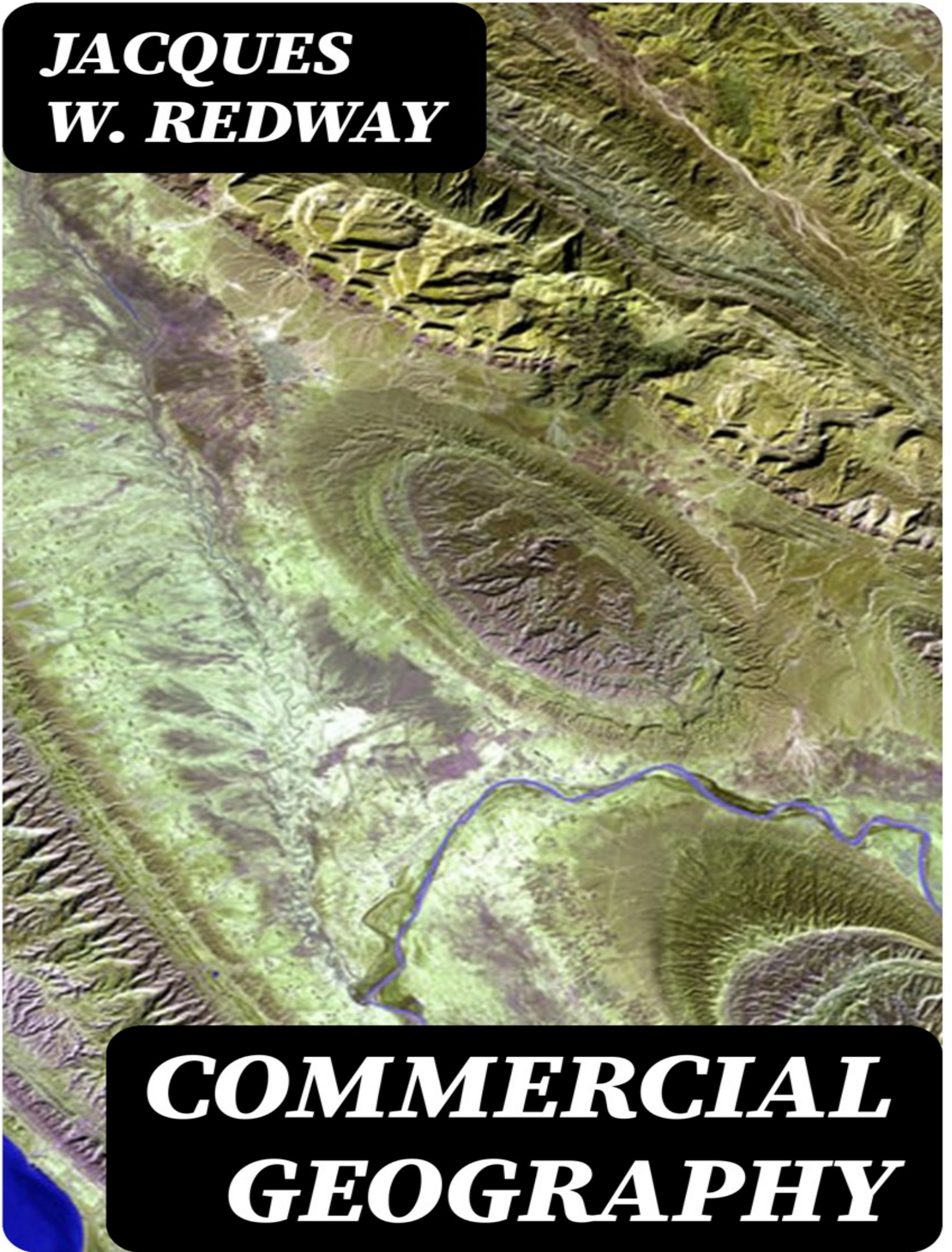


***JACQUES  
W. REDWAY***

***COMMERCIAL  
GEOGRAPHY***





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W. REDWAY**



**COMMERCIAL  
GEOGRAPHY**

**Jacques W. Redway**

# **Commercial Geography**

**A Book for High Schools, Commercial Courses, and  
Business Colleges**

EAN 8596547119142

DigiCat, 2022

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# **PREFACE**

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THE quiet industrial struggle through which the United States passed during the last decade of the nineteenth century cannot fail to impress the student of political economy with the fact that commercial revolution is a normal result of industrial evolution. Within a period of twenty-five years the transportation of commodities has grown to be not only a science, but a power in the betterment of civil and political life as well; and the world, which in the time of M. Jules Verne was eighty days wide, is now scarcely forty.

