

# THE PACIFIC

NORTHWEST

Information for Settlers and Others.



NEW YORK:

MILLS BUILDING, BROAD STREET.
1883.

# PACIFIC SLOPE LANDS.

# The Northern Pacific Railroad Co.

OFFERS FOR SALE

13,000,000 ACRES

-OF-

# WHEAT LANDS, GRAZING LANDS, TIMBER LANDS,

Situated in the Regions traversed by its line in Washington and Oregon, and available for immediate Settlement and Improvement.

There is an equal amount of Government lands in Washington and Oregon lying in alternate sections with the Railroad lands which is offered free to actual settlers, under the Homestead, Pre-emption and Tree-Culture laws of the United States.

The Northern Pacific Railroad is operated from St. Paul, the head of navigation on the Mississippi River, and from Duluth, at the head of Lake Superior, to Portland, Oregon, and Puget Sound, Washington Territory, forming a great new trans-continental line from the Great Lakes to the Pacific Ocean, and to Puget Sound, a distance of over 2,000 miles. It traverses Minnesota, North Dakota, Montana, Northern Idaho, Washington and Oregon.

## These are the most Productive Wheat Lands on the Continent.

#### THE WHEAT LANDS

of Washington and Oregon yields from 25 to 50 bushels to the acre. The crops of other grains vegetables and fruits are also prolific. The climatic conditions are such as to insure a good crop every year.

#### THE GRAZING LANDS

of Washington and Oregon are covered with the nutritious bunch-grass, on which stock feed and thrive throughout the whole year, and keep in good condition without any other food.

#### THE TIMBER LANDS

of Washington and Oregon are covered with a heavy growth of pine, fir and hard-wood trees, and are traversed by streams that afford ample water-power.

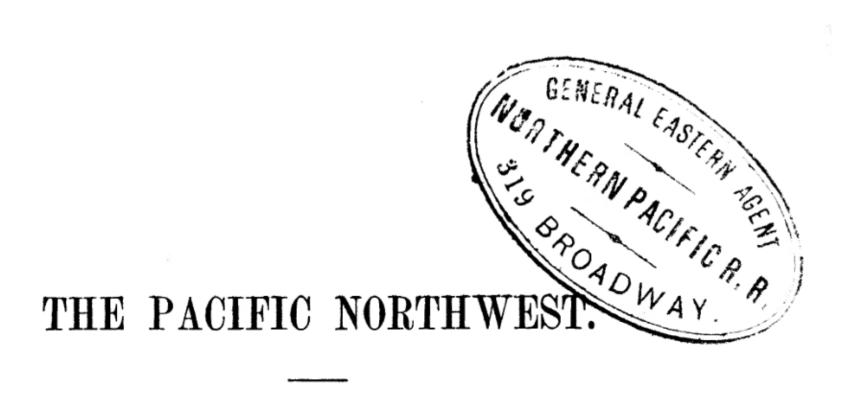
TERMS OF SALE. The price of Northern Pacific Agricultural Lands in Washington and time, one-fifth cash. At the end of first year the interest only on the unpaid amount. One-fifth of the principal and the interest due at the end of each of next four years. The interest is 7 per cent. per annum.

A rich soil, a mild and beautiful climate, good transportation facilities, a growing, intelligent and enterprising population, and excellent opportunities for industry and capital, invite

the emigrant to Oregon and Washington.

FREE.—For Maps and Publications SENT FREE OF CHARGE, and for all information relating to lands in Washington and Oregon, apply to or address either

A. D. EDGAR, General Agent, 52 Clark St., Chicago, Ill. PAUL SCHULZE, General Land Agent, Portland, Oregon. P. B. GROAT, General Emigration Agent, St. Paul, Minn., or CHAS. B. LAMBORN, Land Commissioner, St. Paul, Minn.



In the variety and extent of its natural resources, the Pacific Northwest, a designation which particularly embraces the State of Oregon and Territory of Washington, is richer than almost any other part of the United States. The principal attractions which are offered to settlers, are a temperate and healthful climate, an exceedingly fruitful soil, most valuable fisheries, great mineral wealth and an almost inexhaustible supply of timber. The capabilities of this region for supporting a large and prosperous population have been recognized for more than half a century. But, in spite of the unquestionable merits of the country, it had until recently received little attention from the large army of home-seekers who for a long period have been fast filling up the great but much less valuable areas of the United States, which lie closer to the principal centres of population.

This neglect was not surprising. Oregon and Washington were so remote and utterly destitute of communication with other parts of the United States as to be virtually beyond the reach of immigration, being only accessible at a cost of time, money and hardship which few persons are able to expend. This isolation also prevented capital from engaging, except to a very limited extent, in any of the many inviting enterprises for which the Pacific Northwest offers so wide and excellent a field. The country was not only destitute of railroad communication with the outer world, but was also almost devoid of internal means of transportation, excepting those furnished by its great facilities for water communication, upon which, prior to 1880, it mainly depended for the degree of development which it had at that time attained. Under these great drawbacks the social and material progress of the Pacific Northwest was necessarily slow. Within the past few years, however, a new order of affairs has been introduced. Far-sighted capitalists have made and are continuing to make, earnest efforts to develop the abundant and divers resources of the country. Railroads have been built, and the means of water communication have been extended, the result of which already has been the redemption and occupation of rich areas from the primitive wilderness. Within the brief time since these enterprises began, the advancement of the country has been everywhere apparent, and what has been already accomplished is simply wonderful.

In the summer of 1879 the Oregon Railway and Navigation Company was organized. Under its auspices those broad projects which have already wrought so beneficial a change upon the condition of the Pacific Northwest were put into execution. As a basis of operation, this organization purchased the property and franchises of two existing corporations—the Oregon Steam Navigation Company, and a line of steamships between Portland and San Francisco. At once branch roads to the great wheat-producing districts of the Upper Columbia River and a trunk line between Portland and the naturally rich interior were projected and speedily built. The old vessels between Portland and San Francisco were replaced by as fine iron steamships as float upon the ocean. Another fleet of steamships owned by the Oregon Improvement Company, an allied corporation, was provided, in order to

develop the trade of all parts on the coast from Alaska to Southern California. The extension of the Oregon and California Railroad, from Portland to the California line, was spurred on. Through rail connection with Puget Sound was brought about by the prolongation of the Pacific Division of the Northern Pacific Railroad, from its terminus at Kalama, on the Columbia River, to Portland. The transportation facilities of the Willamette Valley were greatly increased by the operation of an extended line of narrow gauge railroad, in addition to the older roads, which for some years had existed.

East of the Cascade Mountains the Oregon Railway and Navigation Company has already built several hundred miles of road, penetrating the very heart of the fine wheat fields of the great basin of the Columbia River. Thousands of laborers are still in its employment, engaged in grading and track laying, wherever the capability of the soil to produce invites enterprise.

This company virtually forms part of two leading transcontinental systems. It is allied with the great Northern Pacific Railroad, which is now completed and in operation from Lake Superior and St. Paul to Puget Sound, and connects with this trunk line near the confluence of the Columbia and Snake Rivers. It also forms a junction with the Oregon Branch of the Union Pacific Railroad at Baker City, in Southern Oregon.

The great results already attained can best be understood by the statement that, at present, there are over 2,000 miles of transportation lines in operation, exclusive of 1,470 miles of ocean steamer navigation between San Francisco, Portland and the ports of Puget Sound. At the close of 1883 there were finished and in operation about six thousand miles of trunk lines and branches, all meeting in Portland. These lines extend from St. Paul and Duluth, in Minnesota, to Portland, Puget Sound, and to San Francisco. They will undoubtedly give a wonderful impetus to the fertile regions of the Pacific Northwest, by developing the unbounded resources of soil, forests and mines, and by putting to use the inexhaustible water power which now waits for man to claim and employ it.

The harvest of the years 1882-83 gave the Columbia River nearly ten million bushels of wheat to export. Within three years the shipments will probably reach twenty million bushels. Now eight to ten million pounds of wool are annually exported, and that, too, will increase proportionately. Coal and iron are in inexhaustible supply to build up prosperous industries. All that now is wanting, is more brain, muscle and capital for the Pacific Northwest to weave from the warp and woof of its destinies a great and wonderful future.

#### OREGON.

Oregon is situated between the parallels of 42° and 46° 18′ north latitude, and between the meridians of 116° 33′ and 124° 25′ west from Greenwich. It is the most northwesterly State of the Union. On the north it is bounded by Washington Territory, the Columbia River forming the boundary to the point where that river crosses the parallel of 46°, and the line running thence eastward along that parallel to the Snake River. Eastwardly it borders on Idaho Territory; the Snake River being the boundary to the mouth of the Owyhee, and thence by a line drawn due south along the meridian of 116° 05′ west longitude to Nevada. On the south it is bounded by Nevada and California, the parallel of 42° north forming the boundary line. The Pacific Ocean bounds it on the west.

The Pacific Northwest.

NORTHERN PACIFICATION OF THE RIVER OF CHERRY PACIFIC R. P. The average width of Oregon from east to west is 350 miles to south 275 miles. Its full shore line is 285 miles. Its area h 95.474 miles, or nearly 61,000,000 acres. It is as large as all the New England States two-thirds of the State of New York added, and larger than New York and vania combined.

The population of the State, according to the official returns of the census of 1880, was 174,767. It has since increased to at least 250,000.

#### WASHINGTON TERRITORY.

Before Alaska, which is not yet organized, was added to the domain of the United States, the most northwestern part of the country was Washington Territory. This Territory lies between the parallels 45° 32' and 49° north latitude, and the meridians of 117° and 124° 8' west longitude from Greenwich. On the west it is bounded by the Pacific Ocean. On the north it is divided from British Columbia by a line running through the centre of the Strait of Juan de Fuca, the Canal de Haro and the Gulf of Georgia as far as the forty-ninth parallel; thence along this parallel to the west line of Idaho. On the south, the Columbia River, to about the one hundred and nineteenth meridian, and thence, eastwardly, the forty-sixth parallel, separate the Territory from Oregon. Its limit on the east is Idaho along the one hundred and seventeenth meridian to Lewiston, and then the line follows the Snake River till it intersects with that of Oregon.

The length of Washington Territory, from north to south, ranges from 200 to 250 miles, and its greatest breadth from east to west is about 360 miles. Its coast length is 245 miles, and its full shore line 1,738 miles. It is smaller than most of the Territories and several of the Western States, having an area only of 69,994 square miles, or 44.796,160 acres, but is, nevertheless, one and a half times as large as New York or Pennsylvania. Exclusive of the area covered by the waters of Puget Sound, and the mountainous region, which are unfit for cultivation, there would probably remain 35,000,000 acres. Of these, 20,000,000 acres are timber lands, about 5,000,000 are rich alluvial bottoms, and 10,000,000 are prairies and plains. Of the latter, a large proportion is well adapted for wheat culture, and all of it for stock raising.

The tenth census of the United States, taken in 1880, gave the Territory 75,120 inhabitants, or about one to the square mile. The population is now over 120,000.

#### TOPOGRAPHICAL.

Mountains.—The Cascade Mountains divide the entire Territory into two unequal parts, each of which is characterized by a marked dissimilarity in topography, soil, climate, and, to some extent, productions. These mountains run nearly in a northerly and southerly direction at a distance of 110 miles from the Pacific Ocean. They are flanked by the Coast Range from forty to seventy miles to the westward, and by the Blue Mountains at about 150 miles to the eastward. These great mountain chains lend the entire country an extraordinary diversity of feature. Fruitful valleys of varying extent, each of which is traversed by a more or less important stream, are numerous. The scenic beauty of the whole vast region is marvelous, and it can scarcely be surpassed by any other portion of the United States.

RIVERS, HARBORS, ETC.—The largest river of the Pacific Northwest is the Columbia, which, with its affluents, drains an area of 395,000 square miles. It is navigable for a distance of 725 miles. The distance between its navigable waters and the Missouri River is only 450 miles; thus its great value as a means of transportation will be readily seen. The Willamette River is next in size, and may be navigated by the largest ocean steamships and sailing vessels as far as Portland, 112 miles from the sea, and by river steamers a distance of 138 miles beyond. The Snake River comes next in importance and there are numbers of other streams navigable for long distances.

Puget Sound is a beautiful archipelago, covering an area of over 2,000 square miles. Its waters are everywhere deep and free from shoals, its anchorage secure, and it offers every facility that a great commerce would demand. The whole region about the Sound is inexhaustibly rich in timber, as well as in deposits of coal and iron. Water power sites are quite abundant, and gold is found in paying quantities in many of the river beds.

There are several commodious harbors for vessels of light draft on the coast line, exclusive of those found at the mouths of the several rivers. At these places a thriving trade is carried on in lumbering, coal mining, fishing, oystering, dairying and agricultural products.

#### CLIMATE.

The climate of Oregon and Washington is mild and equable. The mean temperature of January ranges from 10° to 20° higher on the Pacific than on the Atlantic side of the Rocky Mountains. This difference is caused by the Japan current, which modifies the climate of the Northern Pacific coast in the same way that the Atlantic Gulf Stream tempers the climate of the British Isles.

