to become more and more important as an export from these islands.

X. *Our trade with British Australia has not yet become very large, but we have good opportunities for commercial expansion in that direction.* Our exports to Australia and New Zealand in 1900 were about $28,200,000; our imports from them, $5,300,000. Our trade with Fiji was only $1,900,000.

XI. *Our trade with British North America is quite important and seems likely to become much more so.* In 1900 our exports thither were nearly $105,000,000; our imports thence, nearly $41,000,000. Our trade with Canada is especially important. The dissimilarity of climate and the diversity of productions of the two countries ought to insure an ever increasing trade between the two. Canada requires our tobacco, iron, steel, coal, tropical fruits, and many of our manufactured goods, while we seem likely to require an increasing amount of her forest and farm products, and can make a good use of her increasing mineral output. The national boundaries are such as to invite extensive commercial intercourse, and if a liberal policy is pursued by the two governments in the future, there is bound to be a great extension of these relations.

XII. *Our commerce with Mexico and Central and South America.* For a long time before the Pan-American Congress our commerce with these countries had been very unsatisfactory. During the twenty years just preceding that congress our exports thither had increased only $16,000,000, while the proportion of these exports to our total exports actually decreased from fourteen to nine per cent. The chief reasons for the slow growth of our trade in that direction up to 1890 had been: (1) the fact that our country did not want South American wheat and some other products, while Europe did, and consequently vessels plying between Europe and South America caught freight both ways; (2) the large number of European immigrants to South America had created a demand for European rather than American goods; (3) the capital of the United States had found more profitable investments at home; (4) the lack of reciprocity treaties; (5) the absence of direct steamship lines between the United States and those countries; (6) the absence of direct railroad communications; (7) the poor

international banking facilities; (8) the unwillingness of American merchants to give long credits; (9) the ignorance of American merchants and manufacturers concerning the wonderful development going on in Latin America; (10) our ignorance of the Spanish language and our unwillingness to ship goods to suit the tastes of the peoples in that region. Our trade with them has increased somewhat since the Pan-American Congress and the negotiation of reciprocity treaties resulting from it; in 1900 our exports thither were $125,000,000, while our imports thence were $184,000,000. But there is still much chance for further improvement in our trade in that direction. As they import chiefly manufactured goods it is doubly important for us to make stronger efforts to secure control of their markets. It is encouraging to note that the Bureau of American Republics has been quite effective in instructing Americans concerning the commercial opportunities in Latin America, and there seems to be a growing disposition to take advantage of these opportunities. But it will not be easy for Americans to supplant British, German, French, and Italian merchants in those countries, even when they enter seriously upon the work of capturing their markets, for these rivals are strongly intrenched. Our delay in awakening to the opportunities in Latin America will prove a serious hindrance to our future commercial expansion in that direction.

349. Our large excess of exports over imports has become a notable characteristic of our foreign commerce, especially during the last decade. This excess increased from $68,500,000 in 1890 to $634,000,000 in 1900. This is generally regarded as a very encouraging phenomenon, especially when coupled with the consideration that our exports of manufactured goods increased so rapidly during the same period, while our imports of similar goods decreased

considerably. But it is well to examine this so-called "favorable trade balance" somewhat carefully, lest we draw erroneous conclusions and indulge in exaggerated hopes for the future. In the first place, the actual excess is probably much smaller than the nominal one, owing to the habitual undervaluation of imports and the practice of smuggling. Secondly, we must remember that about $100,000,000 of the yearly excess represents what we pay to foreign shipowners for carrying our freight. Thirdly, another $100,000,000 is offset by the expenditures of our tourists abroad. Fourthly, no small part of the excess is explained by the remittances to Europe from prosperous immigrants in this country. Fifthly, another, and probably the largest, portion of this excess goes to pay the interest and profits on foreign capital invested in this country. These various items whittle down the real excess to about one half of the nominal excess or even less, and it is hardly likely that even this real excess will be permanently maintained, for no nation can reasonably expect to permanently sell vastly more than she buys.

350. Our domestic commerce. Vast as our foreign commerce has become in recent years, it is far exceeded in value and volume by our internal trade. The value of our domestic commerce is about thirteen times that of our foreign commerce, or about $28,000,000,000. The volume of goods exchanged between different parts of the country is about twenty-four times that of our foreign exchanges. In other words, about one hundred and sixty-two billion tons of merchandise were carried a distance of one mile over our various railroads and waterways in the year 1900. In a country like ours, where the products of the different sections are so varied, there must be an immense amount of internal trade, and in considering the commercial position of the United States it is only fair to consider the volume

and value of this extensive domestic commerce. Taking into consideration both foreign and domestic commerce, therefore, the total trade of the United States to-day is about $30,000,000,000, and this total is much greater than that of the United Kingdom and Germany combined.

351. American shipping. The American merchant marine, which we saw declining during the latter part of the previous period, was almost killed by the Civil War. Our tonnage engaged in foreign trade was only half as great in 1868 as in 1855. By the close of the war only twenty-seven per cent of our foreign commerce was carried in our own vessels, whereas the percentage had been seventy-five per cent in 1855. Owing to the change from wooden to iron ships and the cheapness of iron in England, the high protective duties on materials for iron and steel ships, and the failure of Congress to protect American shipping, our shipbuilders were unable to compete successfully with foreign builders, and consequently our merchant marine continued to decline. By 1897 the tonnage engaged in foreign trade was only about one third of what it was in 1861, and the percentage of our foreign trade carried in American bottoms had decreased to about ten per cent. By that time, also, practically all of our foreign carrying trade had been lost. But while our merchant marine engaged in foreign trade was destroyed by the war and subsequent adverse circumstances, it bids fair to be resurrected as a result of the recent Spanish War. Our unwonted industrial development during the past decade has aroused a desire for reviving our merchant marine; the annexation of Hawaii, Porto Rico, and the Philippines has hastened its revival by precipitating a new struggle for commercial and maritime supremacy.

352. Our struggle for commercial supremacy. The foregoing analysis of our industries and commerce shows that

one of our greatest problems to-day is how and where to find the best markets for our goods. Our home market is already vast and is continually expanding, and hitherto we have not felt very keenly the need for seeking foreign markets. But our industrial development has now suddenly reached a point where we can compete successfully in the world's markets with our manufactured goods as well as our breadstuffs and raw materials. Indeed, if our industrial development continues at anything like as rapid a rate as during the past few years, it must either suffer a serious check in the near future or else we must open new markets and extend our trade in the markets we already have. We cannot hope, however, for an indefinite continuation of the exceptional conditions that have made it possible for us to make such rapid industrial and commercial progress during the past few years. We must not delude ourselves into thinking that our recent rapid progress inevitably insures our speedy conquest of the world's markets. We have not yet attained commercial supremacy, and the struggle for that position will probably be a long one. The struggle is one which will require infinite patience and perseverance, the most active enterprise that we can muster, keen intelligence, and such skill as can result only from the most careful training. Let us, in conclusion, summarize very briefly our chief advantages and disadvantages in the coming struggle for supremacy.

Our chief disadvantages seem to be: (1) the fact that we are far behind some of our principal rivals in commercial education and training, and somewhat inferior to them in technical instruction; (2) our failure to adapt ourselves to the habits and prejudices of foreigners in our commercial dealings; (3) our loss of leadership in some of the sciences which are of special industrial and commercial importance; (4) the growth of the "new trade-unionism"

in this country. The struggle is also likely to be complicated very greatly by (1) the rapid industrial and commercial progress of Germany, (2) the maritime and capitalistic supremacy of Great Britain, (3) the future possibilities of Russia, and (4) the future part to be played by China and Japan in the world's industries and commerce.

On the other hand, we have many important advantages. (1) We have already won our way to agricultural and industrial supremacy and have good grounds for thinking that we may retain this position. (2) The vast size of our home market serves as a splendid foundation upon which to base our struggle for foreign markets. The uniformity of American tastes makes it possible for our manufacturers to make enormous quantities of goods of a certain type, and consequently to make them cheaper than foreign manufacturers, who have to adapt their different wares to so many varying tastes. This enables our merchants to sell our surplus products cheaper than they otherwise could. (3) We are not hampered by militarism and heavy taxation, as most of our rivals are. Europe spends nearly $1,400,000,000 annually in times of peace for her military and naval establishments, while we spend vastly less. Europe's armies also remove four million men from productive work out of her one hundred million males twenty to sixty years of age. (4) We have one of the most perfect banking and credit systems in the world, while the banking methods of continental Europe are extremely cumbersome. (5) We have a most excellent form of government. (6) Our railroad transportation system is the best in the world. Europe has much smaller freight cars and poorer engines, and pays higher railroad freights. (7) The American laborer is to-day the most productive laborer in the world. (8) Our labor-saving machinery largely compensates for the higher wages we pay. (9) Our colonial possessions

furnish us splendid bases for commercial operations in the Pacific, where the race for supremacy is likely to be decided.

Our advantages thus seem to outweigh our disadvantages in the coming race for commercial supremacy, but we must certainly remove some of the more serious disadvantages if we would win the race. It is encouraging to note that important steps have already been taken toward the removal of some of them, but much remains to be done in this direction. It behooves us to bend every energy to the complete removal of these disadvantages, for the race will surely go to the strongest competitor.

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CHAPTER XXX

ENGLAND AND HER NEW RIVALRIES

353. Great Britain's relative position among the manufacturing nations of the world has been greatly altered during the present period. After having long held first rank she has recently been obliged to cede the palm of industrial supremacy to the United States, whose total annual product of manufactured goods now greatly exceeds hers. Ever since the revival of manufactures on the European continent after the close of the Napoleonic wars, the great disparity between the industrial production of Great Britain and that of other countries had been decreasing quite steadily, but during the present period, especially the last decade, her industrial supremacy has been more seriously undermined by the active competition of other countries, notably the United States and Germany. At the beginning of the period Great Britain produced about three fourths of the world's supply of coal and three fifths of its iron and steel; now she produces less than one third of the world's coal, less than one fourth of its iron, and only one fifth of its steel. The United States has jumped to the first place in the production of all these essential elements of industrial supremacy. The superiority of the United States in the iron and steel industries is now unquestioned; American iron and steel, and even some iron and steel manufactures, have recently been sold in British markets in competition with the home products. Similarly, the relative position of Great Britain in other industries has

been changed somewhat during the present period. It must not be inferred, however, from this relative change in England's position among the manufacturing nations of the world, that she is suffering an absolute industrial decline. British industries have not, for the most part, lost ground during the present period, but other countries have gained ground, because, acting under various impulses, they have begun to play their natural part in the world's production. England, in common with these other countries, has greatly increased her output of minerals and manufactured goods, though not nearly so rapidly as have a few other countries like the United States and Germany.

354. Some of the causes for the change in England's relative industrial position. First, it should be remembered that exceptional conditions led to her industrial supremacy. It could not be expected that these conditions would always remain, and just as soon as they were removed other countries were bound to become active competitors. In the second place, many special circumstances caused great industrial awakenings in the United States, Germany, Russia, Belgium, and other countries, so that they have been producing a rapidly increasing share of the world's supply of manufactured goods. Again, it seems quite certain that England's one-sided free-trade policy, whatever may be said about its general advantages, has tended to change her relative industrial position. By this policy she has allowed the products of other countries to enter her dominions practically free of duties, without securing reciprocal privileges. This policy has been almost equivalent to a bounty to protectionist countries, for it tended to confirm them in their policies. As a result of this, British capitalists have frequently found it more profitable to invest in foreign protected industries than in unprotected home manufactures, and have thus helped to build up great industrial rivals.

Another cause for the relative change in England's industrial position has been the relative decrease in her inventive ingenuity since the time of those revolutionary inventions that first gave her supremacy in the textile industries. During the present period American ingenuity, German research, and French dexterity have been contributing more than English inventors to the improvement of industrial machinery and methods.

355. While England has been losing her position as the world's workshop, she has been building up her capitalistic supremacy. Her capital has flowed out steadily into her colonies and nearly every country in the world. Consequently, she has become the world's creditor, and wields the power that accompanies capitalistic supremacy. Her capitalists own vast tracts of land and work farms in nearly every country of the world; they also control railroads, manufacturing plants, and mines in many of the most strategic places on every continent. In this way England keeps her cows in Australia, Canada, and Argentina; cultivates her wheat in Manitoba, the United States, and India; grows her cotton in the United States, India, and Egypt; spins it not only at home, but even in India, China, Egypt, and Mexico; makes her machinery in Germany and the United States. Thus, not only her many colonies, but the whole world, has become a part of her domain through the power of her capital. The total value of British investments abroad to-day is variously estimated at from ten to twenty-two billion dollars; probably an estimate midway between the two extremes would be nearly correct.

356. British agriculture, which had begun to decline before the close of the previous period, has continued to do so, except for a few years about the time of the Franco-Prussian War when the prices of agricultural products were

high. Since 1875 the prices of the leading grains produced in the United Kingdom have decreased greatly as a result of the competition of foreign grains, and this has injured British farmers quite seriously. Rents did not begin to decline quite so soon as prices, but they too began to fall after the very bad harvest of 1879; the gross rental of English and Welsh lands was about $253,000,000 in 1879 and only $168,000,000 in 1900. On the other hand, rents are still too high to enable the small farmers to make as much profit as they should. Some other important factors in the agricultural decline of England are (1) many bad harvests, (2) diseases among cattle and sheep, (3) heavy expenses incurred in fertilizing, (4) decreasing supply of agricultural laborers and the consequent increase in farm wages, (5) lack of governmental protection, (6) neglect of agricultural instruction, and (7) careless methods of farming in many places. There have been, however, a few signs of an agricultural revival during the past few years: (1) the increased yield of most crops since 1896; (2) the increase in the acreage of cultivated lands since that year; (3) the recent establishment of agricultural schools; (4) the recent decrease of rents in some places to a rate which is nearer a profitable basis for the farmer; (5) the increase in small holdings.