The invention of the Bessemer process for making steel was intended primarily to give the railway-operator a track that should be free from the defects of the soft, wrought-iron rail; in fact, however, it created new industrial centres all over the world and brought Asia and Africa under commercial conquest. The possibilities of increased trade between the Atlantic seaboard and the Pacific Coast States led to the building of the Northern Pacific and Great Northern Railways. But when these were thoroughly organized, there unexpectedly resulted a new trade-route that already is drawing traffic away from the Suez Canal and landing it at Asian shores by way of the ports of Puget Sound. It is a repetition of the adjustment that occurred when the opening of the Cape route to India transferred the trade that had gathered about Venice and Genoa to the shores of the North and Baltic Seas.

In other words, a new order of things has come about, and the world and the people therein are readjusting themselves to the requirements made upon them by commerce. And so at the beginning of a new century, civilized man is drawing upon all the rest of the world to satisfy his wants, and giving to all the world in return; he is civilized because of this interchange and not in spite of it.

The necessity for instruction in a subject that pertains so closely to the welfare of a people is apparent, and an apology for presenting this manual is needless. Moreover, it should not interfere in any way with the regular course in geography; indeed, more comprehensive work in the latter is becoming imperative, and it should be enriched rather than curtailed.

In the preparation of the work, I wish to express my appreciation of the great assistance of Principal Myron T. Pritchard, Edward Everett School, Boston, Mass. I am also much indebted to the map-engraving department of Messrs. The Matthews-Northrup Company, Buffalo, N.Y.

J.W.R.

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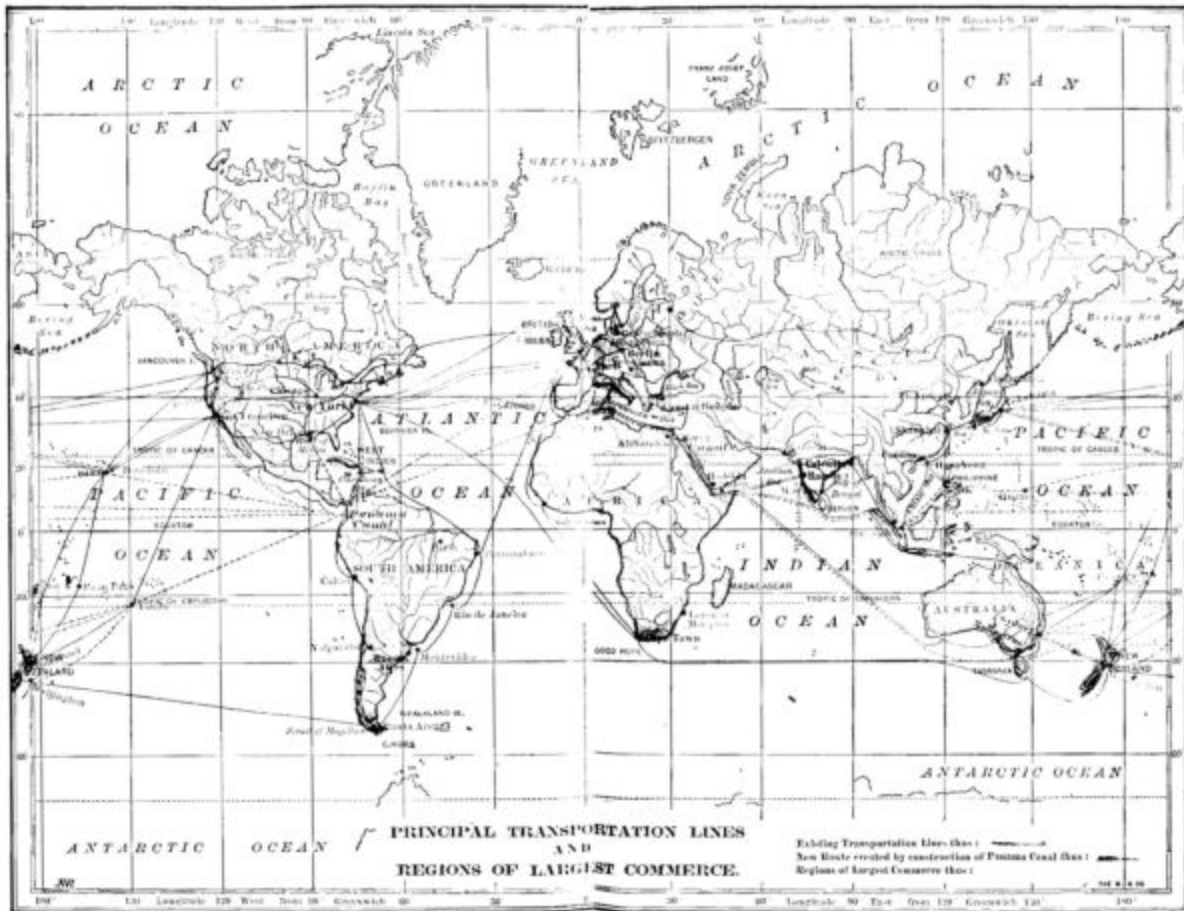
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## PRINCIPAL TRANSPORTATION LINES AND REGIONS OF LARGEST COMMERCE