There is, however, a great dissimilarity in the climate of Oregon and Washington between those lands lying west of the Cascade Mountains and those east of them.

West of the Cascade Range the winters are rainy, rather than cold. The average temperature for spring is 52°; for summer, 67°; for autumn, 53°, and for winter, 38°; showing a mean deviation of only 29° during the year. The winter or rainy season begins about the middle of October, often later, and ends about the first of May. The rains are more copious in December, January and March. At the beginning and end of the wet season the rain is usually in showers, with many intervals of bright weather. Snow sometimes falls, but speedily disappears. Thunder-storms are exceedingly rare; hail-storms, hurricanes, earthquakes and other destructive phenomena are scarcely known. Since the settlement of the country by white men, beginning with Lewis and Clark's expedition, in the early part of the century, no storm has done material damage in the region west of the Rocky Mountains, north of California.

In Western Oregon and Washington Territory, whenever the thermometer falls a few degrees below the freezing point, the weather is usually bright and pleasant, with heavy white frost at night. The frosts that occur in spring, which in other lands would be severe enough to injure fruit and other crops, are commonly followed by heavy fogs from the ocean. The humidity of these fogs dissolves the frost before the sun can strike the vegetation, so that no harm is done by it. This moist atmosphere keeps the grass perennially green on the coast, and it is not unusual for flowers to bloom in the open air the winter through.

Ice is seldom sufficiently thick to be cut for use, and skating is a rare pastime. The spring opens so early that the farmer sows his seed, and the fruit trees and

wild flowers are in bloom when in latitude from four to six degrees further south, on the Atlantic coast, the rigor of winter is still unrelaxed.

During the remainder of the year, from April to October, the weather is delightful. There are showers from time to time, but vegetation is kept fresh by the night dews and occasional morning fogs. July is the hottest month; but the days are tempered by sea breezes and the nights are cool.

East of the Cascade Mountains, it must be remembered, the climate and natural features of the country are very different from those of the great basin lying west of them, so that the popular divisions, Eastern and Western Oregon and Washington Territory, are warranted.

In the eastern section the thermometer is much higher in summer and lower in winter than in the western section. The rain-fall is only half as heavy. From June to September there is no rain, the weather being perfect for harvesting. The heat is great, but not nearly so oppressive as a much lower grade would be in the Eastern States, and the nights are invariably cool.

The winters are short, but occasionally severe. Snow seldom falls before Christmas, and sometimes lies from four to six weeks, but usually disappears in a few days. The so-called "Chinook," a warm wind, is of great benefit to the country; it blows periodically and melts deep snows in the course of a few hours. This warm atmosphere is caused by the passage of the wind across the Japan current.

In Eastern Oregon and Washington spring begins in February, with warm, pleasant weather, and lasts until the middle of May. At this season rain falls in sufficient quantity to give life to vegetation and ensure good crops. The average temperature is 52°.

Autumn weather in October and November is generally delightful. There is often frost by night, but the days are usually warm and bright. The season is marked by showers, and also by thunder-storms in some localities. The mercury ranges between 55° and 70°.

The rain-fall of the year does not average more than twenty inches. South of the Snake River it is not more than fifteen inches, increasing gradually to the northward.

The foregoing description of the climate of Oregon and Washington Territory must be understood, however, as applicable only to the general meteorological characteristics of the two grand divisions of the country. These characteristics are naturally modified to a greater or less extent by locality. The region is vast enough to embrace much variety of climate within the broad limits of the facts here presented. Intending settlers thus have a wide range of climate from which to choose that which may appear to them most desirable.

#### THE SOIL.

The excellence of the soil of Oregon and Washington Territory is not less marked than that of the climate. The combination of good climate and fruitful soil gives the country its exceptional value for agricultural pursuits.

In Western Oregon and Washington the general character of the soil may be described as follows: In the valleys it is a dark loam, containing a large proportion of vegetable mould, and having a clay subsoil. In the bottom lands, near the water-courses, it usually consists of rich deposits of alluvium. Of such lands there are often large tracts of great fertility, termed beaver-dam lands, which, as the name indicates, have been formed by the labor of this busy amphibious rodent

during countless centuries. The constituents of this soil are earthy deposits or humus of great depth, produced from decayed trees and other vegetable growths. All these various soils are of wonderful productive capacity. Under cultivation they are quick, light and friable, yielding astonishing crops of hay, hops, grain, fruits and vegetables for a series of years, without manure and with only indifferent plowing. The ability of the clay subsoil to retain moisture explains, to some extent, the enduring quality of the land. The bottoms are mainly covered with a deciduous growth of hazel, cherry, thorn, vine-maple, alder, crab-apple and salaberry, with only occasional firs and pines, and, as a rule, are confined to narrow valleys. Unlike prairie lands, they must be cleared, at a cost varying from \$15 to \$20 per acre, before they can be plowed. Usually, however, the wood and lumber thus secured will pay for the work, and the farmer will afterwards find his reward in the abundance of his crops.

The soil of the uplands is somewhat inferior to that of the river bottoms. That of the undulating foot-hills and more tillable mountain-faces is red, brown or black loam. The more elevated lands afford excellent natural pasturage, and also produce good crops of grain and the hardier fruits and vegetables.

East of the Cascade Mountains the soil is a dark loam of great depth, composed of alluvial deposits and decomposed lava overlying a clay subsoil. This, in turn, rests upon a basaltic formation which is so far be'ow the surface of the ground as to be visible only on the banks of the deep water-courses. stituents of this soil adapt the land peculiarly to the production of wheat. All the mineral salts which are necessary to the perfect growth of this cereal are abundant, reproducing themselves constantly as the processes of gradual decomposition in this soil of volcanic origin proceed. The clods are easily broken by the plow, and the ground quickly crumbles on exposure to the atmosphere. Although the dry season continues for months, this light porous land retains and absorbs enough moisture from the atmosphere, after its particles have been partially disintegrated, to ensure perfect growths and full harvests. This assertion is so at variance with common experience that it might well be questioned. Happily, it is susceptible of explanation. In spite of the fact that there is scarcely a shower between May and the following October, and that the average rain-fall for the year does not exceed twenty inches, there is always the requisite moisture for maturing the crops. Paradoxical as it may seem, if the rain were greatly in excess of this low average, damage would certainly ensue; and it is equally sure, if successful farming depended upon the limited rain-fall, there would be poor harvests. The clouds supply only in part the moisture which is needed. The warm air-currents, surcharged with vapor, which sweep inland from the ocean up the channel of the Columbia River, prevent drought. The effect of these atmospheric currents in tempering the climate has already been described. Their influence upon the vegetation is no less vital. The moisture with which they are laden is held in suspension during the day, diffused over the face of the country. At night it is condensed by the cooler temperature, and precipitated in the form of a fine mist on every exposed particle of surface which earth and plant present. The effect is that of a copious shower. This is apparent on taking a morning walk through the grass, which can only be done at the cost of wet feet. In this region it is no unusual phenomenon for a smart shower to fall when clouds are invisible and the sun is shining. This occurrence is explained also upon the theory that the vapor in the atmosphere comes in contact with an upper current of cold air, which causes rapid condensation and consequent rain. A summer drought, therefore, which in most climates is a calamity, is here a benefit. The soil needs no more rains after those of the spring are over, and the farmer may depend upon cloudless skies at harvest time. For example, the wheat crop of Eastern Washington in 1883 was 6,500,000 bushels, and no rain fell between May and September. In the whole vast basin of the Columbia River, an extent of 150 miles in width by 500 in length, there is great uniformity in the general character of the arable soil. There are, of course, modifications of its component elements as between the valleys and the higher plateau and lower mountain slopes. In the latter an admixture of clay to some extent is often found. In general, the soil of the foot-hills is more productive than that of the broader valleys.

The exceeding fertility of this great area has only of late years been known. Some of the large wheat farms, which now are most productive, were marked not long ago upon the maps, by the United States surveyors, as "lands unfit for cultivation." The prolific nature of the soil was discovered, finally, by a thoughtful investigator, who plowed and sowed a small strip as an experiment. The result was a surprise and a success. It at once opened the way to the profitable cultivation of the hitherto despised land. Now, wherever bunch grass grows, the fact is accepted that wheat will flourish. Of such lands there are almost boundless tracts awaiting settlement. A mere fraction of the vast fields has yet been taken. In course of time, however, these unoccupied lands will be surveyed and settled, depending on the facilities which may be offered by transportation lines for marketing crops. For the most part, these vast expanses of good, arable soil are the grazing grounds of countless herds and flocks, which thrive, unsheltered, the year throughout, on the natural grasses, and supply with their increase the markets of Utah, Nevada and other States.

Most of the fruits grown within the temperate zone are raised at various points in the low-lying lands in great perfection. Peaches, pears, apples, plums, grapes and berries of fine flavor are produced. Orchards come forward rapidly, peach trees bearing often three years after planting the seed.

The greatest difficulty which the settler will encounter in taking up a farm in any of these great arable tracts, is the comparative absence of timber. There are groves of cottonwood, birch, alder and willow along the water-courses, but pine, fir and tamarack must be transported as a general fact from the mountains. Numerous mills have been established in the hills, and, in many instances, these are connected with railroad stations by flumes, which transport the lumber to central points for distribution. The cost of lumber at the mills is about \$12 per thousand feet, and at the yards it ranges to a much higher figure, according to the distance it has to be transported.

#### HEALTHFULNESS.

The temperate and genial climate, especially in its freedom from the sudden variations which prevail elsewhere, has much to do with the general healthfulness of the Pacific Northwest. Naturally the health of the different districts varies in accordance with location. Portland, the metropolis of Oregon and of the whole region, is remarkably healthy, having, of course, its quota of diseases. The complaints incidental to childhood prevail seldom as severe epidemics. Typhoid fever appears, as elsewhere, as well as other ordinary diseases. Typhus fever never occurs. Cholera, which has been a scourge in the East, has never reached this part of the Pacific coast. The inhabitants of towns situated on the banks of the rivers

suffer more or less from malaria, as is the case elsewhere in places so situated. The further back one goes from the coast, the air is found to be more rarefied, and in some respects more healthy. Those who have a tendency to diseases of the respiratory organs in many cases recover their health by a residence at The Dalles, Walla Walla and other places in eastern Oregon and Washington. Mineral springs exist, and the waters are found to possess valuable medicinal properties.

#### PRODUCTIONS.

Cereals, Vegetables, Fruit and Other Crops.—Wheat is the staple agricultural product of the entire country. Its superior quality has made it famous in the grain markets of the world and ensures for it the highest price. The berry is full and heavy, often exceeding by five to nine pounds the standard weight of a bushel (sixty pounds). There is practically no limit to the quantity which may be produced, except in the lack of farmers to till the soil. The surplus of bread-stuffs for export during the past three years has averaged at least \$8,000,000 per annum in value, although each successive year the demand for home consumption has grown enormously. The yield per acre runs from 20 to 50 bushels.

Oats yield heavily and are exported largely. The standard weight of a bushel of oats is thirty-six pounds, but the weight of forty to forty-five pounds per bushel is not infrequent. Rye and barley are also profitably cultivated. Corn flourishes in southern Oregon, but the average summer is too cool for this cereal in the northern sections.

Hops are a very important product. They are grown on the river bottom lands. The crop runs from 1,500 to 3,000 pounds per acre. The principal gardens are in the Willamette Valley, Oregon, and in the Puyallup and White River Valleys, on Puget Sound, and in Yakima County, east of the Cascade Mountains. The hop acreage might be increased ten-fold, as the crop sells from fifteen to twenty cents per pound and the export demand is steady. The yield is prolific, and the crop has never failed. Suitable soil, abundant poles and fuel for drying, with cheap (Indian) labor for picking, ensure an invariably profitable harvest.

Flax also grows to perfection. Farmers find it a good crop to rotate with wheat—400 to 800 pounds of clean fibre per acre being not unusual. Near Moscow, not far from the Idaho line, there were produced in 1882 not less than 100,000 bushels of flaxseed, which netted \$150,000. In 1883 the yield equaled that of the former year.

Vegetables of every variety and of the finest quality are produced. Potatoes, onions, cabbages, turnips, squashes, beets, carrots, parsnips, cucumbers and celery grow to large size. Melons and tomatoes, however, flourish best in the warmer and dryer atmosphere east of the Cascade Mountains.

Fruits of delicious aroma and flavor and of remarkable size and beauty are grown, especially apples, pears, apricots, quinces, plums, prunes, peaches, cherries and grapes, and their culture must prove a great source of profit, the demand for shipment constantly increasing. Strawberries, raspberries, blackberries, gooseberries and currants of large size and fine flavor are also abundant. Strawberries are often ripe by the 1st of May. The business of drying and preserving fruits might be expanded indefinitely.