357. The means of communication and transportation. These have been still further improved and extended during the present period so that England's facilities of this sort are among the best in the world.

358. England's colonial empire has steadily increased in extent and wealth and has witnessed a remarkable commercial expansion throughout this period. The total area of the empire is now over 11,000,000 square miles, and the population nearly 400,000,000. The total foreign trade of the British colonies to-day, counting that with the

United Kingdom and the intercolonial trade, amounts to nearly $2,800,000,000. The commonwealth of Australia ranks first in the extent of its foreign commerce; British India, second; Canada, third; the Straits Settlements, fourth.

359. It is in Africa that England has made the most surprising territorial acquisitions during the present period. British control of African territory began with the acquisition of the Cape of Good Hope in 1796. This was restored to the Dutch in 1803, but reoccupied by the British in 1806; it was finally ceded to Great Britain in 1814, and then became the Cape Colony. In 1838 England also took possession of Natal, and at that time many of the Dutch settlers in Natal and Cape Colony "trekked" to the Transvaal (the territory across the Vaal). During the present period England has obtained control of vast tracts in various parts of Africa: Basutoland in 1871, Bechuanaland in 1884, Mashonaland and a large territory north of the Zambesi in 1890. These acquisitions form an almost continuous territory from the cape to the southern end of Lake Tanganyika, over two thousand miles long, which is now known as British South and Central Africa. Lying about two hundred miles north of that lake is British East Africa, which was acquired during the years 1886–1890. As England also practically controls the industrial, commercial, and financial life of Egypt and the Egyptian Sudan, her influence and control extends from the cape to Cairo, except within the Congo State and the narrow strip owned by Germany. On the western coast England controls Gambia, Sierra Leone, Lagos, Gold Coast, and the Niger territories. Altogether she controls about 2,800,000 square miles in Africa, exclusive of Egyptian territory, and her share of the Dark Continent is by far the most desirable portion. No one can estimate the commercial and

industrial benefits which England may derive from this vast region in the future.

360. Foreign trade. The increase in the foreign trade of the United Kingdom during the present period has been stupendous. The value of her total foreign commerce, including her forwarding trade, increased from about $2,600,000,000 in 1866 to nearly $4,300,000,000 in 1900. Furthermore, the increase in the volume and weight of British exports and imports has been about three times as great as their increase in value, owing to the general fall in prices. This fact should be borne in mind in comparing England's commercial expansion with that of her chief rivals, the United States and Germany, whose most rapid increases in foreign trade were made long after the greatest fall in prices had occurred. On the other hand, while England's foreign trade has expanded to enormous proportions, it has increased in value only about one third as fast during the present period as during the last decade of the previous period.

361. British imports have increased throughout this period much more rapidly than British exports of domestic products, and this has been especially true during the past eleven years. During the years 1890–1898 the exports of British products actually decreased from $1,282,500,000 to $1,136,000,000 annually; but by 1900 they had increased to $1,418,347,000, making a net gain of $135,847,000 during the eleven years 1890–1900. On the other hand, British imports made a net gain of over $500,000,000 during the same years. This large and increasing excess of imports over exports is a subject which is attracting much discussion to-day, and is considered by many as a cause for alarm on the part of Englishmen and a matter of congratulation on the part of England's rivals. The discussion of this subject has been tinctured with erroneous conceptions of the doctrine of

"trade balances." It is very important to bear in mind England's capitalistic supremacy in discussing her excess of imports over exports. As long as her capital is so extensively invested abroad she will necessarily import more than she exports. Much of her excess of imports over exports is simply a part of the interest and profits on her capital invested abroad. Another important factor in this excess is her large carrying business with other countries. Probably about $200,000,000 can fairly be deducted from this excess to make up for the foreign freight earnings of British vessel owners, who take a large part of these earnings in the form of imported goods rather than money.

362. Analysis of British foreign trade. Over one third of England's imports are food stuffs, nearly one third are raw materials for manufacture, and most of her exports are manufactured goods and coal. Over one fourth of England's trade is with her colonies; about one fifth is with the United States. A further analysis of England's trade with different countries during the present period reveals the following facts and tendencies: (1) British trade with the United States increased in value forty-six per cent during the thirty years 1869–1898; with the British colonies, twenty-six and three fifths per cent; with Europe, eleven and two fifths per cent; with all other countries combined, sixteen and one half per cent. (2) The imports of metals and minerals have increased about elevenfold during this period, and the exports of manufactured hardware have doubled. In this connection, however, it should be said that American and German hardware is in recent years competing seriously with English hardware in many markets. (3) Although the quantity of British textile exports has nearly doubled during the present period, their annual value has decreased about $38,000,000. (4) The per capita British importation of manufactured goods increased from

$3.75 in 1869 to $10.25 in 1899. (5) The imports from Germany, France, Holland, and Belgium are increasing very rapidly, while the exports to all these countries except Germany are declining. (6) England seems to be losing ground in her trade with most South American countries except Argentina. Her average annual trade with Argentina rose from $20,900,000 during the years 1869–1878 to $58,400,000 during the years 1889–1898, but her average trade with all the other South American countries decreased from $202,321,000 to $152,784,000 during the same interval. (7) British trade with China has decreased quite rapidly during the past twenty years. From 1869 to 1878 it averaged $108,534,000, but only $60,838,000 from 1889 to 1898. (8) The trade with the British East Indies (India, Ceylon, and the Straits Settlements) has decreased somewhat since 1888. During the years 1879–1888 it averaged $360,645,000, but only $348,964,000 during the years 1889–1898. (9) The trade with the British West Indies has decreased about forty per cent during the present period. (10) British trade with Canada has increased very rapidly during this period. (11) The average trade with Egypt decreased from $87,606,000 during the years 1869–1878 to $63,270,000 during the years 1889–1898. (12) The average trade with Japan increased from $12,167,500 to $26,768,500 during the same period. (13) There has been an enormous increase in British trade with Australasia and South Africa during the present period.

363. England's merchant marine and carrying trade is still vastly larger than that of any other country. She has considerably over one half of the total effective ocean tonnage and nearly seventy per cent of the effective ocean steamboat tonnage of the world. She has about 7700 ocean steamers, tonnage 11,300,000 tons, and over 8200 ocean sailing vessels, tonnage 2,900,000 tons. A very large

share of the world's ocean and sea trade is carried in British ships. Moreover, she builds more ships than any other country in the world, sometimes over 1,000,000 tons yearly, mostly steamboats. She builds ships not only for herself, but fills many foreign orders.

364. Summary of England's present commercial condition. By many persons the slower relative increase in England's foreign commerce during the present period, especially during the past decade, as compared with that of the previous period, the actual decrease of her trade in some markets, the increasing excess of her imports over her exports, and the much more rapid commercial expansion of the United States and Germany, are taken as a basis for an argument that British foreign trade is in a state of chronic decline. It scarcely seems, however, upon careful consideration, that these conclusions are justified. We have seen that the excess of imports is not necessarily a danger, and is explained by certain circumstances that are really quite favorable, viz., by England's capitalistic supremacy and extensive carrying trade. We have also seen that while her trade is decreasing in some markets, it is still gaining very rapidly in others. Although her total foreign commerce has not increased in value as rapidly during the present period as formerly, it has nevertheless, on the whole, made remarkable progress; and if we should consider the increase in the volume and bulk of her trade, rather than its value, we should probably conclude that she has really made nearly, or quite, as rapid progress as during any previous period of like length. Furthermore, the great increase in both her imports and exports during the years 1899 and 1900 has done much to overcome arguments of "an early decline to the condition of a second-rate power." Certainly the increase of $252,000,000 in her exports, and of $197,000,000 in her imports, during those two years, does not

tend to convince one that her commerce is declining. On the other hand, we should remember that England could scarcely be expected to permanently maintain so rapid a rate of increase in her trade as she made during the last decade of the previous period, nor so rapid a rate as that of countries like the United States and Germany, whose commerce has just begun to expand in recent years. These and some other countries have inevitably cut into British trade quite deeply in some markets with their competition; but it can scarcely be maintained that their commercial expansion as a whole has, thus far at least, been seriously detrimental to that of England. Their rapid increases in recent years simply mean that they have suddenly pushed their foreign trade into the front rank from the comparatively insignificant position which it occupied forty years ago, and their increases in trade have been made by getting their naturally large share of the general commercial expansion of the world, rather than by cutting deeply into British trade as a whole. Furthermore, those who argue that England's commerce is in a state of decline, too frequently assume that other countries, like the United States and Germany, will continue indefinitely to increase their trade as rapidly as they have during the past few years; but this assumption is highly improbable for very many reasons. To sum up, then, the real commercial situation of England to-day: she already has by far the largest commerce of any country in the world; her merchant marine and war navy is absolutely supreme; her capitalists rule the industries of many countries, even those of some of her great rivals. Her commerce, on the whole, is increasing steadily and keeping pace with the commercial expansion of the world, and seems likely to continue to do so, at least for many years to come. At the same time, great rival nations are beginning to compete seriously with her; their trade, too, will

undoubtedly continue to expand, but probably more slowly in the future than during the past few exceptional years; they, too, will meet with many checks and reverses, as England has already done. All these great nations, therefore, will soon settle down to a long, steady race for final supremacy, the outcome of which it is as yet impossible to predict, because each has decided advantages over the others, and is at the same time handicapped in various ways by natural limitations and the advantages enjoyed by the others. At any rate, it may be said confidently that the struggle between England and her rivals for the world's markets is sure to become more and more intense.

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CHAPTER XXXI

THE NEW GERMAN EMPIRE

365. The Franco-Prussian War heralded a new era in the economic as well as the political history of Germany. That great struggle not only crystallized German nationality but its successful termination brought a sudden and complete industrial and commercial awakening, which scarcely has any parallel in the history of the world, unless it be the case of the United States after the Civil War. The sweeping victories won by his armies in France made the ruler of the new German empire begin to dream of greatness for his people; the "Iron Chancellor" not only dreamed but acted as no other man in the world had dreamed and acted since the exile of Napoleon; and the German people readily followed their new leaders. For a time the military spirit aroused by the war remained dominant, but gradually there was grafted on to the old Prussian military ambition a new spirit of industrial and commercial activity. After many centuries of patient plodding Germany suddenly came forth as one of the few great industrial and commercial powers of the world; her career during the present period has been one of industrial and commercial rather than military conquest.

366. The German protectionist policy. For a few years after the Franco-Prussian War Bismarck allowed the free traders to control the imperial government, but this policy let in a flood of English goods, and the newly founded

German industries could not stand the competition. Soon business failures occurred, factories were stopped, and warehouses closed, causing much loss to both capitalists and wage earners. Thereupon Bismarck, forced by the clamors of the manufacturers and their employees, turned protectionist. In a speech to the Reichstag he said: "One thing is clear, that through the widely opened doors of the import trade the German market has become a mere storage space for the overproduction of other countries. We must, therefore, shut our gates and take care that the German market, which is now being monopolized by foreign wares, shall be reserved for native industry." Accordingly, in 1878 a highly protective tariff was promptly passed, and still more stringent ones followed in 1881 and 1885. Nearly everything except raw materials for manufactures was subjected to high import duties by these laws. Several commercial treaties subsequently corrected the excesses of this protective system, but Germany in recent years shows signs of increasing rather than diminishing her duties upon imports, especially those coming from her greatest rivals. In 1901, for example, she increased her duties on meat, animals, corn, wheat, rye, oats, barley, rice, flour, machinery, locomotives, tobacco, petroleum, hard woods, and numerous other agricultural products and manufactures. This law was evidently intended as a blow against Germany's greatest rivals, England and the United States, especially the latter; as far as the United States is concerned it may be considered as a retaliation against the Dingley Tariff of 1897, which tended to check German exportation to this country of such articles as silks, woolens, iron, and cutlery. Taken as a whole, the German protectionist policy, in spite of some excesses, has been a very important factor in the remarkable industrial development of that empire during the present period.

367. We should also note some other important factors in Germany's recent industrial revolution. For one thing, her population has increased very rapidly since the Franco-Prussian War; in 1870 it was about thirty-nine million, to-day it is about fifty-seven million. This increase in population has not only furnished a large supply of labor at low wages, but it has also created an enormous new demand for manufactured goods, most of which has been fed by German industry rather than by importation. Of course we should remember that this increase of population is a result, as well as a cause, of the new industrial development. In the second place, the soil of Germany is no longer sufficient to support her rapidly increasing population; hence more of her people are compelled to find their support in mining, manufactures, and commerce, or to emigrate to new countries and colonies, where they help create a demand for German goods. Thirdly, there is no doubt that political unity has aided greatly the development of German agriculture, manufactures, commerce, and banking. Fourthly, we should note the many applications of science to industry which have either been made by Germans or shrewdly taken advantage of by them. The Germans have been especially skillful in the application of chemistry to manufactures. For example, more than eight hundred patents relative to products of tar were taken out in Germany from 1877 to 1890. Germans have also been especially skillful in making electrical applications, and during the past fifteen years they have filled many orders for their apparatus in all parts of the world. In this line, however, their work has not been so original as in some others; they have rather bought up patents made in other countries and profited by them. Another fact worth noting is that the German manufacturers generally are alert and employ the newest machines and processes.

They have a practical way of doing business, ship goods in attractive packages, quote their prices in the money and weight system of the countries which purchase their wares, make their prices include packing and freight, and conduct their correspondence in the language of the purchaser; all this attention to details has undoubtedly aided them in disposing of their goods. Furthermore, the monetary reform of 1873 and the adoption of the gold standard probably fostered the growth of German industry and commerce by preventing the dangers from the depreciation of silver. The establishment of the Imperial Bank in 1876 and the growth of banking were also important factors in the German industrial revolution.