TO THE TEACHER:—The contents of this book are so topicalized and arranged that, if the time for the study is limited, a short course may be selected. Under no circumstances, however, should Chapters [V](#), [VI](#), [VIII](#), [IX](#), [XII](#), and [XIII](#) be omitted. A casual inspection of the questions at the end of each chapter will serve to show that they cannot be answered from the pages of the book, and they have been selected with this idea in view. They are intended first of all to stimulate individual thought, and secondly to encourage the pupil to investigate the topics by consulting

original sources. The practice of corresponding with pupils in other parts of the world cannot be too highly commended.

The following list represents a minimum rather than a maximum reference library. It may be enlarged at the judgment of the teacher. A good atlas and a cyclopædia are also necessary.

Industrial Evolution of the United States. Wright. Charles Scribner's Sons.

History of Commerce in Europe. GIBBINS. The Macmillan Company.

Discovery of America. FISKE. Houghton, Mifflin & Co.

The New Empire. ADAMS. The Macmillan Company.

Statesman's Year-Book. KELTIE. The Macmillan Company.

Outlines of Political Science. GUNTON AND ROBBINS. D. Appleton & Co.

The Wheat Problem. CROOKES. G.P. Putnam's Sons.

South America. CARPENTER. American Book Company.

From the Bureau of Statistics, Department of Commerce, Washington, D.C., the following monographs may be procured:[\[1\]](#)

Commercial China. American Commerce. Commercial Australia. Commercial Japan. Commercial Africa. Commercial India. Statistical Abstract. Great Canals of the World. World's Sugar Production and Consumption.

The following from the Department of Agriculture is necessary:

Check List of Forest Trees of the United States.

Lantern slides illustrating the subjects treated in this book may be procured from T.H. McAllister, 49 Nassau Street, New York. Stereoscopic views may be obtained from Underwood & Underwood, Fifth Avenue and Nineteenth Street, New York.

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# **COMMERCIAL GEOGRAPHY**

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# CHAPTER I

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## GENERAL PRINCIPLES

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COMMERCE and modern civilization go hand in hand, and the history of the one is the history of the other; and whatever may be the basis of civilization, commerce has been the chief agent by which it has been spread throughout the world. Peoples who receive nothing from their fellow-men, and who give nothing in return, are usually but little above a savage state. Civilized man draws upon all the rest of the world for what he requires, and gives to the rest of the world in return. He is civilized because of this fact and not in spite of it.

There is scarcely a country in the world that does not yield something or other to civilized peoples. There is scarcely a household whose furnishings and contents do not represent an aggregate journey of several times around the earth. A family in New York at breakfast occupy chairs from Grand Rapids, Mich.; they partake of bread made of wheat from Minnesota, and meat from Texas prepared in a range made in St. Louis; coffee grown in Sumatra or Java, or tea from China is served in cups made in Japan, sweetened with sugar from Cuba, stirred with spoons of silver from Nevada. Spices from Africa, South America, and Asia season the food, which is served on a table of New Hampshire oak, covered with a linen spread made from flax grown in Ireland or in Russia. Rugs from Bokhara, or from Baluchistan, cover

the floors; portières made in Constantinople hang at the doors; and the room is heated with coal from Pennsylvania that burns in a furnace made in Rhode Island.