Grasses grow luxuriantly and in great variety. East of the Cascades there are 40,000,000 acres of natural pasture lands producing the nutritious bunch

grass. Wild pea vine, an excellent pasturage for stock, is abundant on the foothills, especially where the timber has been destroyed by fire. Of the cultivated grasses, timothy is the staple for hay. Timothy meadows are known which produce 300 tons to the acre and have not been re-seeded for thirty years. Red and white clover yield heavily under cultivation, and red-top and orchard grasses do well everywhere. Blue grass and alfalfa also flourish in some localities.

The relative productiveness of the soil, of course, varies according to its nature and the skill expended upon its cultivation. In the wheat-growing regions, with ordinary care in plowing and sowing, the yield per acre, without manuring, will be from twenty to thirty-five bushels. With a higher cultivation, but still without the use of manure, forty to fifty bushels may be obtained, as has been proved by Dr. Blalock, the celebrated farmer, upon his great wheat farm.

The ordinary harvest time for wheat is from June 24th to September 10th; for oats, from July 13th to 20th; for barley, from June 20th to July 1st; for rye, from July 1st to 10th; for corn, from August 20th to September 10th.

Barns and sheds for keeping the grain, which are indispensable in other countries, are scarcely needed east of the Cascade Mountains. The grain is threshed in the fields by machinery, and thence sent in sacks directly to warehouses for storage or exportation. Neither mildew nor rust has appeared to any great extent, and no failure of the wheat crop has been known since the settlement of the country, over forty years ago.

#### TIMBER.

It would scarcely be possible to exaggerate the extent and value of the forests of the Pacific Northwest. East and west of the Cascade Mountains there are large tracts of timber lands which the lumberman has not yet invaded. Many such tracts will be brought within the reach of markets on the completion of the transportation lines now in course of construction. In the Blue Mountains and on the eastern slopes of the Cascades the supply of timber is more than sufficient to cover the local demand. It will yield a large surplus for shipment to the level, timberless Territories lying eastward. But west of the Cascade Mountains, and especially in Washington Territory, the lumberman must look for the material which will keep his mills at work without fear of exhausting the supply. The finest body of timber in the world is embraced between the Columbia River and British Columbia and the Pacific Ocean and the Cascades. At a very low estimate, onehalf the growth of this Puget Sound district consists of trees which will yield 25,000 feet of lumber to the acre. The approximate quantity, therefore, in this great tract alone, the area of which is nearly as large as the State of Iowa, is not less than 160,000,000,000 feet. During the last thirty-five years the aggregate cut has been, perhaps, not more than 2,500,000,000 feet, leaving a supply of 157,500,-000,000 feet from which to draw. The principal growths are fir, pine, spruce, cedar, Iarch and hemlock, although white oak, maple, cottonwood, ash, alder and other varieties are found in considerable quantities. Three kinds of cedar, two of fir and three of pine are indigenous to the country. The fir, however, exceeds in quantity and value all the other species combined, and the cedar ranks second in this respect. Trees attain an unusual development, both with regard to height and to symmetry of form. Perhaps nowhere else are they found so tall, straight and gently tapering as to fit them peculiarly for ships' spars and masts. The

yellow fir is not infrequently 250 feet in height; the pine, 120 to 160 feet; the silver fir, 150 feet; white cedar, 100 feet; white oak, 70 feet, and black spruce, 150 feet. Cedars have been found of 63 feet girth and 120 feet in height. The sugar pine of southern Oregon is equal to the best cedar. Ordinary sized trees yield 6,000 to 8,000 feet of lumber each, and many as much as 15,000. Of this are made railroad ties, boards, deals, fencing, laths, paling, pickets, barrel staves and heads, household furniture and ship timber. The product of the saw-mills is shipped to San Francisco, the Sandwich Islands, Mexico, the Pacific coast of South America, Australia, and even to England and France, China and Japan. The first saw-mill was built on Puget Sound in 1851, with a capacity of 1,000 feet daily. steam saw-mill was erected at Seattle which could cut 8,000 to 10,000 feet per day. The business has since greatly increased. The largest saw-mill in operation on Puget Sound is that at Port Ludlow, with a cutting capacity of 200,000 feet per day. Other mills are situated at Port Gamble, Port Madison, Port Blakely, Port Discovery, Seabeck, Utsalady, Tacoma and New Tacoma; and the remainder at The aggregate daily cutting capacity of these mills is over 1,000,000 feet. Some of the logs sawed are enormous in girth and sometimes 115 feet in length. Planing mills are attached to most of these large saw-mills, and dressed building lumber is obtained as required. Each mill is admirably situated with a view to economical production, and nearly every one of them comprises a town of itself, with stores, shops, steam tugs, lumber vessels and dwellings owned by the companies. Ship-building is also an important feature.

The existing conditions of lumbering at Puget Sound could not be more favorable. The forests remain for the most part in virgin condition, except for a short distance from the banks of the streams and estuaries; the shores are not so abrupt as to prevent easy handling of the timber; the harbors are numerous, deep and well sheltered; the hardships, losses and delays incident to severe winters are unknown; logs may be floated down the rivers without danger of a sudden rise and the breaking of "booms;" by clearing the river channels of drift, both logs and lumber may be run out for long distances, and rafts may be towed with ease on the waters of the Sound with only the ebb and flow of the tide to consider in moving them to points of shipment. In this way loggers bring logs from all the bodies of timber along the shore lines to the mills, and dispose of them at fair rates to the owners. This gives employment to hundreds of workingmen. There are still very many desirable places for establishing not only saw-mills, but factories for the manufacture of barrels, pails, house trimmings, doors, sashes, blinds, moulding and every other article made of wood. These opportunities are not confined to Puget Sound. They exist along the harbors and bays of the entire coast of Washington Territory and Oregon, and are only used as yet to a comparatively small extent. For some purposes, and particularly in the manufacture of beautiful household furniture, the ornamental woods of Oregon are unsurpassed.

#### FISHERIES.

The waters of Oregon and Washington Territory abound in fish, of which many varieties are of great commercial value. Particularly is this the fact with regard to salmon. Every river on the coast line teems with this fish, of which there are several species, all excellent in flavor, and many being noted for immense size and weight. These salmon are easily taken, and, being well adapted for canning and salting, a great and prosperous business in connection with them is car-

ried on at several places. Especially is this the case on the Columbia River, where the business of salmon packing is one of the principal industries. The good quality of the Columbia River fish has given it a far-famed reputation, and the demand for it is unlimited. In addition to the large market for this commodity in the Eastern States, it is sold extensively in Australia, England and other European countries. This business is likely to be permanent, and it is capable of indefinite expansion, constantly adding to the enrichment of the country. The following figures show at a glance the growth of the salmon fishery of the Columbia River since it was established, in 1866:

Year.	Product.	Case Price.	Total Value.
1866	4,000	\$16 00	\$64,000
1867	18,000		234,000
1868	28,000	12 00	336,000
1869	100,000	10 00	1,000,000
1870	150,000	9 00	1,350,000
1871	200,000	9 50	1,900,000
1872	250,000	8 00	2,000,000
1873	250,000	7 00	1,750,000
1874	350,000	6 50	2,275,000
1875	375,000	5 60	2,100,000
1876	450,000	4 50	2,025,000
1877	460,000	5 20	2,392,000
1878	460,000	5 00	2,300,000
1879	480,000	4 60	2,188,000
1880	550,000	4 80	2,640,000
1881	530,000	5 00	2,650,000
1882	534,760	5 30	2,837,228
1883	620,438	4 47	2,773,357

About fifty canneries on the Columbia River, between the Cascades and the town of Astoria, near the entrance of the stream, share in this enterprise. Cans of ordinary size hold one pound each, and there are forty-eight cans in each case. Estimating the weight of the case, including the cans, at seventy-two pounds, the pack of 1882 was about 22,335 tons, and toward the close of the season the catch was so enormous that many fish were thrown away for lack of canning facilities. Although competition has reduced the wholesale price of a case of salmon from \$16 in 1866, to \$4.47 in 1883, and the sum paid the fishermen for each fish has increased during that interval of time from ten cents to eighty, the profit of the canning establishments continues to be satisfactory. In this business on the Columbia a capital of at least \$2,000,000 is invested, and all the operations must be conducted with the utmost system and economy to ensure success. The fish are taken with gill nets, seines and traps. In 1883 the number of boats employed was 1,700, including ten steam tenders. The cost of a boat, fully equipped with net, is about \$600. The gill nets are from 250 to 300 fathoms long and twenty feet deep. The seines are from 100 to 200 yards long. Each boat will catch about 2,000 fish during the season. Three average salmon will fill four dozen cans. The fishing is at its height from May to July.

Beside the salmon fisheries on the Columbia River, similar establishments,

many of great importance, exist on the Willamette, the Umpqua, the Rogue and Coquille Rivers, and at Tillamook and Coos Bays, in Oregon; and also on the waters of Puget Sound. The fish, differing much in quality and value, abound literally in millions. They crowd the seas, bays, estuaries and the smaller rivers which flow into the ocean at certain seasons of the year, and may be easily caught with gill nets and with the hook. There is ample opportunity still for the healthy growth of the salmon-fishing industry in the Northwest region.

In addition to salmon, the streams of Oregon and Washington Territory abound in various kinds of delicious trout. Sturgeon of immense size are found at the mouths of all the larger rivers. The lakes and ponds teem with fish of several species, among which may be mentioned the lake-trout, the perch and the pike. Oysters and clams are taken in the bays. Halibut of enormous size, and of a delicacy and tenderness not known in its Atlantic congener, makes its habitat in the waters of Puget Sound. Codfish, averaging two and one-half feet in length, and with a girth around the shoulders of eighteen inches, are taken in the Sound, but they fairly shoal the waters of the banks on which they live, beginning at the western extremity of Vancouver Island and extending beyond Alaska. Herrings and smelts are plentiful. Whales and seals are also found along the coast. These and other denizens of the waters abound in inexhaustible supply, needing only capital and labor to establish fisheries in this part of the country, which would prove as productive and as profitable as any on the face of the globe.

#### MINERALS.

The mineral wealth of Oregon and Washington Territory is large and diversified. Not only are the precious metals obtained, but coal, iron and other useful minerals exist in lavish quantities at many points throughout the country. The production of gold has been going on constantly during the last thirty years, and the coal and iron interests have also, of late, assumed considerable importance. But, as a rule, the mining industries are yet in their infancy.

Gold was discovered in Jackson and Josephine Counties, southern Oregon, in 1851. Some time afterward auriferous gravel was found in large quantities in Baker and Grant Counties, eastern Oregon. At various times, also, placer and quartz mining have been carried on, respectively, at Coos Bay and in the extreme southern part of the Cascade Mountains, in Oregon. In Washington Territory, likewise, the Colville country, and the bed of the Skagit River, have yielded more or less of the precious metal. Perhaps the entire quantity obtained during the past thirty years has not been less than \$40,000,000, more than half of which is to be credited to the first decade in which gold mining was prosecuted. Hitherto, as a rule, operations, in all their phases, have been conducted in a very superficial manner. True, some wonderfully rich deposits have been found, and worked with great profit. But only arastras and other primitive methods for crushing the quartz have been used. Claims were generally abandoned after the surface gravel was exhausted. The expense and labor of sinking shafts, driving tunnels, and employing the other scientific and profitable methods now in vogue, have not been applied. There seems at present, however, to be a disposition to prosecute gold mining with ordinary skill and vigor. Companies have been formed with the capital necessary to develop the real value of the deposits. Several claims have

been opened at various points, on which large amounts have been expended for the requisite machinery to carry on hydraulic mining on a large scale.

Coal will take a foremost rank among the mineral resources which are hereafter to be a prime factor in the growth and development of the country. The abundant supply of this raw material will keep in motion many prosperous industries. Immense beds of semi-bituminous and lignite coal are known to underlie many parts of the region. Especially is this the fact west of the Cascade Moun-This mineral exists in Oregon, at Coos Bay, in Coos County, on the Northern Umpqua, and in other localities in Douglas County. It is found at Yaquina Bay, at Port Oxford, near St. Helen's, on Pass Creek, on the line of the Oregon and California Railroad, and at different points in Clackamas, Clatsop and Tillamook Counties. At most of these places the beds have only been partially explored. The coal fields of Washington Territory, at Puget Sound, however, are far more extensive than those of Oregon. At a very early day in the history of the Territory indications of coal were discovered. In 1863 deposits were found on Issaqua Creek, near Samamish Lake, and on Coal Creek, near Lake Washing-A very important coal mine is at Newcastle, near Seattle. It is owned by the Oregon Improvement Company, and its product is a pure lignite, well adapted to household and railway purposes. The coal fields are connected by a narrow gauge railroad with Seattle, the shipping port, twenty-one miles distant. The company have a fleet of four new steam colliers, each vessel averaging two and one-half trips a month between Seattle and San Francisco. These steamers were built at Chester, Pa., expressly for this trade. The coal beds at Newcastle are practically inexhaustible, and the yield becomes cleaner and harder the deeper the veins are worked. The output from the Newcastle mines alone, in 1882, was not short of 220,000 tons, and the quantity mined each year grows larger, in consequence of increased transportation facilities. The total output during the twelve years since this mine has been in operation has been 1,220,000 tons. Other coal fields on Puget Sound exist on Carbon, Cedar and Green Rivers, specimens from which indicate an excellent quality. The Puyallup River coal deposits are also very valuable. Here thirty distinct veins have been found, in three different groups, varying from three feet up to nine, fourteen and even eighteen feet thick. To the Puyallup coal region a branch line of the Northern Pacific Railroad was built in 1876, now terminating at Carbonado, thirty-three miles from New Tacoma. The mines at present worked are the Seattle, Renton, Seaton, Wilkeson and Carbonado.