368. Germany's splendid transportation and shipping facilities have greatly aided in the development of her industries and commerce. The four great river systems of the Rhine, Elbe, Oder, and Vistula, the secondary rivers like the Ems, Weser, and Niemen, and their tributaries, together with the many canals connecting them, form a most magnificent system of waterways. The imperial government and the various state and city governments have taken great interest in building new canals and in deepening old ones, as well as various rivers, so that now all of the above rivers are quite well connected into one system. Thus goods unloaded at the German ports can be shipped quite readily to all parts of the empire by the cheapest of all forms of transportation. Not only have the various German rivers been thus improved and connected, but the Main-Rhine river system has been joined to the Danube by the Ludwig Canal. Canals now being dug will, when completed, connect the Danube, Oder, Moldau, and Elbe, making a continuous waterway nearly two thousand miles long between the Black Sea and the Baltic and North Sea ports of Germany. The completion of the Kaiser Wilhelm Canal

in 1895 was another important fact in the commercial history of Germany; although originally constructed for naval and military purposes, this canal has contributed much to Germany's economic development and has released her from commercial subjection to Denmark. It requires only thirteen hours to go through this canal, a saving of about forty hours from the Baltic ports to Hamburg and twenty-two hours from those ports to London. Another canal connecting the North Sea and the Baltic by way of the rivers Elbe and Trave was opened in June, 1900. Germany has also made great progress during the present period in the development of railroad transportation. The government is the proprietor of most of the railroads and has taken great pains in constructing them wherever advantages were apparent. Both freight and passenger rates are quite low. Furthermore, German railroad and water transportation are so managed as to supplement, rather than rival, one another. Her postal, telegraphic, and telephonic communications have also been developed extensively during this period.

369. The present industrial and commercial position of Germany. Germany still makes the most of her agricultural and pastoral resources, which, on the whole, yield her increasingly large returns. She produces more potatoes than any other country, and even exports some. Rye is her most important grain, the crop being more than twice that of wheat. The sugar beet is one of her most important agricultural products. Among European countries Germany is excelled only by Russia in the number of cattle reared, and she exports large quantities of dairy products. She also raises large numbers of hogs, horses, and sheep, and large quantities of wheat, barley, oats, buckwheat, grapes, wines, tobacco, wool, flax, hemp, and hops. In spite of her large agricultural and pastoral production, however,

Germany is obliged to import annually about forty-five million dollars' worth of wheat and large amounts of other foods and raw materials. In fact, during the present period Germany has moved completely past her former position as an agricultural nation and become chiefly industrial and commercial. Her rural population has steadily decreased since 1876; in 1871 it was sixty-eight per cent of the total population; by 1894 it had decreased to fifty-five per cent; to-day it is less than half. It would be difficult to describe how rapidly and universally factories have been built, cities enlarged, rebuilt, and many of them beautified. Thirty years ago the towns of the coal regions were mere villages; to-day such cities as Barmen-Elberfeld, Krefeld, Dortmund, Essen, and Solingen have populations ranging from one hundred to two hundred thousand. Krefeld rivals Lyons in silk manufactures; Barmen-Elberfeld has many large cotton, woolen, and silk factories, and has been called "the German Manchester"; Solingen is the "Continental Sheffield"; Dortmund contains many large breweries, blast furnaces, and vast shops for the construction of railroad materials. These few illustrations are only typical of the rapid recent industrial growth of Germany. To-day she ranks third among the great manufacturing nations. During the past fifteen years her importation of manufactured goods has decreased quite steadily, and she now imports little except foods and raw materials. On the other hand, her exportation of manufactured goods has increased very rapidly during the same period, and she to-day exports chiefly manufactured products. Thus her industries have not only supplied the wants of her rapidly increasing population, but other markets have also felt the increased output of her factories. This tendency is further shown by the fact that she has increased her imports only from countries supplying her with food and raw materials, the

largest increase being from the United States, and the next largest from Russia. She imports less and less from Great Britain, Belgium, France, Austria-Hungary, and Switzerland, and has turned squarely round and begun to export to them her manufactured goods.

The largest German industry is that of iron and steel and their various manufactures; it employs the largest number of workmen and turns out the most valuable product. The most important seats of this industry are in Prussia, Saxony, Alsace-Lorraine, Bavaria, and Thuringia. In 1898 the total value of the German foundry products of all kinds was about $150,000,000. The textile industry is second in importance, and exports more products than any other. Saxony is still the chief seat of woolen manufactures, partly on account of her supply of fine wools; but various provinces of Prussia also manufacture woolens. Rhineland, Westphalia, Alsace-Lorraine, Baden, and Würtemberg are the great cotton manufacturing districts; Silesia and Westphalia are the chief linen producers; Rhineland, Alsace, and Baden contain the most of the silk factories. The total product of the German textile industries increased from 60,800 tons of manufactured goods in 1870 to 166,250 tons in 1895, and there has been a further increase since 1895. The value of the textile exports in 1899 was about $250,000,000. But while these industries are very large, they have not been uniformly prosperous during the present period, as there have been great fluctuations in the profits and some serious losses. The Germans have developed the manufacture of beet sugar very rapidly during the present period, so that they are now by far the largest producers of this important article, about one fifth of the world's sugar being produced by them. Germany's chemical and pharmaceutical products are very valuable, and are still in great demand. She

produces nearly three fourths of the European output of coal-tar derivatives, — dyes, perfumes, saccharin, explosives, febrifuges, etc. The manufacture of soda has also been developed to a remarkable extent during the present period. The beer product increased from 423,000,000 gallons in 1870 to nearly 900,000,000 in 1895. The alcohol product in 1898 was nearly 84,000,000 gallons. The manufacture of leather and leather goods is a very important industry. Leipzig turns out an enormous quantity of surgical instruments. The German porcelain, pottery, glass, paper, book-making, and wooden-ware industries are also very important.

German mining has made remarkable progress since the Franco-Prussian War. In 1871 only 8,000,000 tons of coal, 27,500,000 tons of lignite, and 1,500,000 tons of pig iron were produced; by 1899 these figures had increased to 102,000,000, 34,000,000, and over 8,000,000, respectively. Germany has developed the production of other minerals during this period. The total value of her mineral output increased from about $95,000,000 in 1871 to $263,000,000 in 1899. The chief causes for this rapid development of her mineral resources were (1) cheap transportation, (2) excellent mining methods, (3) fairly low wages, and (4) protective tariffs.

Corresponding to her industrial development Germany has witnessed a rapid expansion of her foreign commerce since the Franco-Prussian War, especially since 1894. To-day she ranks second among the great commercial nations of the world. Her increase of imports has been due chiefly to her larger demand for foods, raw materials, and half-manufactured goods; her increase of exports has been due to her larger foreign sales of manufactured goods, — hardware, machinery, agricultural implements, cutlery, instruments, apparatus, chemicals, drugs, leather,

and textiles. Her trade is now chiefly with Great Britain, North and Central America, Austria-Hungary, Russia, South America, the Netherlands, Tunis, Switzerland, and Belgium.

370. German shipping and shipbuilding. Not long ago the German emperor said, "Germany's future is on the sea," and judging by the progress made in shipping and shipbuilding it certainly looks as if that future would be a great one. At the close of the Franco-Prussian War the German marine engaged in foreign trade numbered only five hundred vessels; to-day the effective sea and ocean tonnage of Germany ranks next to that of Great Britain, and the two largest merchant fleets in the world are sailed under the German flag. Of these two the North German Lloyd is the larger. This company made its first voyage to America in 1858, and it now has four independent services to New York. On the average it carries more passengers and freight than any other company plying between Europe and America. It has numerous lines connecting with England, Brazil, Argentina, Australia, and other countries in the Far East. Other German companies are steadily increasing the number and effectiveness of their vessels, and are sending them into every sea and ocean on the globe. At the beginning of the present period Germany was dependent upon Great Britain for most of her merchant vessels; now she ranks next to that country in shipbuilding. She not only builds most of her own vessels, but fills orders for many foreign countries. The great shipyards at Stettin, Hamburg, Bremen, Danzig, and Kiel launch many large vessels each year, which go forth upon every sea. These yards build some of the largest and most magnificent ships afloat. Foreign countries now send to them even to have war vessels built; in 1898 twenty-two foreign battle ships were being built in them.

The new naval bills of 1898 and 1900 gave a still further stimulus to German shipbuilding.

371. "New Germany." Central Europe was for a long time debarred from entering vigorously into the work of distant colonization by her geographical situation and the political conditions prevailing there. Furthermore, Bismarck was at first opposed to colonization, but national impulse at last forced him to adopt a colonial policy. After the establishment of the empire, German merchants began to search eagerly for trade in various new countries, and in 1879 the African Association opened the Congo valley. It was not until 1884, however, that Germany entered actively into the colonization movement in the Dark Continent and Oceania. The leading motives in this colonization were (1) an outlet for German manufactures, (2) a source of supply for raw materials, and (3) a home for German emigrants. The conflicting claims of various European nations in Africa led to a great conference at Berlin in 1885, which, together with succeeding treaties, settled the German share in the partition of that continent. Her share to-day embraces about 930,000 square miles (mostly acquired in 1884–1890), containing a population of about 15,000,000. Thus far, however, German colonization in Africa has not been very successful. German officials are not very skillful in dealing with the natives; the regions colonized are poorly adapted for European settlements, and consequently there has been little emigration from Germany. The total trade of the German African possessions is only $11,000,000. Togoland is about the only self-supporting German colony in Africa. The whole interior of German East Africa lies almost stagnant from neglect, and the caravan routes formerly used by the Arabs are almost deserted. Along the coasts the Germans have tried a few plantations, and some say that Kamerun and the coast region of East

Africa are developing steadily under German rule. On the whole, however, Germany has not been nearly so successful in Africa as Great Britain. In the Pacific she has recently (1885–1899) acquired a number of small islands, the most important of which are Kaiser Wilhelm's Land, the Bismarck Archipelago, the Solomon Islands, and the Samoan Islands. In 1897 she acquired from China the bay of Kiau-Chau and two thousand square miles of its coast.

Vastly more important than the colonies and protectorates are the German settlements made in various other parts of the world. The fact that most of the colonies are poorly adapted for settlement by Europeans has led large numbers of Germans to push into Brazil, Argentina, Central America, Mexico, Syria, Asia Minor, China, and other parts of the Far East. In all these countries German merchants are actively at work developing industries, creating a source of supply for raw materials and an outlet for German manufactures. In Asia Minor, for example, the network of German influence is gradually being completed by the establishment of banks, railroads, and other industrial enterprises. German contractors obtained concessions for the great Bagdad Railroad, where the English and Russians failed. This proposed railroad is to be an extension of the German Anatolian system, starting from Constantinople across Asia Minor to Bagdad, terminating at Basra on the Persian Gulf. By building this and other railroads, and by other enterprises in that region, the Germans hope to be so strongly intrenched commercially that they will exert the controlling influence at this "ancient cross-roads of three continents," which will acquire new importance when Africa is opened by the Cape to Cairo Railway, and when the great southern trans-Asiatic line across India from Alexandria to Shanghai shall be completed. Considerable progress is also being made in the

Far East. In 1899 Germany's trade with Asia, exclusive of British India and Turkish Asia, was nearly $46,000,000. But her greatest gain in the Far East has been in Australia. England's own colony, the trade increasing from about $4,000,000 in 1885 to nearly $33,000,000 in 1899. A very large part of this German trade with the Far East is carried on in German vessels, the tonnage of such vessels having been trebled since 1886. German influence is growing at quite as rapid a rate in Argentina, Brazil, Central America, and Mexico. German banks, warehouses, and plantations are becoming more and more common in all those countries, and German ships and traders absorb a larger and larger part of their trade. What will be the outcome of Germany's vast ambitions for territorial, industrial, and commercial expansion no one dares predict with confidence, but it is quite certain that in these ambitions will center many of the most important chapters in the history of the twentieth century.