Now all these things may be, and usually are, found in the great majority of families in the United States or Europe, and most of them will be found in nearly all households. Certain it is that peoples do exist who, from the immediate vicinity in which they live, procure all the things they use or consume. In the main, however, such peoples are savages.

A moment's thought will make it clear that before an ordinary meal can be served there must be railways, steamships, great manufacturing establishments, iron quarries, and coal mines, aggregating many thousand millions of dollars, and employing many million people. A casual inspection, too, reveals the fact that all of the substances and things required by mankind come from the earth, and, a very few excepted, every one requires a certain amount of manufacture or preliminary treatment before it is usable. The grains and nearly all the other food-stuffs require various processes of preparation before they are ready for consumption by civilized peoples. Iron and the various other ores used in the arts must undergo elaborate processes of manufacture; coal must be mined, broken, cleaned, and transported; the soil in which food-stuffs are grown must be fertilized and mechanically prepared; and even the water required for domestic purposes in many instances must be transported long distances.



## AGRICULTURE AND MANUFACTURE SUPPLEMENT EACH OTHER

A little thought will suffice to show that not only are all food-stuffs derived from the earth, but that also every usable resource which constitutes wealth is also drawn from the same source. The same is also pretty nearly true of the various forms of energy, for although the sun is the real source of light and heat, and probably of electricity, these agents are usable only when they have been transformed into earth energies. Thus, the physical energy generated by falling water is merely a transformed portion of solar heat; so also the coal-beds contain both the chemical and physical energy of solar heat and light converted into potential energy—that is, into force that can be used at the will of intelligence. Indeed, the physical being of mankind is an organism born of the earth, and adapted to the earth; and when that physical form dies, it merely is transformed again to ordinary earth substances.

The chief activities of living beings are those relating to the maintenance of life. In other words, animals must feed, and they must also protect themselves against extermination. In the case of all other animals this is a very simple matter, they simply live in immediate contact with their food, migrating or perishing if the supply gives out. In the case of mankind the conditions are different and vastly more elaborate. Savage peoples excepted, man does not live within close touch of the things he requires; indeed, he cannot, for he depends upon all the world for what he uses. In a less enlightened state many of these commodities were luxuries; in a civilized state they have become necessities. Moreover, nearly everything civilized man employs has been prepared by processes in which heat is employed.

Therefore one may specify several classes of human activities and employments:

(a) The production of food-stuffs and other commodities by the cultivation of the soil—*Agriculture*.

(b) The preparation of food-stuffs and things used for shelter, protection, or ornament—*Manufacture*.

(c) The production of minerals for the generation of power, such as coal, or those such as iron, copper, stone, etc., required in the arts and sciences—*Mining*.

(d) The exchange of food stuffs and commodities—*Commerce*.

(e) The transfer of commodities—*Transportation*.

It is evident that the prosperity and happiness of a people depend very largely on the condition of their



surroundings—that is, their environment. If a country or an inhabited area produces all the food-stuffs and commodities required by its people, the conditions are very fortunate. A very few nations, notably China and the United States, have such diverse conditions of climate, topography, and mineral resources, that they can, if necessary, produce within their national borders everything needed by their peoples.

The prosecution of such a policy, however, is rarely economical; in the history of the past it has always resulted in weakness and disintegration. China is to-day helpless because of a policy of self-seclusion; and the marvellous growth of Japan began when her trade was thrown open to the world.

For the greater part the environment of a people is deficient—that is, the locality of a people does not yield all that is required for the necessities of life. For instance, the New England plateau requires an enormous amount of fuel for its manufacturing enterprises; but practically no coal is found within its borders; hence the manufacturers must either command the coal to be shipped from other regions or give up their employment. The people of Canada require a certain amount of cotton cloth; but the cotton plant will not grow in a cold climate, so they must either exchange some of their own commodities for cotton, or else go without it. The inhabitants of Great Britain produce only a small part of the food-stuffs they consume; therefore they are constantly exchanging their manufactured products for the food-stuffs that of necessity must be produced in other parts of the world.