Iron ores, bog, hematite, and magnetic, exist in great masses, and may be easily obtained. It abounds on the Columbia River, extending from a point opposite Kalama, southward, almost to the falls of the Willamette River. It is also found in large deposits in the Counties of Columbia, Tillamook, Marion, Clackamas, Jackson and Coos. Smelting furnaces exist at Oswego, on the Willamette River, eight miles south of Portland, and near Port Townsend, in Washington Territory, at which latter place a rich bog ore is obtained. The pig iron produced at these furnaces is of excellent quality, and is largely used at the local foundries. Iron ore has been, likewise, recently found on the western slopes of the Cascade Mountains. With this abundance of iron and coal there is ample opportunity for developing important manufacturing interests. In the autumn of 1882 a company with \$3,000,000 capital was formed for the purpose of extending fron manufacture at Oswego. This company has purchased the former plant with

a large area of land containing iron ore, and has enlarged the works, increasing the output of pig iron and establishing rolling mills of great capacity. The company established near Port Townsend also proposes to enlarge its works and build rolling mills.

Deposits of rich copper exist at various points, notably on the line of the Oregon and California Railroad in Southern Oregon. Lead, tin, zinc, cinnabar, plumbago, gypsum, kaolin, pottery clays, mica, marble, granite, limestone and sandstone are also found.

#### LIVE STOCK.

Oregon and Washington Territory are undoubtedly the best country for cattle in the United States. The farmers west of the Cascade Mountains allow their cattle to roam at large nearly the whole of the year, only providing fodder for them during a short time in winter. Sometimes in cold weather stock suffers; but as a rule it does well in the open air. During the winter of 1882–83 no fodder was needed. The largest owners of horned stock are improving its quality by infusing short-horn blood into the herds. In the Willamette Valley there are numerous breeders of Short-horns, Holsteins, Jerseys, Alderneys and Devons of pure race. Particular attention is paid to dairy stock.

Horses of an excellent type are largely raised. The soil and climate, combined with good blood, have produced not only the best draught animals, but also good trotters and carriage horses. Much money has been invested in fine imported stock, from the heaviest Percherons and Clydesdales to the fleetest thoroughbreds. The horses raised east of the Cascade Mountains excel those of other sections in speed. This is due to the bunch grass pasturage and the distance to the watering places. The animals sometimes go on a fast trot for ten miles from their feeding places to water, thus developing muscle from their birth. In the bunch grass districts the feed costs nothing.

Sheep husbandry is one of the greatest and most productive industries, being carried on under the most favorable conditions of climate. Sheep farmers prefer the ranges close to the mountains, where they say the greatest variety of grasses grow upon which the sheep thrive best. Lambing time is in April and shearing in May. In June the flocks are driven to the mountains, where they fatten and the young become vigorous. These mountains are often covered with open pine forests, through which very nutritious grasses grow, different in nature from the bunch grass of the plains. By common agreement sheep owners occupy the range upon which their flocks first fed, and the rights of first comers being thus respected, all contention is avoided. The mountain ranges are unsurveyed, but much of the land in the Blue Mountains is valuable for its timber as well as for its grasses, and, when cleared, will produce good crops of grain. All the Blue Mountain region is well watered. The wool produced in the Pacific Northwest is fast taking rank with the best fleeces which reach the East and has a reputation of its own in New York and Boston. The wool clip of Oregon alone, in 1883, was about 9,000,000 pounds.

The bunch grass pasturage for stock affords all the elements of nutriment necessary for bone, muscle and flesh. It is as strong as oats or barley, and will supply the animal with as much nourishment in a day as the quantity of timothy, clover or hay it will eat in the same time with the usual amount of grain added. The animals fed on this bunch grass are well rounded, hard and solid in flesh, and not large-bellied like those fed on ordinary grass.

It is a mistake to suppose that bunch grass pastures contain no other grasses. Rye grass grows on lowlands and on hillsides. It resembles rye in growth and appearance, and makes excellent hay when well cured, yielding largely. Stock will not eat it, however, except when severe winters come, when they get through the cold weather nicely on the long stems that stand above the snow. Sheep seldom eat bunch grass and never touch the ranker rye grass. All through the bunch grass region, however, they find smaller grasses that cover the ground between the clumps of larger growth, and also crop the occasional weeds. On Fifteen Mile Creek, south of Dalles City, it has been demonstrated that where sheep and other stock range and the bunch grass is trampled out, a number of other grasses and native growths come in place of it, and that such pastures, supposed to be worn out, now support much more stock than in their primeval condition.

During the years 1882-3 there was a great advance in the price of meats, so that beef and mutton are more important items of production than before. This will cause more attention to be paid to raising sheep for mutton. As long as wool was the prime object, it was not advisable to breed for mutton, but the recent change makes mutton-sheep, that will weigh sixty per cent. more and are much hardier, quite as profitable as the heavy-wooled merino. The world must be fed as well as clothed, and sheep breeders are now turning their attention to Cotswolds, Oxfordshires, Shropshires, Leicesters and Southdowns.

#### EDUCATION AND RELIGION.

The people of Oregon and Washington Territory are alive to the importance of education and public morals, and schools and churches are quite liberally supported. In intelligence, morality, love of order, and all the qualifications of good citizenship, the population will compare favorably with any of equal number in the United States. The school fund of Oregon is in part provided from the proceeds of sales of land granted to the State by Congress for educational purposes, but the larger part of the income is derived by a direct tax of from three to four mills, which is imposed by law. There are several colleges: the State University, at Eugene City, Willamette University, at Salem, and the Corvallis College, at Corvallis, to which is attached the State Agricultural The school statistics for 1882 show an attendance of 61,641. In Washington Territory educational matters are much on the same basis as in Oregon. With regard to numbers the religious organizations in Oregon rank as follows: Methodists, Baptists, Presbyterians, Roman Catholics, Episcopalians, Congregationalists, and five minor sects. In Washington Territory the Methodists also come first in point of numbers, followed in this respect by the Roman Catholics, Baptists, United Brethren, Episcopalians, Presbyterians and Congregationalists, with a few smaller sects.

#### CITIES AND TOWNS.

Portland is the commercial metropolis of the entire region. The city is situated on the Willamette River, twelve miles above its confluence with the Columbia. The population in 1870, including that of East Portland, was 11,103. This had swollen in 1880 to 23,000 souls, and in 1883 to about 38,000, while the ratio of increase in future is certain to be very much higher. The reasons for this are quite obvious. Portland's growth and progress are based upon the solid foundation of

natural advantages of position. Its site is so admirable that the limits of the city may be extended on every side. It is virtually a sea-port, to which large vessels may come direct from any part of the world and find wharf accommodation. It lies in the very heart of a great producing country which has no other outlet, and for which it must serve as a receiver and distributer of exports and imports. no other point in the Pacific Northwest are these manifest superiorities offered. In this connection it may be remarked that the navigation of the waters of the Willamette and the Columbia Rivers is only made difficult by obstructions that are caused by parsimony and neglect. The channels of these streams may be kept clear by a comparatively small annual outlay upon the bars and shoals. Portland is the seat of a steamship company which runs lines of ocean steamers to San Francisco and Puget Sound, British Columbia and Alaska, as well as a fleet of river boats. With the completion of the railroads now in course of construction, Portland will become the greatest railway centre on the Pacific coast. From every direction in the Pacific Northwest these roads lead to Portland, making the city the grand terminus of a system which will completely develop the entire region. The streets of Portland are wide, regularly laid out, well paved and well lighted. The buildings of the business thoroughfares would do credit to any city, and the same may be said of many of the churches, the post-office, the custom house, and other public edifices, as well as private residences. The markets are good and spacious. There are public and other schools of various grades, a large library, well conducted newspapers, banks, commodious hotels, street cars, water, gas, manufacturing establishments, telegraphic communication with all parts of the world, an immense wholesale and retail business, and, in fine, all the features of a flourishing modern city. The permanent advancement of Portland is guaranteed by the air of substantial prosperity which pervades the place. The wholesale trade of Portland in 1882 amounted to about \$40,000,000, an aggregate probably never excelled by a city of similar size in the world, being an increase of twenty-eight per cent. in a single year. The value of building improvements in 1882 amounted to \$2,977,000, of which sum \$2,000,000 was expended upon business and manufacturing establishments alone. The factories of the city in 1882 turned out a product of \$7,434,800, being an increase over the census returns of 1880 of **\$4**,832,000.

Other flourishing cities and towns in the Pacific Northwest are:

SALEM, Marion County, Oregon, the State capital, a beautiful town situated on the Willamette River, fifty-three miles south of Portland, on the line of the Oregon and California Railroad. It is also the county-seat. The population of 5,000 is mainly engaged in milling and manufacturing enterprises. Its fine water privileges and admirable situation with regard to transportation, by river and rail, will make Salem, eventually, a great industrial city. The Willamette University is situated here.

Oregon City, the county-seat of Clackamas County, Oregon, is an important manufacturing town, with a population of 2,000. It has the largest woolen mill in the State, two flouring mills and a saw-mill—all of which are run by water power, which is never-failing. The locks, at the Falls of the Willamette, owned by the State, admit of navigation by steamer to the upper Willamette.

Corvallis, the county-seat of Benton County, Oregon, has a population of 1,500. It is the present terminus of the West Side Division of the Oregon and

California Railroad, which runs through the west side of the Willamette Valley. It has a bank, good stores and very fine residences, and is the distributing point for all Benton County. The State Agricultural College—a flourishing establishment—is situated here.

Albany, the county-seat of Linn County, Oregon, has a population of 2,000. It is the centre of an important agricultural district. Among its manufacturing enterprises may be mentioned three flouring mills, a planing mill and a twine factory, all run by water power. A collegiate institute and good general schools afford superior educational facilities.

EUGENE CITY, the county-seat of Lane County, Oregon, is finely situated and beautifully laid out, and has a population of 1,600. It is the seat of the State University.

Astoria, the county-seat of Clatsop County, Oregon, is situated on the Columbia River, twerve miles from its mouth. It is a very important commercial port, with a population of 7,000. The great industries are salmon canning and lumbering. During the salmon season the number of the inhabitants is always largely increased.

Dalles City, an enterprising town on the Columbia River, is the county-seat of Wasco County, Oregon. It has a population of 4,500, and is the distributing point of a large and rich agricultural region. It has fine stores and several large hotels.

Roseburg, the county-seat of Douglas County, Oregon, is the principal business centre of the great and fertile Umpqua Valley and also of southern Oregon. It was formerly the terminus of the Oregon and California Railroad, which is now in process of extension to the California State line. It has a population of 1,500, churches of almost every denomination, fine residences and large business houses.

SEATTLE, the county-seat of King County, W. T., had a population of 9,000 in 1883, having nearly doubled the number of its inhabitants in two years. It is the largest city on Puget Sound, well built, charmingly situated on Elliot Bay, and does an enormous business, principally in coal and lumber. There is also a great trade in salmon, and in manufactures of wool, flour and iron. Its well sheltered harbor, entirely free from obstructions, affords good anchorage, and the water is deep enough for the largest vessels to lie alongside the wharves. The city is connected with the coal fields at Newcastle by railroad, and it is the principal port on Puget Sound for the fleet of large passenger steamships in the Pacific coast trade and the steam colliers belonging to the Oregon Improvement Co.

OLYMPIA, the capital of Washington Territory, has a population of 2,100. It is delightfully situated on Puget Sound, and is rapidly gaining in inhabitants and wealth. Thurston County, in which Olympia is situated, is densely wooded, and lumbering is a leading industry. There is a great extent of prairie and bottom land in this county finely adapted to stock raising and mixed farming.

New Tacoma, in Pierce County, W. T., on Puget Sound, has a population of 4,000, exclusive of that at the contiguous town of Old Tacoma. This place is fast increasing in importance and population. It is the terminus of the Pacific Division of the Northern Pacific Railroad on Puget Sound, as well as the branch line to the coal fields at Wilkeson and Carbonado.

PORT TOWNSEND, the county-seat of Jefferson County, W. T., has a population of 1,600. It is the port of entry for the Puget Sound Customs District, and is

the seat of a large foundry and extensive lumbering enterprises. The town is garrisoned by United States troops, and has the Marine Hospital among its establishments.