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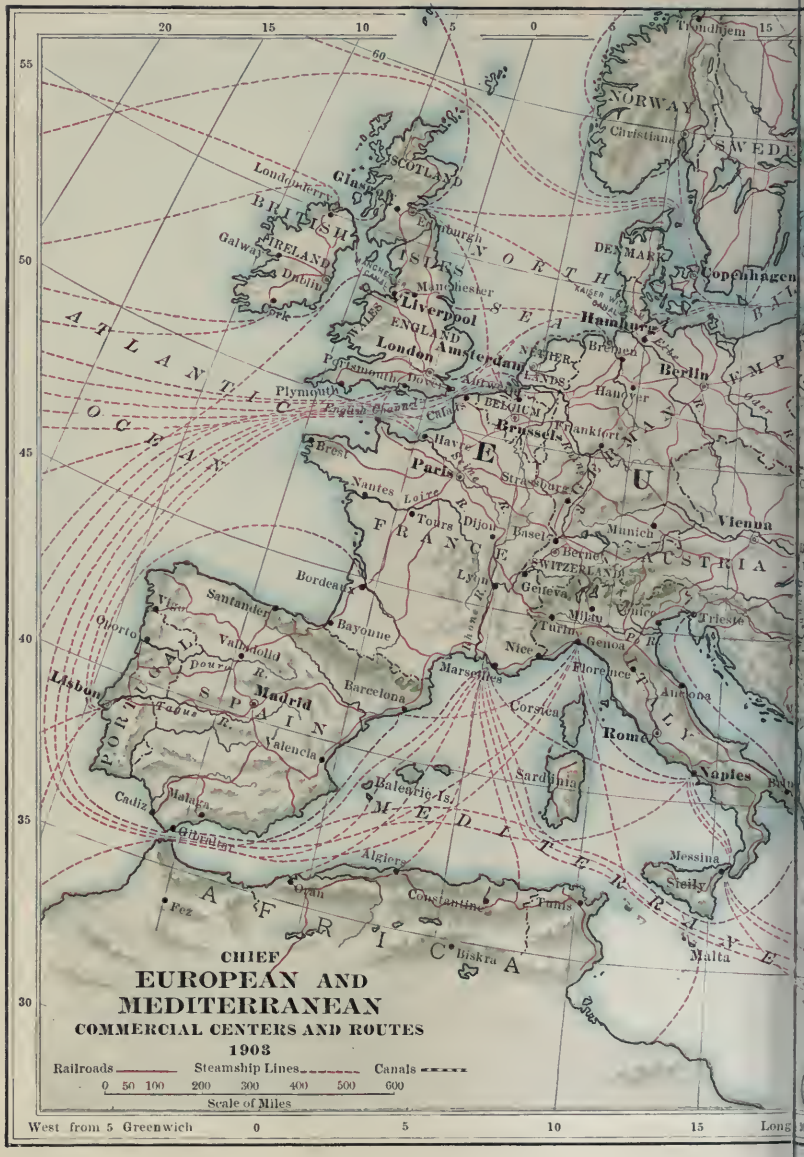
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10
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NORTH SEA
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BRITISH ISLES
SCOTLAND
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FRANCE
SPAIN
PORTUGAL
NORWAY
SWEDEN
DENMARK
GERMANY
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Liverpool
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Edinburgh
Glasgow
Londonderry
Galway
Dublin
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Plymouth
Portsmouth
Dover
Calais
Brussels
Antwerp
Hanover
Frankfort
Havre
Brest
Paris
Strasburg
Nantes
Loire R.
Tours
Dijon
Basel
Munich
Vienna
Berne
Geneva
Lyon
Bordeaux
Rhone R.
Milan
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Nice
Trieste
Venice
Florence
Ancona
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Marseilles
Corsica
Sardinia
Balearic Is.
Barcelona
Bayonne
Santander
Vigo
Oporto
Valladolid
Douro R.
Madrid
Tagus R.
Lisbon
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Malaga
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Algiers
Oran
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Messina
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Perm
Ekaterinburg
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Kama R.
Nijni Novgorod
Riga
Moscow
Samara
Orenburg
Libau
Dunaburg
Dwina R.
Smolensk
Tambov
Saratov
Ural R.
Konigsberg
Orel
RUSSIA
Kiev
Kharkov
Tzaritzin
Volga R.
Dniester R.
Dnieper R.
Rostov
Don R.
Astrakhan
CASPIAN SEA
Nikolaiev
Sea of Azov
Odessa
Galatz
Sebastopol
Kutais
Tiflis
BLACK SEA
Bucharest
Varna
Batum
Sofia
Adrianople
Constantinople
Salonica
Enos
Smyrna
Athens
Tigris R.
Euphrates R.
Crete
Cyprus
Beirut
Damascus
Jerusalem
Port Said
Alexandria
Suez Canal
Suez
Cairo
East from Greenwich

CHAPTER XXXII

THE REMAINDER OF EUROPE DURING THE AGE OF ELECTRICITY

372. France. Although suffering in many ways from the losses inflicted during the Franco-Prussian War, France recovered with a rapidity that astonished the world. Her army and navy were promptly reorganized, and it was not long before she was again a power to be dreaded. The government interested itself in improving the economic condition of the country with good results. France undoubtedly owed her rapid recovery chiefly to her splendid agricultural resources and the energy and thrift of her farmers, who had not yet begun to feel the stress of foreign competition; but no sooner had she recovered fairly well from the effects of the war than she was afflicted with a serious epidemic in her vineyards, which greatly reduced her production of wine, and this has only recently tended to reach its normal level. To add to the distress caused by this "vineyard crisis," her farmers about the same time began to suffer from the foreign competition in grains; France now finds herself outstripped in her agriculture by the United States and Russia, and is obliged to import considerable quantities of grains, wool, cattle, and other agricultural products. This relative decline of her agriculture has affected not only her farmers, but her manufacturers and merchants have also felt the effects of the restricted consumption of their goods. In spite of all obstacles, however, French manufactures have developed

quite rapidly during most of the present period. France, however, excels in the quality rather than in the quantity of her manufactures, for she is far surpassed in the latter respect by the United States, Great Britain, and Germany. Early in the present period France again resorted to the policy of protection. Many of the duties imposed by the new tariffs were so high as to be practically prohibitive, while those on some articles, especially raw materials, were quite low, some important raw materials being altogether exempted from duties. Although these new tariffs again committed France quite thoroughly to a protectionist policy, it was very noticeable that they imposed the highest duties on the products of those countries that closed their ports against French products, and the lowest upon the products of those that did not. In other words, these tariffs were constructed on the double basis of retaliation and reciprocity.

At the beginning of the Age of Electricity France ranked second among the great commercial nations of the world, but she is now surpassed by the United States and Germany, as well as by England. She has ceased to be a really great competitor in the world trade. The main reason for this is that she excels in industries requiring manual skill, rather than in the production of large quantities of cheap commodities for which there is the largest demand in the present world trade. But while France has descended from second to fourth rank, her foreign trade has increased considerably during the present period, though subject to some fluctuations. At the same time there has been a marked decadence of the French merchant marine throughout this period. Foreign competition has gradually forced many French vessels from the seas, and foreign vessels are now more numerous in the ports of France than her own. In some seas the French

marine has altogether disappeared. There has been not only a very rapid relative decline as compared with other nations, but also an absolute decline in the effective marine. On the other hand, the growth of the war navy of France during the present period stands out in striking contrast to the decadence of her merchant navy; with but few fluctuations there has been a progressive increase in her naval expenditures ever since the Franco-Prussian War, and her war navy to-day ranks second among the great navies of the world.

Quite early in the present period France began to seek compensation for the disgraces and losses of the Franco-Prussian War in a new colonial expansion. The French African domain has been increased steadily both by exploration and by conquest. France, it is true, has lost her former influential position in Egypt, but Algeria has been better developed, and Tunis placed under a French protectorate. French domination in Indo-China has been extended to Tongking, Laos, and Annam, and the ancient French rights in Madagascar have been again asserted. In Asia and Africa alone France acquired over 1,000,000 square miles of territory and over 32,000,000 inhabitants between 1882 and 1898. Her total colonial domain now embraces about 4,400,000 square miles, inhabited by nearly 56,000,000 people. In spite of the enormous extent of their colonial domain, however, the French have never yet proved good colonizers. Their colonial policy has been bold, ambitious, and brilliant during its most active periods, but never solid, and always hampered by excessive paternal control. The French people themselves do not emigrate to their colonies, and they have not yet developed them to any extent; even Algeria, after seventy years of French occupation, is still poorly developed, although full of resources and advantageously located. One sometimes wonders if France

is not attempting too much in endeavoring to be a great colonial and naval power, while playing a leading part on the European continent. Be this true or not, however, France now possesses a colonial domain of vast commercial importance and capable of great future development.

373. Russia. One of the most striking characteristics of the present period has been the restless aggressiveness of Russia in her economic development, as well as in her territorial expansion and political policy. Between 1865 and 1884 she annexed or subdued large tracts of territory in central Asia, and more recently has acquired the province of Kwangtung, containing the important ports, Port Arthur and Dalny (Talien-wan); this, together with Siberia, gives her a total area of about 8,700,000 square miles, containing a population of about 130,000,000. Much of this vast empire is almost useless as a habitation for man, but after making all allowances for waste lands there remain vast stretches of territory filled with rich agricultural, forest, and mineral resources. The Russian pioneer is to-day encountering much the same difficulties as did our western frontiersman fifty years ago; a like transformation may be expected when the projected railroads and other developments have been completed. Russia has already done much towards developing means of transportation and communication, especially during the past fifteen years; the greatest undertaking of this kind during the present period has been the Trans-Siberian Railroad, now completed as far as Stretensk, whence Amur steamers are used to the Ussuri River, connecting there with trains for Vladivostok. Russia's railroads are supplemented by a magnificent system of river and canal routes. In spite of the ignorance and poverty of most of her peasants, the inferior farm machinery, the insufficient use of fertilizers, the poor methods of cultivation, and the liability to frosts

and severe droughts, Russia's present agricultural production is enormous; she produces more flax, hemp, rye, barley, and oats than any other country, and is excelled only by the United States in the production of wheat; she ranks fourth among the sugar-beet countries; she is one of Europe's largest growers of tobacco, and also produces large quantities of potatoes, hay, linseed beans, wool, cotton, fruits, and wines, large numbers of hogs, horses, cattle, and sheep, and considerable rice, silk, and tea. She has about ninety agricultural schools and many experimental farms under governmental direction, and great progress is being made towards more scientific farming; when further progress has been made, and all of her available land brought under cultivation, her agricultural product will be incalculably greater.

Although still mainly an agricultural nation, Russia has developed manufactures and mining quite extensively during the present period. She does not yet seek, to any extent, foreign markets for her wares; but she aims to become industrially independent, is meeting more and more of the demands of her own vast population, and is exporting some manufactured goods to oriental countries. At the beginning of this period the total value of her most important manufactures was only $165,000,000 annually; to-day the annual product of her larger factories alone is worth over $1,500,000,000. Russia now ranks first in the production of petroleum and distilled spirits, third in the production of cotton yarn and gold, fourth in the production of iron and beet sugar, and fifth as a steel producer; about ninety-five per cent of the world's supply of platinum comes from the Urals; her flouring industry has made much progress during the past twelve years; she also manufactures very successfully, and in quite large quantities, fine grades of woolens, linens, silks, velvets, leather,

glassware, potteries, cutlery, hardware, machinery and implements, guns and other arms, wooden ware, soap, candles, beer, and other articles, and produces considerable quantities of silver, quicksilver, tin, cobalt, copper, graphite, coal, zinc, manganese, alum, and sulphur. Russia still clings quite tenaciously to a highly protective tariff. The concessions made in her tariffs of 1857, 1867, and 1869 had in view only the opening of western Europe to her agricultural products and the securing of foreign capital with which to build her railroads. Even those tariffs were quite protective, and in 1876, after her railroad system was pretty well advanced, she relevied practically the same duties that formerly prevailed, and the tendency since then has been to raise rather than lower the rates, so that the average duty on imports to-day is about thirty-five per cent. The Russian government not only levies high protective duties, but supervises industry and commerce quite minutely through its Ministry of Manufactures and Trades.

Russia's commercial development has not been nearly so marked during the present period as her industrial development, yet her foreign trade has more than doubled. Her exports have fluctuated a good deal on account of the varying size of her crops; her imports have fluctuated much less, and, on the whole, have increased quite steadily in spite of her decreasing dependence upon foreigners for manufactured goods, this increase being due chiefly to her growing demand for raw materials. The Russian merchant marine is as yet comparatively insignificant. Thus far her maritime opportunities have been few and her port facilities very poor, and this has seriously hindered the development of a merchant marine. When the Trans-Siberian Railroad is completed to Port Arthur and Dalny we may expect a great increase in the Russian merchant

marine. On the other hand, Russia has steadily enlarged and improved her war navy during the present period until it now ranks third among the great navies of the world. This remarkable naval development of Russia, coupled with that of her supposed ally, France, is regarded by many as a very suspicious symptom; the creation of these two powerful navies may have a tremendous significance in the commercial and industrial development of the future.

374. Holland, although she has long since lost her industrial, commercial, and financial supremacy, still holds no mean rank among the commercial nations of the world. She, perhaps more than any other nation, is forced by nature and other circumstances to depend chiefly upon foreign commerce and shipping for her support. Some of the provinces of the Netherlands still carry on quite successfully refineries, distilleries, tanneries, shipbuilding, diamond cutting, candle making, cigar making, and some textile manufactures; but the loss of political power, the absence of coal and other mineral resources, and the high price of labor have checked their industrial development during the present period. This industrial decline, however, has only tended to make the Dutch more active in their commercial enterprises, and has at the same time stimulated cattle raising and some agricultural pursuits. The amount of dairy and agricultural produce that this little nation grows on her seagirt farms is simply astonishing and a great credit to her perseverance and indomitable energy. The free arrival of butter, cattle, and meat from Australia and New Zealand in the markets of Holland, Belgium, and England has, it is true, tended to check Dutch cattle raising, but it is nevertheless their most important home industry. They not only supply themselves with meat and dairy products, but also ship large

quantities to neighboring countries, especially butter and cheese; they also make large quantities of oleomargarine, both for home use and export. The competition of American and other foreign grains has also injured Dutch farmers somewhat during this period, but they still grow very large amounts of rye and oats, and considerable wheat, barley, and buckwheat. Holland ranks sixth among the beet-sugar countries, and grows immense quantities of flowers, also potatoes and other vegetables, both for home use and neighboring markets. Thus, although she is obliged to import a large amount of food, her pastoral and agricultural industries furnish considerable home produce for export. Her fisheries remain very important, and furnish another basis for foreign commerce. Holland's colonies, however, and their characteristic products, furnish the chief basis for her extensive foreign commerce. She has preserved a flourishing trade with them, and they send to her for consumption and reshipment about four fifths of their products, receiving in exchange large quantities of her cottons and other goods, manufactured at home or imported for them. Holland has also derived great commercial advantages in this period from her excellent geographical situation and means of transportation. Her railroad system is inferior to that of most European countries, but it is sufficiently developed to aid her materially in developing an extensive transit trade, while her numerous canals, rivers, and hard roads have compensated for whatever deficiencies exist in her railroad system. The fact that the lower portions of the Rhine, Meuse, and Scheldt run through Holland has given her practical control of the very important transit trade emanating from the great industrial centers along those rivers. Rotterdam's situation on the lower Rhine, together with her great harbor and canal improvements, has enabled her to attract about two thirds

of the German transit trade by way of that river; Amsterdam has secured the other third through her river and canal connection with the Rhine and the completion of the North Holland ship canal (1877). Similarly, the improvements in the lower Maas and the connections established between the waterways of Holland and Belgium have enabled these two cities to attract a large transit trade from the industrial centers of Belgium and Luxemburg. Another factor in the commercial growth of Holland during this period has been her continued policy of free trade; her dependence upon foreign trade and shipping has led her to oppose steadily the adoption of a protectionist policy, although it has been strongly advocated by some of her people.