The dwellers of the New England plateau might grow the bread-stuffs they require, and in times past they did so. At that time, however, a barrel of flour was worth twelve dollars. But the wheat of the prairie regions can be grown, manufactured into flour, transported a thousand miles, and sold at a profit for less than five dollars a barrel. Therefore it is evidently more economical to buy flour in Minnesota than to grow the wheat and make it into flour in Massachusetts.

All these problems, and they exist without number, show that man may overcome most of the obstacles that surround him. So we find civilized man living in almost every part of the world. Tropical regions are not too scorching, nor are arctic fastnesses too cold for him. In other words, because of commerce and transportation, he can and usually does master the conditions of his environment; his intelligence enables him to do so, and his ability to do so is the result of the intelligent use of experience and education.

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# CHAPTER II

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## HOW COMMERCE CIVILIZED MANKIND

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THE history of western civilization is so closely connected with the development of the great routes of travel and the growth of commerce that one cannot possibly separate them. Commerce cannot exist without the intercourse of peoples, and peoples cannot be in mutual communication unless each learns from the other.

**Feudalism.**—When the Roman Empire fell civilization in western Europe was not on a high plane; indeed, the feudalism that followed was not much above barbarism. The people were living in a manner that was not very much unlike the communal system under which the serfs of Russia lived only a few years ago. Each centre of population was a sort of military camp governed by a feudal lord. The followers and retainers were scarcely better off than slaves; indeed, many of them were slaves. There was no ownership of the land except by the feudal lords, and the latter were responsible for their acts to the king only.

But very few people cared to be absolutely free, because they had but little chance to protect themselves; so it was the common custom to attach one's self to a feudal lord in order to have his protection; even a sort of peonage or slavery under him was better than no protection at all. A few of the people were engaged in trade and manufacture of some kind or other, and they were the only ones through

whom the feudal lord could supply himself with the commodities needed for his retainers and the luxuries necessary to himself.

Each feudal estate, therefore, became a sort of industrial centre by itself, producing its own food-stuffs and much of the coarser manufactures. It was not a very high condition of enlightenment, but it was much better than the one which preceded it, for at least it offered protection. It encouraged a certain amount of trade and commerce, because the feudal lord had many wants, and he was usually willing to protect the merchant who supplied them.

**The Crusades and Commerce.**—The Crusades, or wars by which the Christians sought to recover the Holy Land from the Turk, resulted in a trade between Europe and India that grew to wonderful proportions. Silk fabrics, cotton cloth, precious stones, ostrich plumes, ivory, spices, and drugs—all of which were practically unknown in Europe—were eagerly sought by the nobility and their dependencies. In return, linen and woollen fabrics, leather goods, glassware, blacklead, and steel implements were carried to the far East.

Milan, Florence, Venice and Genoa, Constantinople and a number of less important towns along the Mediterranean basin became important trade centres, but Venice and Genoa grew to be world powers in commerce. Not only were they great receiving and distributing depots of trade, but they were great manufacturing centres as well.

The routes over which this enormous commerce was carried were few in number. For the greater part, the Venetian trade went to Alexandria, and thence by the Red



Sea to India. Genoese merchants sent their goods to Constantinople and Trebizond, thence down the Tigris River to the Persian Gulf and to India. There was also another route that had been used by the Phœnicians. It extended from Tyre through Damascus and Palmyra[2] to the head of the Persian Gulf; this gradually fell into disuse after the founding of Alexandria.

The general effects of this trade were very far-reaching. To the greater number of the people of Europe, the countries of India, China, and Japan were mythical. According to tradition they were infested with dragons and gryphons, and peopled by dog-headed folk or by one-eyed Arimaspians. About the first real information of them to be spread over Europe was brought by Marco Polo, whose father and uncle had travelled all through these countries during the latter part of the thirteenth century.[3] Marco Polo's writings were very widely read, and influenced a great many people who could not be reached through the ordinary channels of commerce. So between the wars of the Crusades on the one hand, and the growth of commerce on the other, a new and a better civilization began to spread over Europe.

**The Turkish Invasions.**—But the magnificent trade that had thus grown up was checked for a time by an unforeseen factor. The half-savage Turkomans living southeast of Russia had become converted to the religion of Islam, and in their zeal for the new belief, determined to destroy the commerce which seemed to be connected with Christianity. So they moved in upon the borderland between Europe and Asia, and one after another the trade routes were tightly closed. Then they captured Constantinople, and the routes between

Genoa and the Orient were hermetically sealed. Moslem power also spread over Syria and Egypt, and so, little by little, the trade of Venice was throttled.