East of the Cascade Mountains the principal places are:

Walla Walla, W. T., the county-seat of the county of the same name, beautifully situated in the centre of an immense wheat-growing region. The population exceeds 5,000. The city has fine buildings, public and private, and good schools, among which is a graded public school built at a cost of \$22,000. There are flouring mills and other manufacturing enterprises. The mercantile business in 1883 was estimated at about \$1,500,000. Orchards near Walla Walla are very thrifty. Peaches and apples of fine quality and extraordinary size are produced abundantly.

Waitsburg, W. T., is eighteen miles from Walla Walla. The population is about 1,000, an increase of 300 during 1883. The town is finely situated on the Touchet River and has excellent water power, which enables the flouring mill to turn out 150 barrels of flour a day for export, besides filling the local demand. The sales of general merchandise amounted to \$400,000 in 1883, not including those of farm machinery. The town is the market for an extensive region between the Snake and Touchet Rivers. Its church and educational privileges are good.

DAYTON, W. T., eleven miles northeast of Waitsburg, is the centre of a rich grain section of forty or fifty square miles. Its population in 1883 was 1,600 and it is fast growing. There are churches and good public schools. The Touchet affords excellent water power and the town is the seat of several flourishing milling industries. The sales of general merchandise in 1883 were about \$550,000.

PRESCOTT, W. T., is an attractive new town on the Touchet River, with a dozen or more neat houses, two stores and railroad buildings.

Spokane Falls, Spokane County, W. T., is beautifully situated on the south side of the Spokane River, on the line of the Northern Pacific Railroad. The country is most picturesque, and the Falls of the Spokane River, which in the space of half a mile fall 150 feet, are very grand and beautiful. They furnish constant water power of great value, as the river never freezes. A saw-mill, cutting 20,000 feet of timber daily, cannot supply the demand for lumber; there is a large grist mill and also a machine shop, both doing a profitable business. The sales of merchandise in 1883, amounted to \$1,000,000. The town had 1,600 inhabitants in 1883.

CHENEY, W. T., has a population of 1,300. It is the centre of a great farming country, and did a business of between \$600,000 and \$700,000 in 1882, when it had not been quite two years in existence. It is situated on a spur of the Cœur d'Alêne Mountains, 2,300 feet above the level of the sea. There are several lakes in the neighborhood, three of which possess medicinal qualities. Cheney was chosen the shire town of Spokane County. It has several churches and an academy with a roll of 200 scholars.

Sprague, W. T., had a population of 1,200 in 1883. Its inhabitants are nearly all employed in the extensive railway shops there established. The town has several churches and good public schools.

Pomeroy and Pataha, W. T., are rival agricultural towns in the Pataha Valley, within three miles of each other. The population of Pomeroy is 500, an increase of 300 since 1881; that of Pataha 250, an increase of 100 during the same period.

Both towns are thrifty and full of enterprise, and have good schools and stores. The sales of merchandise in Pomeroy in 1883, amounted to \$270,000; those in Pataha, \$30,000.

Colfax, county-seat of Whitman County, W. T., is the centre of an extensive and fertile agricultural region, doing a brisk and profitable trade with the farming population. Its mercantile business in 1883, fell little short of \$1,000,000. The population, numbering about 1,000, is public-spirited and enterprising, and the place is steadily growing. This growth has recently received a great impetus by the completion of the Palouse Branch of the Northern Pacific Railroad, which reaches the town.

Moscow, Idaho, is situated in the centre of Paradise Valley, and has a large agricultural region trioutary to it. It has a population of about 500. Flax is largely cultivated for the seed alone. Last year the mercantile business amounted to \$400,000, and the town is sure to become an important business place. Its milling interests are growing rapidly.

FARMINGTON and PULLMAN, in W. T., near Moscow, are also towns of considerable activity in the centre of a sich agricultural country, and these places, as well as Moscow, are about to be tapped by the Palouse Branch of the Northern Pacific Railroad.

Palouse City has a population of over 250. It is a great lumbering centre, the logs being run down the Palouse River from the mountains. The saw-mills and flouring mills do a flourishing business. The town supplies a large region with general merchandise, and is also the seat of an extensive furniture manufactory.

Lewiston, I. T., is a well built town of 1,100 inhabitants. It is situated at the confluence of the Snake and Clearwater Rivers. It has a large trade with the mining camps in the Idaho Mountains, and also with the Nez Percé Indians, whose reservation of 900 square miles begins eight miles east of the town. The sales of merchandise in 1883 amounted to \$850,000. There is also a large business done in lumber. The apple and peach orchards near Lewiston are very prolific. The Snake River is navigable from its confluence with the Columbia to a point forty miles above the town, and the Clearwater is also navigable during a part of the year.

#### THE WILLAMETTE VALLEY.

This valley, famed alike for its beauty, salubrity and fertility, is situated in western Oregon. From north to south its length is 150 miles, and its average breadth the entire distance is nearly fifty. A better idea of its great size may be gained by remembering that its area is larger than that of Vermont or New Hampshire, Massachusetts or New Jersey, nearly as large as that of Maryland, almost three times as large as that of Connecticut, five times as large as that of Delaware, and ten times larger than that of Rhode Island. On either hand it is hemmed in by wooded mountains, from the defiles of which numerous lateral valleys debouch upon it. The whole of its wide expanse is refreshed and beautified by more than forty water-courses which feed the navigable river of the same name that flows through it. The valley presents the most charming alternations of scenery, including every feature from snow-capped mountain peaks to thickly wooded hills, rich meadows, shady groves and pastoral dales. In view of its manifold attractions, it has been not inappropriately termed "the Eden of the Pacific." Although

the earliest settlers established their homes in this valley, and it is now, as it has been always, the most populous portion of the State, embracing within its limits the most important towns and cities, it still offers vast tracts of agricultural lands to cultivators. Within its natural boundaries—the Columbia River on the north, the Cascade Mountains on the east, the Coast Range on the west, and the Callapoia Mountains on the south—it contains four millions of acres, of which area nearly the whole is of unusual productiveness. But to assume that one-fifth of this land is now under cultivation, or even held in permanent meadows for pasturing and grazing purposes, would be estimating very liberally.

The staple productions of the Willamette Valley are all the cereals, (excepting Indian corn,) wool, cattle, fruit and vegetables. Wheat is first in importance. Under favorable conditions of cultivation the yield is from twenty to thirty bushels per acre and even as much as forty bushels. Land, summer-fallowed and fall-sowed, is certain to produce twenty-five bushels as a minimum yield and sometimes a maximum of fifty-five bushels. Some of the fields that have been cropped continuously for twenty-five years still produce enormously, with no signs of diminution. The wheat of this region is a plump, full berry, which yields a flour of uncommon whiteness. In the English markets it commands a premium of from three to five cents a bushel over the best California wheat.

It is true of this valley that it is receiving great accessions of population. Many new comers who have money purchase land here in large or small tracts, the original enormous farms being sometimes subdivided. Often the older settlers sell out to move east of the mountains. The towns are growing very perceptibly, and the general prosperity of the valley is increasing. Better farming prevails, and mixed husbandry is more practiced, to meet the changing conditions of the country.

The principal owners of unoccupied lands in the valley are the United States Government and the Oregon and California and the Oregon Central Railroad Companies. The lands owned by these corporations were obtained under a grant in aid of the construction of their railroads.

The grant to the Oregon and California Railroad Company comprises the odd numbered alternate sections within twenty miles of the road on either side, to the extent of 12,800 acres for every mile of road. This company sells its lands on the liberal terms of \$1.25 to \$7 per acre. If the purchaser pay cash he is allowed a discount of ten per cent. on the price. If he choose to buy on credit he may take ten years to make up the amount in small annual payments, with interest at seven per cent. per annum. Paying one-tenth of the purchase money at once, at the expiration of one year he pays seven per cent. interest on the remaining nine-tenths of the principal. At the close of the second year he pays one-tenth of the principal and one year's interest on the remainder. In this way the payments go on each successive year, until all are made.

#### THE ROGUE RIVER VALLEY.

The completion of the Oregon and California Railroad will open to settlement the fertile lands of the Rogue River Valley, which lie midway between the Willamette and Sacramento Valleys. The Rogue River Valley is the finest fruit-growing region in Oregon, and ranks in this respect with the most favored districts of California. The climate is the best on the coast, the rain-fall not being as copious as in the more northerly districts, and the temperature being free from extremes.

The soil produces large crops of wheat, oats, barley and corn, while every sort of fruit yields well. No better country for grapes and peaches could anywhere be found. Corn ripens thoroughly, showing ears fourteen inches in length, well filled to the tip with first-class grain. Southern Oregon possesses more natural attractions than any other portion of the State, and the Oregon and California Railroad Company has much good land in that section. Within a year this rich and pleasant region will be brought into railroad communication with Portland and provided with means of transportation for its crops.

#### THE BIG BEND COUNTRY.

The Big Bend of the Columbia River is a region that is attracting much attention, offering, as it does, inducements of a high order to settlers. It is a large undefined region, only partially surveyed, lying north and west of the Northern Pacific Railroad, and bounded by the Columbia River. This stretch of country contains, perhaps, 6,000 square miles, at least one-half of which is excellent soil, abundantly watered, a quarter good soil, needing irrigation, and the remainder not considered available for agriculture. This region is easily accessible from Spokane Falls, Cheney and Sprague. From the latter place roads lead to Fort Colville and Camp To the south and southwest Spokane, distant respectively 120 and 55 miles. of Sprague there are very few settlers, although there is excellent land, of at least five townships in extent, in those directions, the nearest point being about seven miles distant from the town. West of Cheney and north of Crab Creek, reaching to the Grand Coulée of the Columbia, is a tract forty miles wide and ninety in length, three-fourths of which could be made into farms. Timber is to be procured in all the coulées which put into the Columbia River. The Big Bend is at present mainly a vast stock range where bands of horses and herds of cattle live and thrive, suffering little loss even in the severest winters, keeping in good condition on the dry bunch grass that retains the virtues of cured hay. The region is an imperial domain, and will be a magnificent feature of Eastern Washington Territory after the branch railroads which are to be built have supplied it with transportation facilities.

#### THE PALOUSE COUNTRY.

No more favorable region could be chosen by settlers than that part of Whitman County, Washington Territory, known as the Palouse Country. It is situated between the Snake River on the south and the main line of the Northern Pacific Railroad on the north and west, and lies within the great grain-growing belt of the Columbia River Valley. The face of the country consists of high, rolling prairies, watered by many streams. Pure spring water abounds. The climate is dry and healthy, and the inhabitants are exempt from throat and lung troubles, rheumatism and fevers.

The best lands of the Palouse Country lying near the mountains and the timber belt on the north and west are taken by actual settlers, but a great body of excellent land away from the timber belts, perhaps two-thirds of Whitman County, centrally situated, is still vacant. The greater part of fifty townships of the Palouse region south of the latitude of Farmington, not including fourteen townships, owned by the Oregon Improvement Co., are unoccupied, including some of the finest agricultural territory existing east of the Cascade Range.

The soil is highly productive, and its constituents ensure its lasting qualities. Wheat is the staple product; thirty-five to fifty bushels per acre is usual, and

the quality is unsurpassed. Oats, barley, rye, timothy, flax, millet, potatoes, cabbage, beets, etc., produce largely. Orchards do well everywhere. The unsettled lands, hill and valley alike, are covered with wild flowers and bunch grass, making this region a favorite cattle range. Blue grass is also plentiful, especially along the Cœur d'Alêne Mountains.

The Palouse Country is not only within the limits of the land grant of the Northern Pacific Railroad, by which line it is traversed, but it is also brought into connection with the principal centres of business and population in the entire Pacific Northwest region by the Oregon Railway and Navigation Company's lines.

#### THE GRANDE RONDE VALLEY.

This remarkably beautiful and fertile valley is situated in Union County, eastern Oregon, east of the Blue Mountains. It is about thirty miles long by ten wide, and contains about 250,000 acres of excellent farming land. The soil is well adapted to the production of wheat, oats, barley, rye, flax, hemp, sugar beets and every sort of vegetables. The country cannot be excelled for the purpose of dairying and stock raising. The Grande Ronde Valley is almost surrounded by high mountains, the summits of which are covered with snow from early in November until late in July. There are numerous streams of water threading the valley which afford ample power for driving mills and machinery. The climate is about the same as that of the Palouse Country.

The vacant lands of Union County consist of the mountain districts that embrace large areas of excellent soil. East of the Grande Ronde Valley, at a higher elevation, is Wallowa Valley, an extensive country now being rapidly settled and cultivated. It is a beautiful region, but rather cold in winter, proving, however, well adapted to agriculture. Every year new districts are found perfectly capable of sustaining a large population, which before were passed by without recognition of their merits.