375. Belgium has witnessed a remarkable industrial and commercial development during the present period, considering the small size of the country. Her agriculture is more advanced than formerly, but does not supply her own wants, and she is chiefly a manufacturing nation. Blessed with an abundance of coal, a large number of industrious laborers who work for low wages, with iron at hand, and with light taxes and military burdens, her bold and enterprising manufacturers have pushed her industries into the very front rank, and their products have worked their way into nearly all the markets of the world. Belgian capital has also gone out to exploit undeveloped resources in various foreign countries. The pressure of foreign tariffs and competition led Belgium to enter the protectionist fold quite early, and also served as a stimulus to her industries; but the rivalry of Dutch ports and the German ports on the North Sea has made it necessary for her to exercise great care in levying her duties. Under these varied stimuli, Belgium has developed her industries to such an extent that she manufactures more goods per capita than

any other nation of continental Europe. While Belgium is essentially a manufacturing nation, several circumstances have favored the growth of her foreign commerce during this period. In the first place, while political events culminating in the Franco-Prussian War were undermining French influence in Europe, Belgium was attracting much trade to Antwerp by liberal tariffs, great public works, the deepening of the Scheldt, numerous canals, and a splendid system of railroads. A large part of French exports went by rail to her docks for shipment, and a large manufacturing region in northeastern France was fed by her merchants. Belgian manufacturers also found in France a valuable outlet for their goods. Then, too, the opening of the St. Gothard Railroad tended to give Belgium the transportation of large quantities of merchandise from her own factories and those of other northern countries destined for the Orient by way of Italy. In another direction she developed an extensive railroad and river trade with Germany. The Congo region also has recently furnished her another fruitful resource and outlet. As a result of these and other circumstances Belgian commerce has grown steadily during the entire period.

376. Austria-Hungary. The two parts of the dualistic monarchy created by the constitution of 1867 were at first inclined to move in separate industrial and commercial paths. Hungary was almost entirely agricultural, and chiefly anxious for freedom to export her grain and beasts; Austria, being much more industrial, desired a return to the protective system, which, since 1866, had been undermined by commercial treaties with England, Germany, France, and other countries. Gradually, however, during the present period, the federative bond has been drawn closer: a customs union was formed into which Istria, Dalmatia, and the occupied provinces of Bosnia and Herzegovina were forced; the commercial privileges of Fiume

and Trieste were equalized; the Austrian Lloyd became the Austro-Hungarian Lloyd; the Austrian Bank (created 1816) became the Austro-Hungarian Bank. After the Russo-Turkish War (1876–1878), when the Slavic element in the population was reënforced by the occupation of Bosnia and Herzegovina, Hungary became somewhat less jealous of Austria. This fact, together with other circumstances, made Hungary less hostile to protectionism, and in 1878 common duties were levied along the entire frontier. The Russo-Turkish War also marks the beginning of another important tendency. Having been chased from power in Italy and Germany without any hope of returning, Austria now hurled herself again towards the East, not only by occupying Bosnia and Herzegovina, but also by developing more actively her commercial relations in that direction. Hungary prospered greatly under the new régime; her agriculture continued to thrive, her mines were active, and a few important manufactures were founded. Austria was quite seriously affected by the panic of 1873, but she gradually recovered, and after the tariff of 1878 developed her manufactures quite successfully, especially in Bohemia, Moravia, Styria, and the duchy of Austria. Although Austria is still much more industrial than Hungary, agriculture is more important even there than manufactures. The foreign trade of Austria-Hungary has grown quite steadily during most of the present period. The trade with Germany is much larger than with any other country, due partly to the reciprocity treaty of 1891. This treaty was an important step towards a customs union for central Europe, and in 1892 this union was extended to Italy and Rumania by other treaties. Other important factors in the commercial development of Austria-Hungary during this period have been: (1) the completion of the Arlberg tunnel, which

established railroad connections with Paris, Geneva, and Marseilles; (2) the railroad over the Brenner Pass leading into Germany and Italy; (3) the railroads from Vienna to Constantinople and Berlin; (4) the rectification of the course of the Danube from Vienna to the Black Sea, especially the improvement of the Iron Gate; (5) the connecting of the Danube and the Rhine-Main by the Ludwig Canal; (6) the extension of Austrian influence into Bosnia, Herzegovina, Servia, Bulgaria, Turkey, and other Balkan and Levantine states; and (7) the lowering of the duties on colonial products so that Trieste has become the great coffee market of southeastern Europe by attracting much of the coffee trade that was previously conducted by way of Hamburg and the Elbe.

377. Italy has been doubly active in commerce and industry since she gained her freedom and became united. She, too, in 1878, levied a protective tariff, but special commercial treaties with England, France, Austria, and Switzerland lowered the duties on some articles. The circumstances were somewhat favorable for the new protectionist movement in Italy. France had been forced by her vineyard crisis to buy large quantities of wine from the Neapolitan districts, which thus suddenly found themselves prosperous once more; this prosperity increased their purchasing power and made them better outlets for the manufactures of northern Italy. This, together with the stimulus given by the new tariff, favored the growth of the manufacturing towns in the Po valley, where the fine water power supplied the deficiency of coal, and in some other sections. It is in her foreign trade, however, rather than in her manufactures and agriculture that Italy has made the most notable progress during this period. Several circumstances have caused this progress. At the beginning of the period, commerce between Italy and France was

stimulated by the vineyard crisis in the latter country, and by the completion of the Mont Cenis Railroad (1871). This railroad also served for a time as an important link in the Suez Canal route between England and her eastern possessions; quantities of goods came through France and over this road to Genoa, thence to Brindisi, the place of embarkation. Gradually, however, other forces tended to sever these relations between Italy and France. The political sympathies of united Italy tended to turn her commercial current away from France towards united Germany. Furthermore, the completion of the railroad from Rome to Vienna (1879), and the St. Gothard tunnel (1882), enabled England, Switzerland, Austria, and western Germany to trade more directly with Italy. This shifting of Italy's commercial relations led her to levy duties on French agricultural products in her tariff of 1887, and the commercial treaties between the two countries were not renewed upon expiration. France, therefore, levied retaliatory duties, her navigation companies no longer stopped at Italian ports, and she almost entirely ceased buying there, going to Spain instead for her wines. As Italy did not at once find full compensation in Germany, Austria, and Switzerland for the closed French market, she experienced a severe crisis. So great was the suffering that there was an extensive emigration from some provinces to Brazil, Argentina, and the United States, the emigration almost taking the form of a white slave trade. On the other hand, this exodus soon furnished another field for Italian merchants and manufacturers; Italy now took revenge on France by supplanting Marseilles and Bordeaux as providers of Rio Janeiro. Italian merchants also increased their trade with northern Africa and the Levant. During the past decade Italy's foreign trade has expanded very rapidly in almost every direction; her merchant marine conducts a very large

part of it, and is protected by a navy that ranks seventh among the world's navies.

378. Spain's economic development during the early part of this period was for various reasons quite slow. The vineyard crisis in France, however, afforded her an unexpected opportunity to retrieve her fortune, especially after France ceased buying wines in Italy. About the same time Spain began to develop her rich mineral resources with unwonted activity; some of her manufactures were pushed with renewed vigor, navigation companies were formed, closer relations with the colonies were developed, and part of the profits of travel and traffic with northern and western Africa was secured. Spain's foreign trade, therefore, increased quite steadily from 1878 to 1891, but since then it has on the whole tended to decrease, subject to several fluctuations. Among the causes for this decline are (1) the recovery of the French vineyards, (2) the French tariff of 1892 and the retaliatory Spanish tariff, (3) the financial crisis about 1892, (4) the unhappy quarrel with Cuba, culminating in the war with the United States, and the loss of Cuba, Porto Rico, and the Philippines. If certain symptoms are not misleading, however, Spain's home industries, and ultimately her foreign trade, will profit rather than lose by her recent losses and the lessons learned from them. Spain still has splendid resources, and she has a fair opportunity for becoming a really great agricultural, manufacturing, and commercial nation if she undergoes a reform in her administrative system and a revolution in her spirit and her industrial methods.

379. Portugal likewise profited by the vineyard crisis in France; but this was only a temporary boon, as in the case of Spain and Italy. She has suffered much during the present period from her bad financial condition, which has greatly restricted her credit. She possesses considerable

mineral wealth, but manufactures are poorly developed, owing chiefly to lack of capital and scarcity of coal. In northern Portugal, however, the cotton industry has recently been quite successful. Agriculture remains her chief industry, and wine her largest export. Her foreign trade has increased quite slowly in this period and has been subject to fluctuations, but her colonies in Asia and Africa may eventually enable her to recover some of her former commercial importance.

380. Switzerland, thanks to her central and neutral position in Europe, her contiguity to Germany, France, Austria, and Italy, her free-trade policy, and other favorable circumstances, continues to occupy a commercial and industrial position quite out of proportion to her area and population. Neighboring markets have afforded her good opportunities to buy raw materials and sell manufactured goods. Her splendid water power and complete system of railroads, telegraphs, and telephones have largely counterbalanced her inland position and her deficiency of coal and iron. The number of tourists at her mountain resorts has steadily increased, and several important manufactures and commercial trades are fed from this source. The completion of the St. Gothard and Arlberg railroads over the Alps, both of which border on her territory, have increased her importance as a transit country. It is not strange, therefore, that this little nation has witnessed a quite extensive industrial and commercial development during the present period.

381. Sweden and Norway, in spite of their political union under one king and the monetary union concluded between them, still stand economically apart. They are absolutely separated, as far as their customs duties are concerned, each levying duties upon the other. Norway is essentially a commercial and shipping nation and inclines towards free trade, although she has a revenue tariff; in proportion to

her population she has the largest merchant marine in the world and carries a large part of the trade of many other nations. Sweden, on the other hand, is chiefly agricultural and industrial, and her tariff of 1892 is avowedly protective. She is more populous and better endowed with agricultural and mineral and forest resources than Norway, all of which she has developed quite successfully during this period. She is also beginning to manufacture hardware and machinery, and has numerous distilleries, sugar refineries, and textile manufactures, most of the latter being still conducted on the domestic plan. Her industrial development, however, has been checked by her lack of coal, capital, and cheap labor. Her foreign trade has made considerable progress during this period, but her merchant marine is relatively much less important than formerly and less effective than that of Norway.

382. Denmark has lost much of her commercial importance during the Age of Electricity, owing to the commutation of the Sound dues, the loss of Schleswig, the opening of the Kaiser Wilhelm Canal, and other adverse circumstances. Nevertheless, she has shown a determination to preserve as nearly as possible her former position in commerce and shipping. She has expended large sums in improving and enlarging the harbor of Copenhagen and declared that port free, and that city has consequently developed very rapidly. Denmark has also continued to develop her pastoral and agricultural industries quite successfully. Her industrial development has been restricted by lack of coal and water power, but her foreign trade has more than trebled during this period.

383. The Balkan states. Several important recent events have greatly modified the economic situation in southeastern Europe and western Asia: (1) the building of railroads; (2) the improvement of the lower Danube; and (3) the

opening of the Corinthian Canal. The railroad from Constantinople to Belgrade has shortened the steam journey so that the former city is only seventy-five hours from London and sixty-eight hours from Paris. The line from Salonica to Belgrade has decreased the distance from Berlin to Port Said and brought Athens and Smyrna within twenty-four hours from the heart of central Europe. As the length of the sea voyage from Salonica to Port Said is seventeen hours less than that from Brindisi, the opening of this line has had a tendency to draw the commerce between central Europe and the Orient away from Brindisi to Salonica, just as the St. Gothard Railroad a little earlier had drawn much trade away from Marseilles to Brindisi. These railroads from Constantinople and Salonica to Belgrade and thence to Vienna and Berlin have, therefore, been quite prejudicial to the commerce of western Europe and have greatly aided the German and Austrian commercial march eastward. They have made much more of the commerce of western and southern Asia and of eastern and northeastern Africa tend towards central Europe as their most direct and nearest market. This has been doubly true since the extension of German influence throughout Asia Minor and the building of the German railroad from Scutari to the Euphrates, where it will eventually connect with another line running to India. The regulation of the course of the lower Danube, the opening of the Salina Canal, and the connecting of the Danube and Rhine river systems by canal have also had the same tendency. On the other hand, it must be remembered that these railroads and river improvements have established more direct communications with the western European countries, and have thus furnished another means whereby they may penetrate the Balkan Peninsula with their products, check the German exportation into that region, and hold it within the circle

of western commercial relations. The Corinthian Canal has shortened the distance from Constantinople, Athens, and Odessa to the western Mediterranean ports about one hundred and ten miles, and to the Adriatic ports about two hundred and twelve miles. It would seem, therefore, that Austria-Hungary might eventually be aided by this canal in her commercial march eastward. All of the Balkan states have themselves been greatly benefited by these improvements in transportation, and nearly all of them except Turkey have made quite substantial economic progress during the present period, especially Bulgaria, Rumania, and Servia. Greece does not now occupy relatively so important a commercial position as she did at the close of the previous period, for her merchant marine has declined considerably. The Corinthian Canal, however, ought to prove quite beneficial to Grecian commerce and shipping. It is to be hoped that a wiser governmental policy will prevail in the future, and thus enable Greece to continue a commercial development that was quite brilliant in the previous period.