ROUTES TO INDIA—

### THE TURK CHANGES THE COMMERCE OF THE WORLD

Now a commerce that involved not only many millions of dollars, but the employment of thousands of people as well, is not likely to be given up without a struggle. So the energy that had been devoted to this great trade was turned in a new direction, and there began a search for a new route to India—one that the Turks could not blockade.

**The Search for an All-Water Route to India.**—Overland routes were out of the question; there were none that could be made available, and so the search was made for a sea-route. Rather singularly the Venetians and Genoese, who had hitherto controlled this trade, took no part in the search; it was conducted by the Spanish and the Portuguese.

The Spanish monarchs, Ferdinand and Isabella of Castile, fitted out an expedition under Christopher Columbus, a master-mariner and cartographer, the funds being provided by Isabella, who pledged her private property as security for the cost of the expedition. This expedition resulted in the discovery, October 10-21, 1492, of the West India Islands. In a subsequent voyage, Columbus discovered the mainland of South America.

Even before the voyage of Columbus, the Portuguese had been trying to find a way around Africa to India, and Pope Eugenius IV. had conferred on Portugal "all heathen lands from Cape Bojador eastward even to the Indies." Little by little, therefore, Portuguese navigators were pushing southward until, in 1487, Bartholomew Dias sighted the Cape of Good Hope, and got about as far as Algoa Bay. Then he unwillingly turned back because of the threats of his crew. It was a most remarkable voyage, and one of the shipmates of Dias was Bartholomew Columbus, a brother of the discoverer of the New World.

Ten years later, or five years after the voyage of Columbus, Vasco da Gama sailed from Lisbon for the Cape of Good Hope. As he passed the Cape he was terribly storm-tossed, but the storms carried him in a fortunate direction. And when at last he got his reckonings, he was off the coast of India; he therefore kept along the coast until in sight of a port. The port was the well-known city of Calicut. Two years later he returned to Europe by the same route, his ships laden with spices, precious stones, beautiful tapestries and brocades, ivory and bronzes. The long-sought sea-route to India had been discovered.



A HANSE CITY—HAMBURG, ALONG THE WATER-FRONT

**Commerce in Western Europe.**—After the discovery of the new route, Venice and Genoa were scarcely heard of in relation to commerce; they lost everything and gained nothing. The great commerce with the Orient was to have a new western terminus, and the latter was to be on the shores of the North and Baltic Seas.

The commerce between Europe and India stimulated trade in western Europe as well. As early as the twelfth century the manufacture of linen and woollen cloth had grown to be a very important industry that had resulted in the rapid growth of population. The older cities grew rapidly, and new ones sprang up wherever the commodities of trade were gathered, manufactured, or distributed.

These centres of trade had two hostile elements against them. The feudal lords used to pillage them legally by extorting heavy taxes and forced loans whenever their treasuries were empty. The portionless brothers and

relatives of the feudal lords, to whom no employments save war, adventure, and piracy were open, pillaged them illegally. Along the coasts especially, piracy was considered not only a legitimate, but a genteel, profession. So in order to protect themselves, the cities began to join themselves into leagues.

**The Hanse League.**—About the beginning of the thirteenth century[4] Hamburg and Lübeck formed an alliance afterward called a *hansa*; at the beginning of the fourteenth century it embraced seventy cities, having the capital at Lübeck. At the time of its greatest power the League embraced all the principal cities of western Europe nearly as far south as the Danube. Large agencies, called "factories," were established in London, Bruges, Novgorod, Bergen, and Wisby. The influence of the League practically controlled western Europe.

The Hanse League performed a wonderful work. It stopped piracy on the seas and robbery on the land. Industrially, it encouraged self-government and obedience to constitutional authority. Shipbuilding and navigation so greatly improved that the ocean traffic resulting from the discovery of the cape route to India quickly fell into the hands of Hanse sailors and master-mariners. The League not only encouraged and protected all sorts of manufactures, but its schools trained thousands of operatives. The mines were worked and the idle land cultivated. It was the greatest industrial movement that ever occurred.