#### THE POWDER RIVER VALLEY.

South of Grande Ronde Valley lies Powder River Valley. It was at first considered, in great part, a sage-bush and alkali wilderness, but time and irrigation, where the latter was necessary, have proved that this valley has no superior for The railroad, which now approaches Baker City, a •fertility and productiveness. very thriving town, will make this part of eastern Oregon quite valuable. Malheur region, in the south of Baker County, is an extensive country, unknown as yet, but sure to be developed by the railroad. Indeed, the whole of Baker County must grow rapidly, owing to its many resources. It contains rich ores of gold, silver and copper, besides extensive placers. It is one of the greatest graz-Its agricultural area, being larger than ing regions of the Pacific Northwest. the Willamette Valley, will soon attract immigration, and its wheat fields within two years' time are likely to rival the attractions of the Palouse or other favored regions.

#### LA CONNER, ARCHIPELAGO DE HARO, ETC.

An interesting and fertile part of Washington Territory is that locally known as the La Conner region, situated in Whatcom County. Farming is done principally on the tide lands. Oats, barley and wheat yield enormously, and all the hardier vegetables thrive. Apples are of large size and excellent flavor. About thirty miles from La Conner a valuable coal mine exists, the quality being similar

to that of Cumberland coal. Gold and iron are also obtained on the Skagit River. Fine sandstone exists in the Chuckanut Mountains, which can be quarried easily.

Bellingham Bay is about six miles north of the Chuckanut Mountains. Whatcom, the county-seat of Whatcom County, is situated on the bay, and has one of the finest harbors on the coast. A great immigration is now attracted to the northern part of Whatcom County, to settle upon its fertile lands, which are largely unoccupied.

San Juan and various other islands of the archipelago compose San Juan County. All the islands are adapted to farming and grazing, and are well supplied with excellent timber.

Whidby Island, which, with the adjoining island of Camana, forms Island County, is one of the oldest settlements on Puget Sound. The soil is good, and may be described as a fine upland prairie.

#### OTHER REGIONS OPEN TO SETTLEMENT.

The Idaho and Rocky Mountain Divisions of the Northern Pacific Railroad have made a magnificent region of mining, agricultural and timber lands accessible. An immense new tract, including all Northern Idaho and a large part of Eastern Washington and Western Montana, is thus opened up, and is certain to develop with great rapidity. The vast grain-growing plains of Eastern Washington extend to Northern Idaho, and this area is watered by numerous streams which flow from the Cœur d'Alêne Mountains into the Columbia, furnishing many fine mill sites with abundant water power. Among other desirable sections, the Potlatch country, a few miles east of Moscow, covering a remarkably fertile expanse, fifteen miles by thirty in extent, may be specially named.

The streams of Northern Idaho are all gold-bearing and valuable discoveries of the precious metals have recently been made. The Cœur d'Alêne Range is known to be rich in galena fields carrying silver, and quartz leads of great promise have also been found. Indeed, the whole region north and south of the Northern Pacific Railroad, from Lake Pend d'Oreille, in Idaho, to Missoula, in Montana, 180 miles from east to west, and extending to the British boundary line on the north, offers a most inviting field to prospectors. Although this country has not been thoroughly explored, enough is already known about it to show that the precious metals exist in vast deposits within the recesses of the mountains. Not only do the finer and baser metals abound, but the region is very rich in gold and other useful minerals. The mountains are densely clothed with most excellent timber, of which the principal varieties are red fir, white pine, white cedar, hemlock, tamarack and larch. The trees grow to an immense height and are often seven to ten feet in diameter.

The Clark's Fork River, along which the railroad runs, has many tributaries flowing into it from both sides, some of which have valleys from seven to ten miles in width and from thirty to seventy miles in length. The bottom lands of these branches are of great fertility and offer excellent chances to home-seekers.

North of Lake Pend d'Oreille, in Kootenai County, Idaho, and in Stevens County, Washington, the whole vast country is ramified by innumerable gold-bearing streams, and the mountains abound in ledges of marble, limestone, granite and gold-bearing quartz. There are also immense galena fields, some of which have been developed sufficiently to show their richness in silver. A remarkably fine galena field, of great extent, has recently been found in the Kootenai country,

distant about 100 miles from Lake Pend d'Oreille. The veins are broad, boldly cropping out on the surface, and are well situated for cheap and systematic development. Placer mining has been carried on in this region and also in the Colville country to the westward since 1864, the yield having been very large. Unfortunately, the diggings could not be worked to full advantage because of their great distance from transportation lines and the necessary high cost of living. The completion of the Northern Pacific Railroad has obviated this difficulty and miners are beginning to flock into the country in large numbers. Of late attention has been given to prospecting for gold-bearing quartz leads and some of great promise have been reported.

Among other most inviting districts which afford especially fine openings may also be named:

The eastern end of Klikitat County, W. T., within the grant of the Northern Pacific Railroad. Wherever the soil has been cultivated in this sparsely settled county it yields excellently, the wheat crops being very large. The entire county is finely watered and has always been a favorite stock-raising region on account of the abundant bunch grass.

In Whitman County, W. T., on the north side of the Snake River, about six miles above Ainsworth, there is an excellent strip of unoccupied land, twenty miles in length and extending back at least six miles from the river. There is still another strip of desirable vacant land along the Columbia River not far from Ainsworth, lying between the river and the Northern Pacific Railroad, while directly north of Ainsworth, situated parallel with the railroad, is still another fine body of unoccupied land.

There is also considerable excellent unoccupied lands in the northern parts of Garfield and Columbia Counties, W. T., and a large extent of vacant country lies in the Assotin region, in the southern portion of Garfield County.

Rev. J. F. Devore, Presiding Elder of the Puget Sound District, has been engaged in the itinerant service of the Methodist Episcopal Church for thirty years, mainly on Puget Sound, and the southern part of Western Washington. His thorough knowledge of that country is based on this experience, traveling through it from the earliest days of its occupancy by whites. He says while this is in great part a rough, timbered region, difficult to subdue, that from the very summit of the Cascade Mountains, in some places, to the ocean, almost 100 miles east and west, there is but little waste land. The soil is a rich clay loam, generally heavily timbered, but timber is very valuable. This is the sort of country Scandinavians and Germans prefer, and such people can render it all available for cultivation. It is well calculated for all that the Willamette Valley produces—grains, fruits, vegetables and grasses.

Mr. Devore instances the region between Nisqually and Cowlitz, forty by sixty miles, as reported by surveyors, as the best soil and timber found in Washington Territory. Many rich bottoms and benches, grown with vine-maple and alder, are found here, and there are some open prairies of moderate extent near the Cascades.

Mr. Devore has visited the ocean shore, west of the Olympic Range, and reports that from Cape Flattery, or Neah Bay, down to Gray's Harbor, there is a very fine country, fifteen to thirty miles in width, averaging about twenty, that is well watered with beautiful lakes and streams, half prairie and half timber, capable of sustaining a large population.

#### THE NORTHERN PACIFIC RAILROAD AND OTHER LANDS.

The bulk of the agricultural lands of the Northern Pacific Railroad, in the Pacific Northwest, now in market, is situated in Yakima, Walla Walla, Columbia, Garfield, Whitman and Stevens Counties, Washington Territory, and in Nez Percé County, Idaho. These lands are, for the most part, accessible, and within easy reach of transportation facilities, not only by way of the trunk line of the Northern Pacific Railroad and the Columbia and Snake Rivers, but also by the branches of the Oregon Railway and Navigation Company's system, extending from Wallula Junction over the region south of Snake River, and from Palouse Junction on the Northern Pacific, 51 miles northeast of Wallula, through the territory watered by the Palouse and its numerous tributaries. Among the regions most desirable for settlement may be mentioned those watered by Crab, Rock and Hangman Creeks, in Stevens County, and by Thorne, Pine and Cottonwood Creeks, in Whitman County. The soil is exceedingly rich and productive, and living water is found on almost every quarter section. There are also extensive tracts of equally desirable railroad land in the counties of Garfield, Columbia, Yakima and Walla Walla.

The lands of the Northern Pacific Railroad, lying west of the Cascade Mountains, are principally timbered. There are, however, large tracts in the valleys of the Chehalis, Cowlitz, Lewis and Salmon Rivers, as well as on the plateau north of the Columbia, extending toward the Cascade Mountains, which may be easily cleared and brought under cultivation. Here all kinds of fruit and grain thrive equally well. On Puget Sound, too, there is plenty of rich bottom land that can be brought under cultivation at but little cost.

The Northern Pacific Railroad Company sells its lands on easy terms and at low prices, assisting intending settlers in every way to find suitable locations.

Besides the Northern Pacific Railroad Company and the United States Government, the Oregon Improvement Company is the largest seller of land in the territory east of the Cascade Mountains. This company owns 145,000 acres of carefully selected agricultural land in Whitman County, Washington Territory, and 20,000 acres in Grande Ronde and Powder River Valleys, Baker County, Oregon. These lands are particularly desirable, owing to their proximity to the Palouse branches, and the Grande Ronde branch of the Oregon Railway and Navigation Company. They are sold on easy terms, at from \$5 to \$10 per acre.

#### THE UNITED STATES LAND LAWS.

The liberal provisions which have been made by the United States Government for acquiring public lands are to be found in the following summary of the acts of Congress relating to the subject:

Under the provisions of the "Homestead Law," every head of a family, male or female, or single man over twenty-one years of age, a citizen of the United States, or having declared his intention to become such, can enter, on payment of the registry fees, which range from \$5.50 to \$22, 160 acres of Government land, excepting lands bearing gold, silver, cinnabar or copper. After five years' continuous residence upon and improvement of the land, the Government will give the claimant a perfect title.

Under the Pre-emption Law, persons who are qualified to take up land under the conditions applying to the homestead law, and who are not already in possession of 320 acres in any of the States or Territories of the United States, may "enter" and establish a pre-emption right, at the Government Land Office of the district, on payment of a fee of \$3. In other words, any such person has the right to purchase a tract of 160 acres, either within or without the limits of a railroad grant, at \$2.50 per acre in the former, and at \$1.25 per acre in the latter case. Where the tract is offered for sale by the Government, the land must be paid for within thirteen months from the date of settlement, otherwise within thirty-three months.

This act is Under the Timber Culture Act 160 acres is the maximum entry. liberal in its provisions, but claimants are required to strictly comply with the During the first year at least five acres must be letter and spirit of its terms. plowed. The second year said five acres must be actually cultivated to crop, and a second five acres plowed. The third year the first five acres must be planted in timber, seeds or cuttings, and the second five acres actually cultivated to crop. The fourth year the second five acres must be planted in timber, seeds or cuttings, making, at the end of the fourth year, ten acres thus planted. Perfect good faith The timber must not only be planted, must be shown at all times by claimants. but it must each year be protected and cultivated in such a manner as to promote its growth. A patent may be obtained for the land at the expiration of eight years from date of entry, upon showing that for said eight years the trees have been planted, protected and cultivated as aforesaid, and that not less than 2,700 trees were planted on each acre, and at the time of making proof there shall be then growing at least 675 living, thrifty trees to each acre. If at any time during the said eight years it shall be shown that the party has failed to comply with the terms of the law, the entry will be canceled. Only the planting of such trees, seeds or cuttings as are properly denominated timber trees, or which are recognized as forest trees, will be considered a compliance with the law.

The United States Land Offices in Oregon are situated at Oregon City, Roseburg, The Dalles, La Grande and Linkville, and those in Washington Territory are to be found at Olympia, Vancouver, Yakima City, Walla Walla and Colfax.

#### TAXATION.

Oregon has earned a good reputation for economy in Government expenditures, and the rate of taxation is extremely moderate, amounting on an average to four mills on the dollar. The estimated expenditures of the State for the two years ending September, 1882, were \$354,280. The disbursements include interest on the bonded debt of the State, which amounted, on September 1st, 1880, to \$511,376. According to the latest statistics, the total assessed value of real and personal property in the State was \$86,531,716, divided as follows: land and improvements, \$48,002,791; merchandise, farm machinery, etc., \$29,370,870; live stock, \$9,158,055. It may, however, be taken for granted that the real worth of the property exceeded by at least one-half the figures here given. Assessors rarely comply with the statute which requires that taxes shall be levied upon property at its full cash value.

Washington Territory, since 1879, has never imposed a tax of more than three mills on the dollar, and in 1882 this was reduced to  $2\frac{1}{2}$  mills. The Territory is entirely free from debt, and has a cash balance in the treasury. This favorable condition of the finances is due to the steady and healthful increase of property valuations, and to the economy exercised with respect to appropriations and expenditures. The assessed value of all property in 1881 was \$25,786,415, and the terri-

torial tax levy on the same was \$77,351. In 1882 the assessed value of all property was \$32,566,807, and the amount of taxes levied was \$81,415.77.