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St. Petersburg
RUSSIAN
Perm
Moscow
Omsk
Hamburg
London
Paris
EUROPE
Orenburg
Irtish R.
Ob R.
Odessa
Rostof
CENTRAL A
Astrakhan
Aral Sea
Sebastopol
Black Sea
Caspian Sea
Tashkend
Constantinople
Baku
Khiva
TURKISH EMPIRE
Bokhara
Samarkand
Lisbon
Cadiz
MEDITERRANEAN SEA
Smyrna
Teheran
Herat
Tangier
Algiers
Tunis
ALGERIA
Alexandria
Bagdad
PERSIA
Kabul
Fez
Tripoli
Port Said
Ispahan
Kandahar
Morocco
MOROCCO
TRIPOLI
Cairo
Suez
EGYPT
Khelat
Delhi
Rio de Oro
Karachi
SAHARA
ARABIA
Bombay
St. Louis
Timbuktu
Khartum
Mocha
ARABIAN SEA
Bathurst
Sokoto
Kuka
Aden
Socotra
AFRICA
Freetown
ABYSSINIA
Monrovia
Libreville
Equator
Leopoldville
Mombas
ATLANTIC
KONGO STATE
Zanzibar
Seychelles Is.
Mariali
Loanda
INDIAN
OCEAN
Benguela
Mozambique
Mossamedes
Beira
Madagascar
Tamatave
Bulawayo
Reunion
Mauritius
Walfish Bay
Johannesburg
Lourenço Marquez
Kimberley
CAPE COLONY
Durban
Cape Town
Port Elizabeth
TO CAPE VERDE Is. 2,933 MILES
TO CAPE VERDE Is. 3,856 MILES
CAPE TOWN TO HOBART
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COMMERCIAL CE
Steamship Lines : ----- Ca
Railroads in operation :
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Scale of Mile
Distances along Steamship Lines are given in Nautical Miles
Longitude

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NERS AND ROUTES
Caravan Routes :
Railroads proposed :
3000
4000
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from Greenwich 100
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S I B E R I A
E M P I R E
Tomsk
Irkutsk
L. Baikal
Stretensk
Nerchinsk
Nikolaifsk
Amur
Vladivostok
Okhotsk Sea
Kamchatka
Bering Sea
S I A
Dalny
Pekin
Tientsin
KOREA
Port Arthur
Weihaiwei
Kiau Chau
Hakodate
Tokio
Yokohama
Nagasaki
EMPIRE OF JAPAN
CHINESE EMPIRE
Hankau
Chungking
Shanghai
Yunnan
Canton
Fuchau
Macao
Hongkong
Calcutta
Tropic of Cancer
TO VANCOUVER, 4,550 MILES
TO SAN FRANCISCO, 4,797 MILES
TO HONOLULU, 3,445 MILES
P A C I F I C
O C E A N
Ladrone Is.
Wake I.
Guam
Marshall Is.
Pelew Is.
Caroline Is.
Gilbert Is.
BAY OF BENGAL
Madras
Karakal
Ceylon
Andaman Is.
Nicobar Is.
Rangoon
SIAM
Bangkok
Saigon
Manila
PHILIPPINE ISLANDS
CHINA SEA
Singapore
Sumatra
Borneo
Celebes
Moluccas
Makassar
Batavia
Java
Timor
Bismarck Arch.
New Guinea
Solomon Is.
Ellice Is.
Santa Cruz Is.
New Hebrides
Fiji Is.
Suva
New Caledonia
Loyalty Is.
O C E A N
TO ADEN, 5,140 MILES
3,380 MILES
Tropic of Capricorn
Palmerston
Cooktown
Broome
A U S T R A L I A
Brisbane
Perth
Albany
Adelaide
Sydney
Melbourne
Tasmania
Hobart
Norfolk I.
TO HONOLULU
SYDNEY 4,476
1,077 MILES
1,180 MILES
1,284 MILES
1,313 MILES
5,456 MILES
Auckland
NEW ZEALAND
Wellington

CHAPTER XXXIII

AFRICA, ASIA, AND THE FAR EAST AT THE BEGINNING OF THE TWENTIETH CENTURY

384. Africa at the beginning of the twentieth century is no longer the "Dark Continent," and her outlook into the future is very bright. Guarded by the fevers of her coasts, the unfruitful plateaus which first greet the explorer, her deserts and unnavigable rivers, she remained, with the exception of a few portions of her coast and the adjacent islands, sealed to the movement of the world's commerce for about three centuries and a half after her rediscovery at the close of the fifteenth century, except as a market for slaves and ivory. During the latter half of the nineteenth century, however, especially the last fifteen years, she began to reveal her vast treasures and resources to the European explorer and merchant. Egypt was the first portion of the continent to be transformed by European influence, first by the French and later by the English. The cultivation of rice, cotton, and grains was gradually developed, and since the opening of the Suez Canal she has had a very important transit trade; recently sugar refineries and cotton factories have been successfully operated there, while such native industries as leather tanning and working, and the manufacture of potteries and embroideries continue to be profitable. Great Britain still dominates there, followed in influence by the French, Italians, and Greeks. Northern Africa, especially Tunis and Algiers, was also being resurrected throughout the nineteenth century by the French.

But with these exceptions the chief trade of Africa, up to the last quarter of the nineteenth century, was the caravan and coasting trade which had been conducted for many centuries by Arabs and Hindoos. Then came the great gold and diamond boom in Africa, which produced effects quite like the discovery of gold in California and Australia about the middle of the century; and during the last fifteen years the leading European nations have vied with one another in securing as large a share as possible of this rich unexplored continent.

To realize the vast possibilities of this old but suddenly new continent, one must remember that it has an area four times as large as that of the United States, a soil and climate which fit it for an almost infinite variety of products, and a rapidly increasing productive capacity in numerous industries. Africa has the greatest known supplies of gold, ivory, and diamonds: ninety-eight per cent of the world's diamond supply is produced at Kimberley; the greatest gold mines in the world are those at Johannesburg, which yield annually about $60,000,000, with $3,500,000,000 of gold "in sight." Her total population is about one hundred and forty-six million, of whom about two million are Europeans. She is rapidly being covered with railroads, telegraphs, telephones, and steamboats. Her foreign commerce already amounts to a little over $800,000,000, most of which is with the great mining and agricultural sections of the south and with the European settlements on the coasts.

385. Eight European nations hold territories on this continent, most of which were acquired between 1884 and 1900. France holds more territory in Africa than any other nation, but Great Britain holds nearly as much, controls about three fourths of the African foreign trade, and is clearly ascendant in that continent. The other European nations that have shared in the partition of Africa are Turkey, Germany,

Belgium, Portugal, Spain, and Italy. Since the British annexation of the Transvaal and the Orange Free State, there are only four independent African states, Morocco, Abyssinia, Liberia, and the Congo Free State.

386. The chief imports into northern Africa are silks, cottons, cutlery, arms, ammunition, mineral oils, spirits, tobacco, jewelry, clocks, watches, and haberdashery; into the trading posts on the eastern and western coasts of tropical Africa, coarse cottons, gaudy apparel, beads, cutlery, salt, spirits, tobacco, rice, hardware, and cooking utensils; into southern Africa, cottons, woolens, agricultural implements, machinery, hardware, groceries, and haberdashery; into the mining regions, strong cotton and woolen goods for the miners, boots, shoes, meats, flour, coffee, groceries, mineral oils, and machinery; into the island of Madagascar, cottons, salt, arms, rum, machinery, implements, and hardware; into Réunion, rice and other grains.

387. The chief exports from northern Africa are cereals, cotton, potatoes and other vegetables, dates and other fruits, olives and olive oil, cork, dyewoods, sponges, hides, and leather; from tropical Africa, palm nuts, palm oil, rubber, sesame, ivory, cotton, coffee, corn, gums, and tropical fruits; from southern Africa, wool, goat hair, hides, ostrich feathers, grains, and sugar; from the mining regions, gold and diamonds; from Madagascar, rubber, wax, beasts, and hides (the mineral resources and the silk and cotton industries are now being developed quite vigorously); from Réunion, sugar, vanilla, coffee, and spices.

388. American trade with Africa up to 1860 was almost entirely in slaves. This trade, except on the part of Cuba, was broken up by the Civil War in the United States.[1] Cuba resumed the slave trade in 1862 and imported about

[1] Although Congress prohibited the foreign slave trade in 1807, a good many negroes were imported even up to the time of the Civil War.

twenty thousand negroes annually from that time until 1875. In recent years the United States is finding a substitute for her former profitable slave trade in an increasing African trade in other articles. Her exports to Africa increased from $4,000,000 in 1890 to $19,500,000 in 1900. This branch of her trade, however, is still in its infancy.

389. The productions and commerce of the interior of Africa have thus far developed slowly, but seem likely to develop more rapidly in the near future. Access to the interior has been, until recent years, barred by falls and rapids in the great rivers. Recently, however, railroads have been constructed around the falls of the Congo and the Nile, a passage to the upper Zambesi has been discovered, and the nations using the Niger have agreed to aid in developing the navigation of that river. Steamers have been placed on the great lakes in the central eastern part of the continent. These lakes and rivers seem likely, therefore, to become great commerce carriers in the near future. Nearly four thousand miles of railroads have already been built in the Nile valley and along the Mediterranean coast: there are about three thousand miles in South Africa, extending from Cape Colony far north into the interior; there are also lines from Portuguese East Africa to the Transvaal gold mines. The Germans and British are already pushing lines west from the eastern coast to the great lakes of central Africa; the British, French, Germans, and Belgians are already constructing various short lines towards the interior from the western coast. The most audacious and interesting railroad enterprise in Africa to-day is the Cape to Cairo Railroad projected by the late Cecil Rhodes. During the past few years this enterprise has been pushed quite vigorously both northward from Cape Town and southward from Cairo, and several thousand miles of road have been constructed; but

since the death of Mr. Rhodes it is difficult to predict how soon the distance between the two lines will be bridged.

390. The opening of China to foreign commerce has made considerable progress during the present period. Prior to 1842 foreign trade with the Celestial Empire was mostly conducted through native merchants at certain prescribed ports. During the Portuguese and Dutch ascendencies, as we have seen, Canton was about the only port open to foreigners, and they were obliged to dispose of their wares there through native intermediaries, subject to duties and very strict regulations. In 1841, as a result of the Opium War, Hongkong was ceded to Great Britain, and the next year, by the Treaty of Nankin, Shanghai was opened for residence and commerce to British subjects. In 1844 a similar treaty was concluded with the United States, whose merchants had traded on the old plan since 1784. Canton was not fully opened to foreigners until 1859, but after that other Chinese ports were gradually declared free. By 1862 twelve ports had been opened for trade and residence to citizens of all countries having treaties with China. In 1877 three cities were added to the list of treaty ports, and two more in 1889. Since 1895 the number of cities thus opened to foreigners has increased very rapidly, many of them being far in the interior. Nearly all of these treaties merely give the right of residence in certain sections of the respective cities, and subject most foreign goods to rigid customhouse regulations. Some articles are admitted free and the customs duties are generally low, ranging from five to ten per cent *ad valorem;* but the internal duties are high, and are levied by each province and frequently between subdivisions of provinces, so that the total charge upon foreign goods going far into the interior is very high. Another obstacle to the rapid extension of China's foreign trade is her lack of good means of interior transportation. Many

of the imperial roads which formerly won the admiration of travelers are in a bad state of repair, and the rivers and canals are altogether inadequate for the effective opening of the vast interior. The average freight charge in most of China is nearly three times as much as in countries which are well provided with railroads. It is significant to note, however, that a beginning has been made in railroad construction. The first Chinese railroad was a fourteen-mile line from Shanghai to the port of Woosung, built in 1876. Nothing more was done until 1886, when a line was projected from Tien-tsin to her neighboring port. After the Japanese war this line was completed and extended to Pekin, and another line run to Paoting. Altogether, about five hundred miles were in operation in China in 1900. Several other important railroads have recently been projected: a line from Paoting to Hankau, six hundred and fifty miles; one from Hankau to Canton, six hundred miles. This line, when completed, will pass through the greatest commercial center of the interior and many smaller cities, all situated in a densely populated region and one very rich in mineral and agricultural resources. Another proposed line is to connect Pekin with Shanghai; others are to connect Pekin, Tien-tsin, and Shanghai with the great coal and iron fields of Shensi and Shansi. In the meantime, the Russians are building a road through Manchuria and one from Port Arthur to Vladivostok, and Pekin is to be connected with both. In southern China several roads have been projected westward from Canton, one of which is to extend to the province of Szechuen, a highly productive agricultural region with about seventy million people, and rich in minerals. The French have projected a line from Tongking into China, and the British are preparing to extend their Burma system so as to connect with these other roads and with the great network of Chinese waterways. No one

dares predict, however, how soon these great improvements in transportation will be completed.

391. China is still essentially an agricultural nation, but the density of her population and her primitive methods of farming make it impossible for her to export food products. Large quantities of rice and other grains, fruits and vegetables, however, are grown for home consumption. The leading export is raw silk, which is grown in many parts of the empire, but especially in the southern and western parts; a large amount of wild silk is also gathered in the forests of the north. Tea is the next largest export and is grown in the southern, western, and eastern parts of the empire. The western demand for these two products has led China to grow them in larger quantities and to gradually open her doors to western traders. Sugar, cotton, indigo, and opium are also being grown in constantly increasing quantities. If modern methods once get a firm hold, the possibilities of Chinese agriculture are almost limitless.

392. In spite of their lack of machinery and ignorance of the advantages of division of labor, the Chinese turn out a large and valuable manufactured product. For many centuries they have not only supplied themselves with nearly all the manufactured goods used by them, but they have exported considerable quantities of some of their wares, as, for example, silks, carvings in ivory, wood, and stone, china ware, glassware, copper and bronze wares, and paper. To-day they also export in considerable quantities straw braid, fireworks, matting, fans, and bamboo articles. Since the war with Japan in 1895, foreigners have been permitted to import machinery and establish manufactures at the treaty ports. Already cotton and silk factories with modern machinery are running night and day at their full capacity in Shanghai and Canton, and numerous mining and manufacturing licenses have been granted to foreigners in many

parts of the empire. It begins to look as if the late Li Hung Chang was in earnest when he said on his western tour that he would return to do his utmost to make China the workshop of the world.