## HANSE ROUTES—THE HANSE LEAGUE REORGANIZES THE TRADE OF THE WORLD

Socially, the Hanse League brought the wealth that gave those comforts and conveniences before unknown. The standards of social life, education, art, and science were raised from a condition scarcely better than barbarism to a high plane of civilization. Indeed, the civilization of western Europe was the most important result of it.

It forced the rights of individual freedom, as well as municipal independence, from more than one monarch, and punished severely the kings who sought to betray it. It crushed the power of those who opposed it,<sup>[5]</sup> and rewarded those who were faithful to it. Its most important mission, however, was the overthrow of feudalism and the gradual substitution of popular government in its place.

Having accomplished the regeneration of Europe, the Hanse League died partly by its own hand, because of its arrogance, but mainly from the fact that, having educated western Europe to self-government and commercial independence, there was no longer need for its existence. Independent cities grew rapidly into importance, and these got along very well without the protection of the League. The great industrial progress was at times temporarily checked by wars, but it never took a backward step. Indeed the progress of commerce has always been a contest between brains and brute force, and in such a struggle there is never any doubt about the final outcome.

#### QUESTIONS FOR DISCUSSION



What were some of the effects of Cæsar's invasion of Germanic Europe so far as commerce is concerned?

What were some of the effects on commerce of the breaking up of the Roman Empire?

How did the invasion of England by William of Normandy affect the commerce of the English people?

Who was Henry the Navigator, and what did he accomplish?

How did the blockade of the routes between Europe and India bring about the discovery of America?

What was the result of the great voyage of the Cabots?

Was the overthrow of feudalism in Europe a gain or a loss to commerce?

Why are not commercial leagues, such as the Hanse, necessary at the present time?

Why did Spain's commerce decline as Portugal's thrived?

COLLATERAL READING[6]

Gibbins's History of Commerce—Chapters IV-V.

Fiske's Discovery of America, Vol. 1—Chapters IV-V.

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# CHAPTER III

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## TOPOGRAPHIC CONTROL OF COMMERCE

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THE great industry of commerce, which includes both the trade in the commodities of life and the transportation of them, is governed very largely by the character of the earth's surface. But very few food-stuffs can be grown economically in mountain-regions. Steep mountain-slopes are apt to be destitute of soil; moreover, even the mountain-valleys are apt to be difficult of access, and in such cases the cost of moving the crops may be greater than the market value of the products. Mountainous countries, therefore, are apt to be sparsely peopled regions.

But although the great mountain-systems are uninhabitable, or at least sparsely peopled, they have a very definite place in the economics of life. Thus, the great western highland of the United States diverts the flow of moisture from the Gulf of Mexico northward into the central plain, and gives to the region most of its food-growing power. In a similar manner, moisture intercepted by the Alps and the Himalayas has not only created the plains of the Po and the Ganges from the rock-waste carried from the slopes, but has also made them exceedingly fertile.

Mountain-ranges are also valuable for their contents. The broken condition of the rock-folds and the rapid weathering to which they are subjected have exposed the minerals and

metals so useful in the arts of commerce and civilization. Thus, the weathering of the Appalachian folds has made accessible about the only available anthracite coal measures yet worked; and the worn folds about Lake Superior have yielded the ores that have made the United States the foremost copper and steel manufacturing country of the world. Gold, silver, tin, lead, zinc, platinum, granite, slate, and marble occur mainly in mountain-folds.

**Mountains and Valleys.**—Mountain-ranges are great obstacles to commerce and intercommunication. The Greek peoples found it much easier to scatter along the Mediterranean coast than to cross the Balkan Mountains. For twenty years after the settlement of California, it was easier and less expensive to send traffic by way of Cape Horn than to carry it across the Rocky Mountains.

The deep cañons of mountainous regions are quite as difficult to overcome as the high ranges. In modern methods of transportation a range that cannot be surmounted may be tunnelled, and a tunnel five or six miles in length is no uncommon feat of engineering. A cañon, however, cannot be tunnelled, and if too wide for cantilever or suspension bridges, a detour of many miles is necessary. In crossing a deep chasm the route of transportation may aggregate ten or fifteen times the distance spanned by a straight line.

Excepting the mining regions, the population of mountainous countries is apt to be found mainly in the intermontane valleys. A reason for this is not hard to find; the valleys are usually filled with rich soil brought from the higher slopes and levelled by the water. The population, therefore, is concentrated in the valley because of the food-