#### COMMERCE.

In geographical features Oregon and Washington are similar and their resources are common. Both have fertile lands, and possess, as we have seen, great wealth in timber, iron, coal, the precious metals, pastures and fisheries. Within a brief period they will become one of the greatest wheat and wool producing regions of the continent. In view of the fact that all the natural facilities and most of the necessary raw material for staple products are abundant, progress in every department of manufacture must take place. The year 1883 has given the Pacific Northwest direct railway communication with the East. Local railways will soon reach all the more important parts of the country. During the past two years alone the enormous sum of thirty millions of dollars has been spent by the Northern Pacific Railroad, the Oregon Railway and Navigation Company, the Oregon and California Railroad and the Oregon and Transcontinental Company in the construction of new lines of railroad. This expenditure has resulted in a large inflow of population, attracted by the great demand for skilled and unskilled labor, and opened vast areas of cheap and fertile lands to settlement. As showing the degree of growth which took place in a single year, the following comparison of the figures of 1881 and 1882 exhibits the increase in domestic exports from Oregon and Washington Territory by way of the Columbia River and Puget Sound:

	1881.	1882.	Increase.
Columbia River	\$8,049,418	\$15,366,388	\$7,316,970
Puget Sound	4,413,042	7,303,621	2,890,589
	\$12,462,460	\$22,670,009	\$10,207,559

The principal articles which made up the exports are breadstuffs, salmon and lumber, the bulk of which is shipped direct to foreign countries.

#### MEANS OF COMMUNICATION.

The navigable water-courses of the country, so numerous and so important to its welfare, have been elsewhere described. Great benefits must always be derived from these natural highways. They will not only be an auxiliary to the artificial channels of transportation, but in many instances will enter into lively competition with them. Upon the railroads, however, the region must chiefly depend for opening up the great expanses of fertile lands to profitable agriculture and for affording opportunities to develop the mining and other dormant resources. Railroads now tap the fruitful valleys of the Columbia, the Willamette and the Snake Rivers, and are rapidly reaching out to other wheat-producing regions. Immigrants are already able to travel continuously by speedy and comfortable conveyances to the homes and farms which they wish to possess. The long and tedious journey by wagon roads, with its train of hardships and dangers, is numbered with past events, and a rich and smiling country, so long hidden in solitude, is revealed to the world and invites to occupation. This valuable part of our broad domain has been brought into direct communication with the Eastern States by the Northern Pacific Railroad,

and nothing now is lacking to secure the rapid advancement of the Pacific Northwest to lasting prosperity.

The names of the several railway and steamship lines are as follows:

- 1. The Northern Pacific Railroad, extending from Wallula Junction, in Washington Territory, to St Paul, Minn., and Duluth and Superior, on Lake Superior, a distance of 1,834 miles, exclusive of its branches. The portion of this grand continental route lying within the limits of the Pacific Northwest traverses for the most part a fine agricultural country in Whitman and Stevens Counties, W. T., and also richly timbered and mining regions in Kootenai County, Idaho, Missoula County, Montana, rendering them available to settlers and industrial enterprise.
- 2. Pacific Division of the same railroad, extending from Portland, on the Willamette River, to Tacoma, on Puget Sound (143 miles), with a branch line (34 miles) to the coal regions of Wilkeson and Carbonado. This road passes through a most interesting part of Washington Territory.
- 3. A narrow gauge railroad, 15 miles long, from Olympia to Tenino, on the line of the Pacific Division of the Northern Pacific Railroad.
- 4. The Oregon and California Railroad (East Side Division), from East Portland via Roseburg, in the South Umpqua Valley, a distance of 262 miles. The road follows the east side of the Willamette and touches all the principal towns in the valley. Its extension to the California line is now in progress. From present end of track a well managed stage line runs to Redding, in the Sacramento Valley, the present northern terminus of the California railroad system.
- 5. The Oregon and California Railroad (West Side Division), beginning at Portland, within the city limits, and following the west side of the Willamette River. Passing westwardly through Washington County, it then turns to the south and ends at Corvallis (97 miles). This line will be extended to Junction City, some miles further, to unite with the Oregon and California Railroad, and eventually, also, in a northwest direction to Astoria, at the mouth of the Columbia River.
- 6. The Oregonian Railway Company, Limited, a narrow gauge road, also traverses the most fertile lands of the Willamette Valley, on both sides of the river. This line flanks the Oregon and California Railroad. It begins at Coburg, 120 miles from Portland, on the east side of the river, and skirts the foot-hills, running north until it approaches Ray's Landing. It continues its course on the west side of the valley, running south to Airlie, a distance of 37 miles, with a branch of seven miles to Sheridan. This line has been leased to the Oregon Railway and Navigation Company.
- 7. The Oregon Railway and Navigation Company's Railroad. A standard gauge line, fully equipped, running from Portland mainly through the valley of the Columbia River, by way of the Dalles, to Wallula, thence to Walla Walla and Dayton, with a branch from Bolles' Junction to Riparia, on the Snake River. Another branch of the Oregon Railway and Navigation Company's system begins at Umatilla, 187 miles from Portland, and will soon connect at Baker City, in Southern Oregon, with the system of the Union Pacific Railroad. There is also a narrow gauge branch from Whitman, near Walla Walla, to Blue Mountain Station, near Weston, Oregon.
- 8. The ocean steamship lines of the same company, being a fleet of first-class passenger and freight steamships, making regular trips twice a week between San Francisco and Portland, as well as forming a line between San Francisco, British Columbia, the ports on Puget Sound and Alaska.
- 9. A fleet of 30 river steamboats and barges, plying daily on the Lower, Middle and Upper Columbia and Snake and Willamette Rivers, and on the waters of Puget Sound; together with the steamboats and facilities formerly owned by the Willamette Locks and Transportation Company.
- 10. The fleet of four new iron steam colliers, comprising the "Mississippi," the "Umatilla," the "Willamette" and the "Walla Walla," which make frequent trips between Seattle and San Francisco.

Appended are the routes of travel which new radiate from Portland, with the mileage in operation:

Willamette Valley Routes:	MILES.
From Portland to Glendale by the Oregon and California Railroad [This road is in process of extension to the California State line, and is already open for traffic a distance of thirty-one miles south of Glendale, and	262
is completed several miles beyond.]	
From Portland to Coburg, by the narrow gauge division of the Oregon Railway and Navigation Company	120
and Navigation Company.  From Airlie to Sheridan, branch of last named road.  From Portland to Dayton, by Oregon Railway and Navigation Company's steamboats.	. 7 s
From Portland to Corvallis, by Oregon Railway and Navigation Company's steamboats	3
Lower Columbia Route:	
From Portland to Astoria, by Oregon Railway and Navigation Company's steamboats	
Puget Sound Route:	
From Portland to Kalama, by Oregon Railway and Navigation Company's	
Steamboats	38 143 34
pany's Steamboats	120 90
Gauge Railroad	22 28
Upper Columbia Route:	
From Portland to The Dalles, by the Oregon Railway and Navigation Company's steamboats	110
Company's railway	270 13
From Bolles' Junction to Riparia, on the Snake River, by the Oregon Railway and Navigation Company's railway	31
From Riparia to Lewiston, on Snake River, by the Oregon Railway and Navi-	14
gation Company's steamboats  From Umatilla to Pendleton, by the Oregon Railway and Navigatiom Company's railway (in process of extension through the Grande Ronde Valley)	78 43
From Wallula Junction to St. Paul and Duluth, Minn., by the Northern Pacific Railroad	1811

Ocean Routes:
From Portland to San Francisco, by the Oregon Railway and Navigation Company's steamships
From San Francisco to Victoria, B. C., and Puget Sound ports, by Oregon Railway and Navigation Company and Oregon Improvement Company's steamships
Total in operation
In addition to which are the following lines of railroad now in course of con-
struction, and already in operation as far as they are finished:
MILES.
From Umatilla Junction to Baker City, in Southern Oregon
From Palouse Junction, on the main line of the Northern Pacific Railroad, to Colfax
Pataha and Lewiston Branch, located, work about to commence
Farmington and Pine Creek Branch, located, work about to commence 45
Moscow Branch, located, work about to commence
Elk Creek Branch, located, work about to commence
Total projected and to be completed
Add total in operation
Total completed and projected

#### SUGGESTIONS TO EMIGRANTS.

Good health is the first requisite of a person who proposes to emigrate to a new country, with a view to improving his condition in life. Persons beyond the active years of life run considerable risk in emigrating, unless possessed of means. No one should think of emigrating without sufficient means for self-support for at least a short time after reaching his destination; for suitable employment immediately after arrival cannot always be relied on, and there is nothing more discouraging to the new comer than to become a subject of public or private charity.

Success can be promised to energetic farmers. However modest their beginning, they may be sure of finding themselves in possession of a competency after a few laborious years. But there is not only a fine opening for small farmers; nowhere else will stock raising and ordinary farming on a large scale bring more satisfactory results. Land in all stages of improvement and grades of cultivation may be purchased in the Willamette Valley, and at almost every other point. A small farm, well tilled, will afford a good living at once, obviating the loss of time and the hardship incident to a new settlement. The greater number of settlers, however, must avail themselves of Government or railroad lands. To them the fact is of great importance that the mild climate greatly mitigates the discomforts of the first few years, and that the legitimate rewards of the husbandman's toil are nowhere more certain to be reaped.

Generally speaking, persons accustomed to ordinary and mechanical labor, and who unite frugal habits with persevering industry, will run the least risk in emigrating; but individuals unwilling to work, or accustomed to live by their wits, are not wanted. Idlers will only go from bad to worse, and adventurers will not prosper.

#### WHEN AND HOW TO REACH THE COUNTRY.

Spring is the best season for immigration; next, summer; then autumn; and winter the worst. In spring, the chances of finding employment are better than at any other time of the year, and those who take up land, or rent or purchase farms, can go at once to work.

The most direct, most expeditious, and most economical way for emigrants from Europe, the Eastern States and Canada, to reach the Pacific Northwest is by the Northern Pacific Railroad from St. Paul, Minn.

The time from New York, Philadelphia or Baltimore, to Portland, via the Northern Pacific Railroad, is made: first class, in seven days, and by emigrant train in twelve days.

Emigrant Sleeping Cars are run between St. Paul and Portland. These cars are fitted with upper and lower berths, for which no extra charge is made; but passengers must furnish their own blankets or other bedding. The comforts of this sleeping accommodation will be appreciated by those who have made long journeys in an ordinary emigrant car.

Emigrants can get meals at the regular "eating stations" along the line, or they can carry cooked provisions with them and eat on the train. On each division of the Northern Pacific Railroad a man is stationed, whose sole business is to look after the interests of emigrants as they pass over his division. This is a special feature of the Northern Pacific line.

Cars cannot be chartered for the transportation of passengers. Every passenger must hold a ticket at rates quoted, without reference to number traveling in the party, but the *exclusive use* of a coach is given to an organized party holding 30 full tickets of same form, purchased at the same time and place.

The following table gives the present emigrant rates by way of the Northern Pacific Railroad from St. Paul, Minn., to the places named:

FROM ST. PAUL	Miles.	Rate per Car.	Rateper 100 lbs.	Emigrant's Rate Single
Spokane FallsWash.	1537	300 00	3 50	42 50
Cheney "	1553	300 00	3 50	42 50
Sprague	1577	300 00	3 50	42 50
Ritzville "	1599	300 00	3 50	42 50
Palouse Junction "	1644	300 00	3 50	42 50
Ainsworth"	1683	300 00	3 50	42 50
Wallula Junction	1697	300 00	3 50	42 50
Waitsburg	1726			45 00
Walla Walla "	1728			42 50
Dayton	1736			45 00
Blue MountainOregon	1748			45 00
Umatilla Junction	1724	370 00	4 55	45 00
Blalocks "	1776	370 00	4 55	45 00
Dalles"	1823	370 00	4 55	45 00
Portland "	1911	370 00	4 55	45 00