393. The foreign trade of China has increased quite steadily since her ports were opened by treaty. In 1842 it amounted to only $25,000,000; by 1893 it had risen to $131,000,000, and since that time the increase has been very rapid. Over sixty per cent of this trade is controlled by Great Britain and her colonies, chiefly India, and about four fifths of her trade with China passes through Hongkong. It is a noticeable fact, however, that England's trade with China is relatively declining. On the other hand, the United States has been sending a rapidly increasing amount of cotton goods, petroleum, flour, canned goods, machinery, and railroad materials to China, especially to the southern provinces. The fact that our Pacific ports have direct communications with those of China, coupled with the further advantages that are likely to result from the digging of the isthmian canal, ought to insure a great extension of our trade with that empire. The comparison between the British and American shares of Chinese shipping is not so favorable to us: Great Britain owns about sixty per cent of the tonnage engaged in the foreign trade of China, while the United States owns less than one per cent. The British port of Hongkong is surpassed by only two or three other ports in the world in the volume of merchandise passing through it. About twenty-two and one half per cent of China's foreign shipping is conducted by her own vessels. Since 1872 she has been developing a considerable merchant fleet of the European type, but most of her vessels are still of the antiquated Asiatic type.

394. Japan's industrial revolution and present position in the Far East. Although Japan had scarcely been drawn

into the current of the world's commerce at the opening of the Age of Electricity, her foreign trade has increased throughout the period; since 1884 it has increased eightfold. Her rapid transformation was conclusively shown by her startling victories over China in 1894 and 1895, but prior to that her industries had been less transformed than her army and navy. Since the war with China, however, Japan has undergone an industrial revolution which is rapidly making her the leader among the nations of the Far East. Cotton spinning has been introduced quite successfully, and in 1900 there were nearly one million five hundred thousand spindles in operation, most of the yarn produced being made into cloth on thousands of hand looms throughout the island. A still more recent industry is the manufacture of woolens, and there are already several successful woolen factories. The silk industry has also received a new impulse in recent years. The value of the various textiles manufactured in Japan increased from less than $9,000,000 in 1886 to about $72,000,000 in 1899. Shipbuilding has already become a very important industry in Japan. She also makes boots, shoes, glassware, watches, clocks, mathematical and surgical instruments, matches, leather goods, umbrellas, patent medicines, and many other articles, some of which, however, are of inferior quality. Japan does not have very rich mineral resources, but she is developing quite rapidly what she has. She has the largest copper mines in Asia, and in 1899 she ranked third among the copper-producing nations of the world. Coal is mined quite extensively in some districts, and considerable quantities of it are exported to China. Japan abounds in a superior quality of kaolin, which is made into fine porcelain for home use and export. She is beginning to produce petroleum, and seems likely to increase very greatly her output of this important mineral. She also

mines some silver, gold, lead, antimony, and iron. The scarcity of this latter mineral, however, seems likely to be one of the most serious hindrances to the extensive development of Japanese manufactures. Although the recent development of manufactures and mining has diverted much labor from farming to other industries, agriculture is still the most important industry in Japan. She produces vast quantities of raw silk, tea, and rice, and considerable barley, rye, wheat, cotton, and numerous fruits. Formosa, which has belonged to Japan since the war with China (1894–1895), produces about five sixths of the world's supply of camphor, and raises large crops of tea, rice, and sugar cane. The Japanese fisheries are among the most valuable in the world and yield about $26,000,000 annually. Japan's means of communication and transportation have been greatly improved during the present period by the building of about thirty-five hundred miles of railroads, nearly fourteen thousand miles of telegraphs, and over fifteen hundred miles of telephone. Her merchant marine contains over eleven hundred steamers of European type, over nineteen hundred sailing vessels of European type, and about nineteen thousand native craft; and this merchant navy carries a very large part of the Japanese trade. Her war navy ranks sixth among the leading navies of the world, next to that of the United States.

Japan evidently aims to become a great industrial and commercial nation, and many things make it seem likely that she will succeed. She may ultimately prove the leader in creating a great Pan-Mongolian movement, and if her influence should thus dominate in China and the other Mongolian countries of the Far East, her industrial and commercial future would be a great one. There are certainly some good reasons for thinking that Japan may

eventually be successful in such a movement. Her troops played a very prominent part in the recent advance of the "allies" to Pekin, and thus increased the great respect which China already felt for them. For several years she has been very active in her efforts to arouse the Chinese to reforms and good government, so as to be able to check the advance of Russia in the Far East. The war of 1894–1895 may be regarded as the beginning of such an effort, and since then there has been a strong tendency towards a Japanese-Chinese alliance. As Japan favors incorporating all the best of western civilization without destroying the best of eastern civilization, which seems to be so necessary to the race, perhaps she would be the best and most practicable leader in the industrial and political revolution that is certain to come, especially if guided by the counsels of the leading western nations, which she seems on the whole disposed to accept. Japan's large, intelligent, disciplined, and well-organized army, coupled with her splendid fleet, and backed by a reorganized China, would certainly prove one of the most effective checks that could be placed upon Russia's alarming march towards the Far East. But whatever may be the political future of the Far East, and whoever may be the ultimate industrial and commercial leader there, Japan is bound to play an ever increasing part in the world's industrial and commercial development.

395. The recent rapid progress of Japan, as well as the imminent awakening of China, is something in which the merchants and manufacturers of the western nations, particularly the United States, must be keenly interested. Until quite recently Great Britain dominated in the trade with Japan and China. The opening of the Suez Canal gave her a great advantage in this far eastern trade, and this advantage was greatly strengthened by her Trans-Canadian Railroad, with its connecting line of steamers between

Vancouver and Yokohama. Recently, however, the United States has shown a determination to take advantage of her splendid transcontinental systems of railroads and her magnificent situation on the Pacific, to establish for herself the shortest, quickest, and cheapest route between these great outlets in the Far East and a source of supply adequate to provide those markets. Still more recently the route from Europe has been still further shortened by the completion of the Trans-Siberian Railroad, so that the journey from Paris to Nagasaki may be made in about twelve days. Thus the way has been cleared for some vigorous and close commercial competition over these leading routes between the West and the Far East. At present the outlook is very favorable for the United States in this increasingly lucrative trade of the Far East, particularly that of Japan. In 1899 the United States overtook England and headed the list of leading nations trading with Japan. There are several reasons for thinking that this country may not only hold, but greatly increase, the advantage thus gained in Japanese trade. A careful examination of the list of Japan's leading imports reveals the fact that over four fifths of them are such as could be furnished very advantageously by the factories, mines, and farms of the United States. American cotton is clearly preferred by the Japanese to Indian cotton, as is shown by the fact that the Japanese importation of American cotton increased from twenty-three thousand five hundred pounds in 1889 to one hundred and twelve million pounds in 1898. It is important to note that the isthmian canal will greatly facilitate the development of this branch of the American trade by bringing the cotton fields of the Gulf states nearer to Japan. Another product which the United States and the Philippines are likely to sell to Japan in increasing quantities is tobacco; about one third of the

Japanese importation of this article already comes from this source. Japan's increasing need for careful cultivation will make it necessary for her to import large quantities of oil cake for fertilizing, and the United States has a good chance to furnish most of the supply, although South American nitrates will undoubtedly compete with oil cake on Japan's farms. California wines are already driving French wines out of Japanese markets. The United States also has great opportunities for furnishing Japan with increasing quantities of iron, machinery, locomotives, steel rails, alcohol, indigo, watches, flour, woolens, leather, leather goods, glassware, and many other articles.

There is another aspect of the industrial and commercial situation in the Far East that is too often overlooked by people in the West. What if the four hundred million Chinese should awaken as the forty million Japanese have done and should undergo a great industrial revolution? No one can estimate the vastness of the industrial development implied in such an awakening. The mineral resources of China are boundless. She is undoubtedly one of the greatest coal countries in the world. Iron is very abundant in many parts of the empire. Copper is also plentiful. The vast supply of cheap Chinese labor could undoubtedly be made available, not only for developing these mineral resources, but also for numerous and extensive manufactures. All this is implied in the possible industrial awakening of China. A corollary to the above question is, Who will profit most by this great awakening? The leading merchants and manufacturers of the western nations have generally rushed to the conclusion that such an awakening would only tend to make the valuable raw materials of China — her cotton, silk, iron, coal, and other minerals — flow in constantly increasing quantities to the West, and to make the influx of western manufactured products into

that empire vastly greater. The thoughtful, however, are already raising the question whether the imminent Chinese awakening does not also mean such an industrial revolution as would keep most of these valuable raw materials at home to be worked up there into manufactured products. Will not China in the future avenge herself upon the West for past European aggressions by flooding the western markets with the manufactured products of her own cheap labor, instead of submitting to a much greater influx of western manufactures? It is certainly worth while to reflect upon these suggestive questions. It is doubtful, indeed, if the dense population of China could increase very greatly their ability to buy foreign manufactures simply by developing their agriculture and mining. Will they not rather be compelled to use their raw materials at home and make most of their own manufactured goods, or else do without?

396. British Australasia has witnessed a most remarkable growth of foreign trade during the present period. The trade of Australia has increased nearly sixteen fold since 1851; that of New Zealand nearly fifty fold since 1852. Australia is to-day the greatest sheep and wool producing country in the world, and exports about a half billion pounds of wool annually. Besides wool she exports large quantities of hides, leather, frozen meats, tallow, and dairy products. Although stock raising is far more important than other forms of agriculture, large quantities of grains, sugar, cotton, grapes, and other fruits are grown, some of which is exported. West Australia is one of the greatest producers of gold in the world, and this valuable metal is also found in large quantities in other parts of the commonwealth. New South Wales now turns out about four million tons of coal annually, and exports much of it to southern Asia and even to the Pacific coast of the United

States. New South Wales also has extensive iron fields, but they have not yet been developed very much. Large quantities of tin are produced, especially in Tasmania. Some important manufactures have been founded or extended during the present period, especially in the neighborhood of the larger cities, as, for example, the manufacture of agricultural implements, machinery, leather, leather goods, soap, candles, flour, lumber, sugar, beer, brandy, and small ships. Australia, however, is still obliged to import most of her manufactured goods, the most important being textiles. New Zealand exports chiefly frozen beef and mutton, wool, numerous animal by-products, butter, and cheese; but considerable quantities of wheat, flour, grass seeds, gums, and flax are also exported. Gold and silver are the most important minerals in New Zealand, large quantities of the former being exported. Manufactures have been stimulated during the present period by a high protective tariff and the supply of good coal near at hand. Besides meat preserving and wool scouring, the manufacture of boots, shoes, woolens, brick, tile, lumber, furniture, flour, beer, hardware, and machinery is carried on quite successfully. New Zealand, however, is still obliged to import large quantities of textiles, clothing, iron and steel goods, paper, sugar, and spirits.

397. British India is to-day, as formerly, chiefly an agricultural country, about nine tenths of her people being engaged in some form of farming. During the present period the British government has done very much to foster and improve Indian agriculture. Each province now has a public department which collects and distributes valuable agricultural information. Extensive irrigation facilities have been introduced; agricultural schools and experimental farms have been established; new methods of farming, new implements, and new fertilizers have been

introduced quite successfully in many places. Consequently, the total agricultural product of this vast peninsula has been greatly increased. Unfortunately, however, several circumstances still hinder quite seriously the economic development of the country. The landholdings are mostly so small as to scarcely suffice for bare subsistence. Religious beliefs confine about three fourths of the inhabitants to a vegetable diet, and thus deprive them of an important food resource and the profits derived from raising animals for market. Some sections are still subject to famine because of the limited diet allowed by religious custom, the imperfect irrigation existing there, and the difficulty of transporting foods from provinces having a surplus to those having a scarcity. The famine problem, however, is gradually being made simpler by the extension and perfection of the railroad and irrigation systems. In good crop years India exports large quantities of wheat and some rice. Cotton is her largest export, she being the second largest grower of this product. Large quantities of opium and tea are also exported, and numerous other agricultural products are grown very successfully in various parts of the peninsula. British India is also beginning to develop manufactures and mining according to modern methods. In 1899 she produced about five million tons of coal, and her cotton, hemp, jute, and woolen mills contained nearly five million spindles and about fifty-two thousand looms. She also has numerous tanneries, distilleries, breweries, sugar refineries, paper mills, lumber yards, iron foundries, and shipyards. India is still obliged, however, to import large quantities of textiles, hardware, machinery, railroad materials, liquors, chemicals, and provisions. The poverty of her people keeps her per capita foreign commerce quite small as compared with that of leading western nations, but her enormous population and vast size swell

her total foreign trade to very large proportions. Her sea-born foreign trade has increased about fifteen fold since 1835.

398. The Straits Settlements are to-day, as formerly, very important commercially. Most of their extensive trade is a forwarding trade. Singapore, which is still the great center for this trade, has an annual movement of about seven million tons.

399. The Dutch East Indies, thanks to the excellent colonial system now prevailing there, have retained their commercial importance and have an extensive and profitable foreign trade. These Dutch possessions embrace territories about sixty times as large as the mother country and form one of the most valuable commercial colonies in the world. Their principal exports are sugar, coffee, tea, rice, quinine, tobacco, indigo, gutta-percha, tin, pepper, and other spices. Excepting rice, about four fifths of their exports go to Holland, most of them passing through Batavia.

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CHAPTER XXXIV

CANADA, MEXICO, CENTRAL AMERICA, AND SOUTH AMERICA

400. Canada, like the United States, has made giant strides of progress during the present period. She, too, has been fed by foreign immigration, has seen vast tracts of her virgin soil opened to cultivation, an enormous increase in her agricultural production, her mines and manufactures developed, and her means of communication and transportation greatly improved. For a time the attractions in the United States, especially the higher wages and better lands which this country seemed to afford, caused an extensive exodus from Canada. It was not long, however, before a reflex movement of population set in across the border, caused by the lowering of farm wages and prices for agricultural products and the increased competition among industrial laborers in this country, and by the increased demand for labor in Canada to develop her manufactures and other resources. Gradually the splendid resources of Manitoba became known, and a flood of immigrants rushed into this central region, making of it a great sea of waving grains, which was soon connected by railroads and an unrivaled water communication with the European markets. At the same time stock raising and dairy farming have been developed on a large scale in the eastern provinces. The rich mineral resources of the upper Rockies, the Lake region, Nova Scotia, and Quebec were developed, and large quantities of gold, coal, copper, nickel, silver, petroleum, asbestos, lead,

and iron were turned out. The sudden increase in the gold output of the Klondike since 1897 has placed Canada fifth among the gold-producing countries of the world, the total value of the gold now produced in that country being about $21,000,000 annually. Coal is the next most important mineral product of Canada, the value of the output being about $10,000,000 annually. Recently quite important iron industries have been developed in Nova Scotia, Newfoundland, and eastern Quebec. The total value of the Canadian mineral product in 1899 was nearly $50,000,000. Nevertheless, the mineral resources of the Dominion have hardly begun to be developed properly; it is estimated that the coal area alone contains over sixty-five thousand square miles. The timber wealth of Canada is also very great, and vast tracts of forest have been cut down during the present period to feed manufactures and commerce. In 1891 her forest product reached $80,000,000, but by 1899 it had decreased to $31,000,000. Canada, however, still has the largest forest area of any lumber-producing country in the world, but much of the timber cannot be utilized until railroads are pushed farther northward. Besides lumber, Canada exports large quantities of wood pulp, this industry having become very important in recent years. The Canadian fisheries rank among the largest in the world; those of the Atlantic are still worked vigorously and new ones have been developed in the Pacific, the Great Lakes, and the various rivers. The total fishery product in 1899 was worth about $23,000,000. Canada is also one of the largest producers of furs, but the joint prohibition of "pelagic sealing" by the United States and Great Britain, in 1898, checked somewhat the enormous profits of the British Columbian sealers.

While thus developing her agriculture, mining, forestry, fisheries, and fur industry, Canada has, during the present

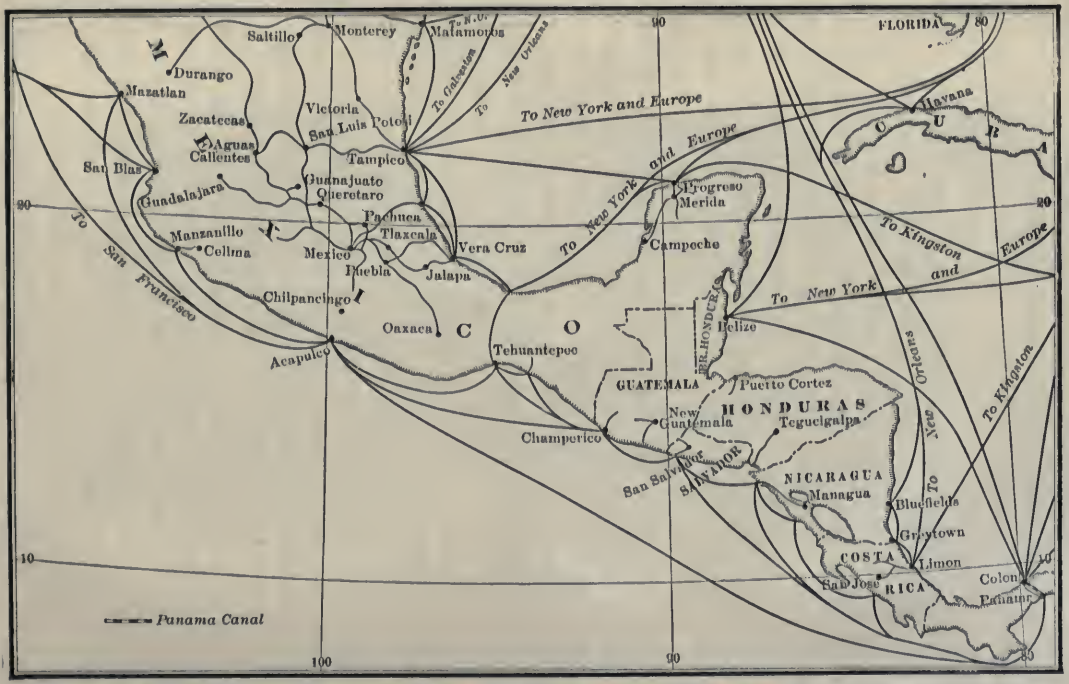
period, made considerable progress in manufactures, and has protected them by high tariffs which have not even spared the mother country. Nearly all of her manufactures are growing, except the shipbuilding industry of New Brunswick, which has declined since the introduction of iron and steel ships. Canada exports considerable quantities of leather, shoes, agricultural implements, refined sugar, beer, and cheap cottons, woolens, and clothing; but she still demands a large part of her manufactured goods from foreigners, chiefly the United States and Great Britain.

Canada seems likely to derive increasing advantages in the future from her great inland waterways and the splendid system of railroads which is being formed. Her transcontinental system from Montreal to Vancouver, coupled with the line of steamers from Vancouver, forms the most direct route from England to Japan and the Far East, while railroads projected from York, on Hudson's Bay, to Winnipeg, will, if completed, shorten the route still further and aid in the development of the intervening country. The transit trade over these railroads is already profitable and cannot fail to profit Canada still more in the future. At the same time her magnificent system of waterways has been improved by such canals as the "Soo" and Canadian canals, the Welland Canal, the St. Lawrence Canal, the Ottawa Canal, and the Richelieu Canal, by the establishment of a line from New York to Montreal, and by the deepening of the St. Lawrence so that ocean steamers can come to Montreal and vessels drawing fourteen feet can go direct from Chicago and Duluth to European ports. Even yet, however, a very large part of Canada's foreign trade is carried through the ports of Boston, Portland (Maine), and New York, especially during the winter, when ice obstructs the navigation of the St. Lawrence.

The foreign trade of Canada has increased about two and one half times during the present period, over $100,000,000 of this increase having been since 1895. About three fourths of her trade is with the United States and Great Britain, about evenly divided between the two. Her chief exports are timber, wooden ware, wheat, flour, cheese, cattle, fish, gold and other minerals, furs, leather, and leather goods; her leading imports are iron, steel, hardware, machinery, fine textiles, coal, sugar, tea, coffee, and raw wool.

401. Mexico. This country, during the present period, has witnessed a great revival of her mining industries, a considerable development of her manufactures and agriculture, and an improvement in her means of communication and transportation. At the beginning of the period her silver and gold mines, which had turned out a product worth about $3,500,000,000 since the Spanish conquest, seemed nearly exhausted and were yielding only about $3,000,000 annually. In reality, however, the mineral resources of Mexico were still very rich, and many of them had scarcely been touched. The development of her mines has been especially successful since 1893, the product having been about doubled during the interval since then. The annual value of her present mineral output is about $67,000,000, about nine tenths of which comes from her silver mines. Gold mining is still in its infancy in many parts of the country where the largest supplies of this metal exist. There is an almost exhaustless supply of excellent iron ore in various sections, and this resource is beginning to attract considerable attention. Coal is also found in many sections, but comparatively little is yet mined. Petroleum, lead, sulphur, copper, mercury, and tin are also important mineral products, which are likely to yield much larger returns in the near future.

Not only has Mexico seen her mines reopened and worked more actively than ever before, but numerous manufactures have been developed quite successfully. Her highly protective tariff has attracted a considerable number of German, British, and American capitalists, who have taken advantage of the government's protective policy and the large supply of cheap labor. The home demand for cottons and sugar is nearly supplied to-day by the product of about one hundred and twenty Mexican cotton factories and about three thousand sugar mills. Very large quantities of beer, spirits, cigars, and cigarettes are turned out annually. Coarse woolens are made in over twenty woolen mills. Paper, porcelain, soap, chocolate, glass, and drugs are also manufactured in considerable quantities. But while Mexico manufactures enough of some articles for her own use and even for export, she is still obliged to import a large quantity of manufactured goods, and is chiefly a mining and agricultural nation. Her agriculture is still, for the most part, in an almost primitive condition, but foreign capital and modern methods have been applied very successfully in certain sections, and her future agricultural possibilities are very great. Most of her agricultural products are at present consumed at home: maize and beans, which are produced in enormous quantities, are the staple foods of her people; all the sugar cane and cotton grown is consumed in her own mills, and she is still obliged to import about half of her cotton supply from Texas; large quantities of bananas, oranges, lemons, and other fruits are grown, but they have not yet entered largely into her foreign trade. By far the most important vegetable export to-day is heniquen, most of which is grown in Yucatan. Coffee ranks next in the list of vegetable exports. Vanilla is also a somewhat important export. Tobacco and rubber are produced in considerable quantities, but very little is yet exported. The total vegetable



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exports of Mexico amount to only about $25,000,000 annually. Cattle raising and dairy farming are increasing in importance, and about six million dollars' worth of cattle, hides, and other animal products are exported annually. The Mexican fisheries are quite valuable, especially the pearl fisheries in the Gulf of California. The Mexican forests have been used so wastefully that lumber has to be imported, but large quantities of mahogany and dye woods are exported.

Mexico has recently made considerable progress in railroad building, all the principal commercial and mining centers being now thus connected. Several great trunk lines connect her with the United States, but she has no line connecting her Pacific and Gulf coasts. About twelve lines of steam navigation touch her ports, and about half of them run to Europe.

Mexico's foreign trade has increased quite slowly during most of the present period, but it has grown quite rapidly since 1893, owing chiefly to the larger output of her mines. Nearly three fifths of her exports are minerals; the principal imports are textiles, hardware, and machinery. Some very notable changes in the course of Mexican foreign trade have occurred during the past fifty years. Spanish trade with Mexico has decreased from $40,000,000 to $3,000,000 since the latter country won her independence. Great Britain's trade with Mexico has increased only about $3,000,000 during the present period, while that of the United States has increased from less than $2,500,000 to $89,000,000. About half of Mexico's imports are now purchased in the United States, while we take nearly four fifths of her exports.

402. Central America. Although possessing an exceptionally fertile soil and rich mineral and forest resources, most of the states in this peninsula have thus far made but little economic progress. Guatemala, however, has

recently displayed quite a strong tendency towards economic improvement. It is to be hoped that the near future will witness a much better political condition, a development of better interior transportation facilities, and a consequent industrial and commercial expansion in all the Central American countries.

403. South America. This continent was for several centuries commercially important chiefly because she was one of the world's largest producers of precious metals. Owing to the bad colonial policies of her European masters she furnished few other exports for the world's trade and was a poor market for European merchandise. For some time also after their revolt from Spain and Portugal, the various states in this continent made very slow economic progress because they were badly fitted for independence and were consequently troubled with frequent revolutions which seriously impeded their commercial and industrial development. Another hindrance to healthy economic development was the unstable and depreciated paper money used in most of those countries. Most of their specie was exported to buy foreign manufactures, to pay the interest on the numerous and heavy public debts, and to pay the interest and profits on foreign capital invested in various agricultural, manufacturing, and mining enterprises. This drainage of the specie supply and other causes led to frequent overissues of paper money, which soon depreciated, and thus deranged industry and commerce. The highly protective tariffs imposed by most of these states also tended to check the growth of their foreign commerce. Gradually, however, European capitalists and colonists, especially the British, Germans, and Italians, gained sufficient confidence in the safety and profits of South American investments to go there in large numbers and develop the rich resources of that continent. Under their

stimulation South America has, especially during the present period, increased the amount and variety of her exports quite rapidly and become a much more valuable market for the products of other countries. Her total foreign trade now amounts to over $800,000,000. Several of her staple products have assumed great importance in the world's commerce, as, for example, her wool, coffee, nitrates, cattle, meats, cocoa, grains, and cane sugar. The Plata countries have about one fifth of the world's supply of sheep, and furnish nearly one fifth of the world's wool clip. South America to-day produces about ten times as much coffee as the East Indies, which formerly had a monopoly of this product. Chile and Peru produce nearly all of the world's supply of nitrates, now used so extensively as fertilizers. About one half of the world's cocoa comes from South America. Peru and Bolivia are still important producers of the precious metals. Argentina and other states export large quantities of frozen meats, jerked beef, cattle, hides, tallow, grains, and considerable cane sugar. It is to be noted that the agricultural, pastoral, and industrial development of South America has only just begun. Vast tracts of rich forest, agricultural, pastoral, and even mineral territory have not yet been developed and scarcely explored. The fact that the continent lies on both sides of the equator has thus far closed a great part of it to European colonization. The uncertain banks of the Amazon, the forests and marshes which line them, and the insalubrious climate along its course have prevented it from leading immigration to the fertile, higher, and more healthful valleys of its upper tributaries. Thus the whole equatorial zone is still poorly populated and cultivated, — given over to diamond and gold hunters. In some openings of the Amazon valley, however, the tropical forests and commercial plants have been exploited,

CHIEF SOUTH AMERICAN COMMERCIAL CENTERS AND ROUTES (1903)

and many resources in this zone lie waiting for development. Farther away from the equator, other regions have already been developed quite extensively, but still there are almost inexhaustible resources in all these regions that have scarcely been touched.

Argentina, Brazil, and Chile are to-day the leading commercial countries of South America. Together they possess about three fourths of the foreign trade of that continent. The foreign trade of Argentina has increased about ninefold during the present period; Brazil's commerce has not increased nearly so rapidly as has that of Argentina. The foreign commerce of Chile has a little more than doubled during this period.

England ranks first in the trade with Argentina, Brazil, and Chile, as well as in that with most of the smaller South American states. Germany also has a large part of this trade and seems to be gaining upon England. France ranks about fourth. Belgium and Italy also have large portions of the trade with Argentina, Uruguay, and Paraguay. The United States has a comparatively small part of the South American trade, except in the case of Brazil and a few other countries.

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