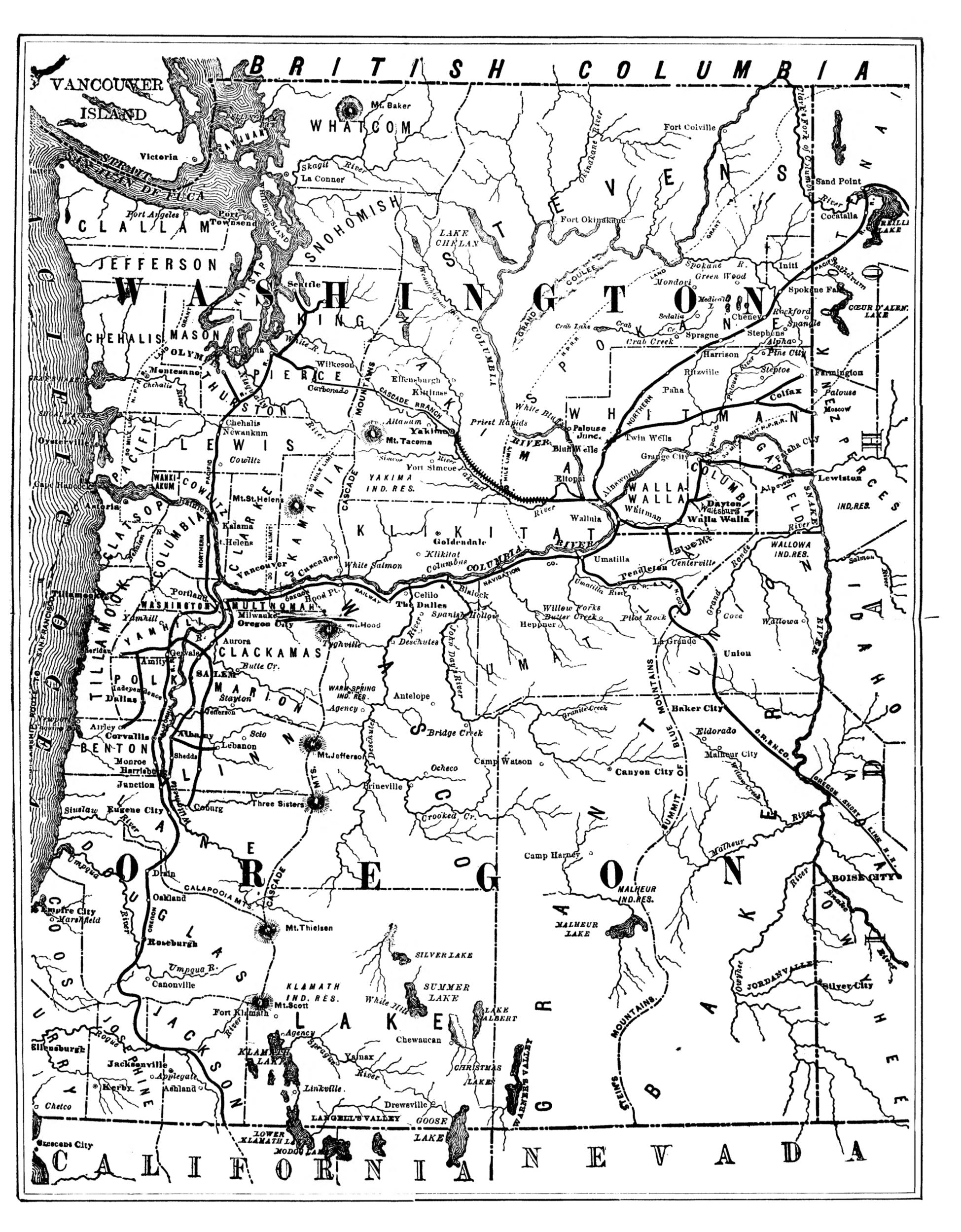
Emigrants from Europe and the Atlantic coast region may also reach the Pacific Northwest by the ocean route, landing at Portland, the principal distributing point of the whole country. The voyage will either be made on a Pacific Mail Company's Steamship from New York to Panama, or else from Europe direct by English or German steamer to the Isthmus, thence by the Pacific Coast regular steamers to San Francisco and Portland. The time from New York to Portland via Panama and San Francisco is about thirty days. On the steamships of the

Oregon Railway and Navigation Company and the Pacific Coast Steamship Company, between San Francisco and Portland, emigrants are furnished with neat, clean and comfortable quarters, and supplied with plenty of good, wholesome food.

Passengers who go overland will in every case save money by purchasing through tickets, which may be obtained at the offices of all the great railroad lines. The fares to Portland from Atlantic sea-board and interior cities are constantly changing. At present, the rates for emigrants' tickets are as follows:

Austin, Texas\$55 00	Fort Wayne, Ind 58 45	Nashville, Tenn 65 70
Atchison, Kansas 45 00	Galveston, Texas 55 00	Newark, O 62 00
Bay City, Mich 62 60	Grand Rapids, Mich 59 45	New Orleans, La 50 00
Baltimore, Md 65 50	Green Bay, Wis 53 00	New York, N. Y 67 00
Boston, Mass 73 00	Hannibal, Mo 51 15	
Buffalo, N. Y 65 00	Harrisburg, Pa 65 00	, , ,
Burlington, Iowa 53 50	Houston, Texas 55 00	Omaha, Neb 45 00
Cedar Rapids, Iowa 52 75	Indianapolis, Ind 59 50	Oshkosh, Wis 53 00
Cheyenne, Wyo 45 00	Iowa City, Iowa 53 00	Peoria, Ill 54 40
Clinton, Iowa 53 50	Jackson, Mich 60 25	Philadelphia, Pa 65 75
Cincinnati, O 60 00	Kansas City, Mo 45 00	Pittsburgh, Pa 64 00
Cleveland, O 61 50	Kalamazoo, Mich 58 25	Portland, Me 72 50
Columbus, O 61 50	Leavenworth, Kansas 45 00	Pueblo, Col 55 00
Chicago, Ill 53 50	Lafayette, Ind 57 60	Quebec, Can 70 00
Dallas, Texas 55 00	Logansport, Ind 57 50	Quincy, Ill 53 50
Davenport, Iowa 54 00	Louisville, Ky 60 00	
Decatur, Ill 53 50	Madison, Wis 53 00	St. Joseph, Mo 45 00
Denison, Texas 45 00	Mansfield, O 64 20	St. Louis, Mo 53 50
Denver, Col 45 00	Memphis, Tenn 50 00	St. Paul, Minn 45 00
Des Moines, Iowa 49 25	Milwaukee, Wis 53 00	St. Thomas, Can 62 85
Detroit, Mich 59 50	Minneapolis, Minn 45 00	Sedalia, Mo 53 00
Erie, Pa 63 50	Moberly, Mo 53 00	Syracuse, N. Y 65 00
Evansville, Ind 63 60	Montgomery, Ala 73 45	Topeka, Kansas 45 00
Florence, Kansas 55 00	Montreal, Can 68 50	Toledo, O 60 00
,	,	•
Sleening car rates first	-class, overland, are as follo	WG . D. A. G. A.
bleeping car races, mist	-ciass, overland, are as lone	WS: Berths. Sections.
New York to Chicago	····	\$5 00 \$10 00
Chicago to St. Paul	····	2 00 4 00
St. Paul to Portland		15 00 30 00

Parties going to Oregon by way of Chicago, will find at the offices of the General Agent of the Northern Pacific Railway Company and the Oregon Railway and Navigation Company, No. 52 Clark Street, full information with respect to routes and connections, and locations in Oregon and Washington will be freely described and pamphlets furnished. Upon arriving at Portland immigrants will find it to their advantage to call at the Bureau of Immigration, corner Front and D Streets, where valuable information can be obtained.



## The Northern Pacific Railroad

WITH ITS CONNECTING RAILROAD LINES FROM

## Boston, New York, Philadelphia, Baltimore, Montreal,

#### IS MORE THAN 450 MILES THE

SHORTEST LINE

TO THE PRINCIPAL CITIES AND TOWNS IN MONTANA AND NORTHERN IDAHO, AND WITH ITS CONNECTIONS FORMS

#### ONLY RAILWAY LINE THE

FROM THE PRINCIPAL ATLANTIC PORTS AND INTERIOR CITIES TO THE LEADING CITIES AND TOWNS IN

WASHINGTON AND OREGON.

#### The Northern Pacific Railroad

Is 527 Miles the Shortest Line from Chicago to Bozeman.

Is 527 Miles the Shortest Line from Chicago to Bozeman.
Is 447 Miles the Shortest Line from Chicago to Helema.
Is 307 Miles the Shortest Line from Chicago to Butte.
Is 815 Miles the Shortest Line from Chicago to Butte.
Is 815 Miles the Shortest Line from St. Paul to Bozeman.
Is 735 Miles the Shortest Line from St. Paul to Bozeman.
Is 595 Miles the Shortest Line from St. Paul to Butte.
And is proportionately the shortest line to other points in Montana and Northern Idaho.
It is the only railway line to Washington and Oregon.

LANDS Millions and Millions of Acres of low-priced Lands for sale by the NORTHERN PACIFIC R. R. CO. on Easy Terms. They are the Cheapest and most productive Lands ever offered for sale by any railroad company. An equal quantity of Government lands also open for settlement under the Homestad, Pre-emption and Tree-Culture Laws. These Railroad and Government lands are THE BEST WHEAT, GRAZING, FARMING AND TIMBER LANDS NOW IN MARKET.

TERMS OF SALE OF NORTHERN PACIFIC LANDS. Agricultural lands are sold at \$4.00 per acre, and the preferred stock of the Company will be received at par in payment. When these lands are purchased on time, one-sixth stock or each is required at time of purchase, and the balance in five equal annual payments

required at time of purchase, and the balance in five equal annual payments in stock or cash, with inferest at 7 per cent.

The price of a large proportion of agricultural lands west of the Miasouri River in Dakota and Montana ranges chiefly from \$2.60 to \$4.00 per acre. If purchased on time, one-sixth cash, and the balance in five equal annual cash payments, with interest at 7 per cent per annum. THE NORTHERN PACIFIC RAILROAD passes are frough a region replete with more picturesque and wonderful scenery than can elsewhere be found. Added to this. The Northern Pacific Country possesses unrivalled attractions in undeveloped agricultural, grazing, mineral and forest wealth. Its water-power privileges are unequalled in number and capacity. Its absert resources are boundless. Its numerous town, farm, and all other properties are rapidly increasing in value, and it is an inviting field for people to engage in profitable manufacturing and various business enterprises. These conditions offer excellent opportunities for profitable investments and employment. The vast numbers who will make an interesting tour of observation through the Northern Pacific Country in Minnesota, North Dakota, Montana, Northern Idaho, Washington and Oregon—the pleasure-seeker, the sportsman, the invalid, the land buyer the stock raiser, the farmer, the mechanic, the manufacturer, and the business and travelling public generally—can combine profit with pleasure by making judicious investments and securing points for future locations in this presperous, new country.

For Maps and Publications, SENT FREE OF CHARGE, and for all

FOR Maps and Publications, SENT FREE OF CHARGE, and for all information relating to the NORTH PACIFIC COUNTRY, apply to or address either of the following officers:

CHARLES S. FEE, Gen'l Passenger Agent, St. Paul, Minn. J. M. HANNAFORD, Gen'l Freight Agent, St. Paul, Minn. E. HANNAFORD, General Land Agent, Portland, Oregon.

ED. STONE, General Land Agent, Helena, Montana.

A. D. EDGAR, General Agent, 52 Clark St., Chicago, III.

P. B. GROAT, Gen'l Emigration Agent, St. Paul, Minn.

CHAS. B. LAMBORN, Land Comm'r, St. Paul, Minn.

## GO TO THE PACIFIC NORTH-WEST!

Which Offers Rich Lands, Healthy Climate, Unrivaled Scenery
And PROSPERITY to All.

# The Northern Pacific Railroad Company, Oregon Railway and Navigation Company,

AND

### Oregon and California Railroad Company

Operate over 5,000 Miles of Transportation by OCEAN, RIVER AND RAIL,

Furnishing Unroualed Facilities in their magnificent fleet of Ocean and River Palace Steamboats and Cars to reach all points along the famous Willamette, picturesque Columbia and Snake Rivers, and the rich agricultural lands of Oregon, Wasnington and Idaho, now being rapidly settled.

Every few days one of their Steamships—either the "Queen of the Pacific," "Columbia," "Oregoz, "State of California," "George W. Elder," or "City of Chester," leaves at 10 A. M.

#### - From SAN FRANCISCO to PORTLAND, Oregon, -

And returning leaves Portland for San Francisco at 12.05 A. M.

Cars and Steamboats leave Portland for The Dalles, Umatilla, Walla Walla, Ainsworth, Chenex, Spokane Falls, Lake Pend d'Oreille and points in Western Montana, at 7 A. M., every day (Sundays excepted).

ASTORIA, KALAMA. TACOMA and SEATTLE, at 6  $\Lambda$ . M., every day (Sundays excepted).

VICTORIA and New WISTMINSTER, 6 A. M., Mondays, Wednesdays and Fridays.

CATHLAMET, BAY VIEW, SKAMOCKAWAY, BROOKFIELD, 6 A. M., Mondays, Wednesdays and Fridays.

Westport, Clifton and Knappa, 6 A.M., Tuesdays, Thursdays & Saturdays. Oregon City, Salem, Albany, Eugene, Oarland, Roseburg, Jacksonville, Hillsboro, Forest Grove, Yamhill, Independence and Corvallis, every day (Sundays excepted).

THROUGH TICKETS at reduced rates over our lines from Portland to ALL POINTS IN THE EAST.

#### General Offices-cor. Front and "D" Streets.

C. H. PRESCOTT, Manager O. R. & N. Co.

J. M. BUCKLEY, Ass't Gen'l Manager, Pacific Div. N. P. R. R., New Tacoma, W. T.

R. KOEHLER, Manager O. & C. R. R. Co., Portland, Oregon.

A. L. STOKES, Assistant General Freight Agent, Portland, Oregon.

P. SCHULZE, General Land Agent, Portland, Oregon.

A. D. EDGAR, General Eastern Passenger Agent, 52 Clark Street, Chicago.

GEO. V. SIMS, General European Agent, 20 Water Street, Liverpool, England.