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ved by The Oregonian from a photograph taken by McAlpin & Lamb.) PORTLAND—BUSINESS, BANKING AND RAILROAD CENTER OF THE PACIFIC NORTHWEST—SECOND CITY ON THE COAST. (Looking east from tower, Oregonian building.)

HE STATE OF OREGON

e Resources of An Empire in the Pacific Northwest.

ETCH OF ITS PROGRESS AND DEVELOPMENT

cultu e the Prime Factor in Its Steady and Remarkable Prosperity.

T EXTENT OF LUMBER AND MINERAL INDUSTRIES

ome of Stock-Raising and Wool-Growing—Fisheries—Hops —Unrivaled Climate and Fertile Soil—Rivers, Harbors and Water Courses.

REGON is the most northwesterly state of the Union, except Washington, and is in area 96,274 square miles, or 60,016,000 acres. Its dimensions are 350 miles from east to west, and 275 miles from north to south. It lies south of Washington, west of Idaho, north of California, and east of the Pacific coast. Its population is 352,-652,000, and in national resources it bears favorable comparison to any of the older commonwealths. The early history of Oregon is full of romance. Its set- by Americans began before the of gold in California and be- American conquest of that state. nal boundaries of Oregon em- ver 300,000 square miles, and in- ll the area above the 42d par- west of the Rocky mountains—a from which have since been he present Oregon, Idaho, Wash- nd part of Montana. The first of the Northwest territory 02, when Spanish explorers vis- passed up the coast as far as parallel. These adventurers ap- have overlooked the open estuary mouth of the great river of the st, for the Columbia was not ed until 1792, when Robert Gray, n, entered its mouth and named am after his vessel, the Columbia. the Lewis & Clark expedition and reported to President Jef- the vast virgin resources of the ntry, populated only by Indians. Captain Winship, of New Eng- ted the first house on the Co- In 1811 John Jacob Aster founded trading station of Astoria. The nt 35 years were partly a his- conflict between English and n settlers which was allayed by of "joint occupation" in 1818. In s. Jason Lee and Daniel Lee and sionaries came to the Northwest, le the first permanent settlement, nded the first genuine civilization country. They established the Manual Labor School," near for the education of Indians. In der protection of the American mpany, Dr. and Mrs. Whitman, H. and Mrs. Spaulding and W. established a mission among the of Eastern Oregon. These set- attracted immigrants, and se- nflict for possession between the and the Americans began. In casional government was formed. treaty was concluded between d States and Great Britain, fix- northern boundary at the 49th n 1848 congress established a l government, and General Jo- e was nominated for governor. settlements thrived and grew, tanding their remoteness; but iginal inhabitants did not give ut a struggle. Fights with In- re frequent. On November 28, and Mrs. Whitman and 12 others rdered by Cayuse Indians near nt site of Walla Walla, then in The settlers organized, and sub- savages. Again the Indian trou- e renewed in 1855, and again as 857 and 1878. The tribes are now confined to reservations. The was admitted as a state Febru- 859, and a constitution adopted. above are meagerly and briefly events of the early history of . It abounds in deeds of in- and collective heroism and self- in tales of thrilling adventure and in forest; of incredible hard- fortitude by early missionaries ers whose patriotic purpose was m the great territory from the s, and establish and build a ealth which would be a source and power to the nation. Their is conspicuously attested in the nd prosperity and high degree of civilization which prevail in the country today.

There are three natural subdivisions to the state—Eastern, Western and Southern Oregon. The two first are distinct and well-defined, but the last is more correct- part of Western Oregon, with two counties from east of the Cascades. These three portions of the state have by usage come to be considered its geographical units, and it is well enough to adopt the common classification. Eastern Oregon is divided from Western by the Cascade range of mountains, extending north and south through the state at an average altitude of 5000 feet. At intervals snow-clad peaks rear their heads far above the usual height. Mount Hood, in the north, near the Columbia river, is the most lofty, being 11,225 feet. Mt. Pitt, in Southern Oregon, is 9618 feet. The principal productive portion of Western Oregon is the Willamette valley, extending from the Columbia river north about 150 miles to the California range of mountains. The Coast range, parallel to the Cascades, occupies much of the territory of this division, and the narrow strip between these mountains and the sea is arable in part. The Umpqua valley, drained by the Umpqua river, south of the California range, is very rich for agriculture, and the Rogue river valley in extreme Southern Oregon, is famous for fruit-growing. These two valleys are the gardens of Southern Oregon. The uplands are fertile and cultivated in part. The bottom lands along the lesser streams in various parts of this section of the state are exceedingly productive.

Eastern Oregon is all that area east of the Cascade mountains. It is in the form of a parallelogram, 275 miles long and 240 miles wide. Its plains are broken up in mountains, the chief range being the Blue mountains in the north and the Stein mountains in the south. Intermediate spaces are devoted to agriculture, and to stockraising and woolgrowing. Precious minerals are found in the mountains, and the industry has attained considerable development.

On the coast of Oregon are nine inlets from the sea including the Columbia river. Three of these are navigable to deep-sea vessels. Others can be entered by vessels of lighter draught. The entire state is traversed by a multitude of water-courses. The Columbia river forms the northern boundary of the state. All the valleys and lowlands are drained by streams of greater or less magnitude some of them navigable for steamers. The mountains are covered with timber of great commercial value; the lowlands, in their natural condition, with light-growth vine maple and alder, with only occasional firs and pines.

These in outline are the principal topographical features of Oregon, breaking the state up into valleys, hills, table-lands, and mountains. There is no part of Oregon from which a range of hills or mountains cannot be seen, and the country everywhere is picturesque. There is no valley which is not productive, and there is no upland or table-land or even hill land which does not offer excellent opportunities for cultivation either for agriculture or horticulture, or for a productive industry of some kind.

CLIMATE AND SOIL.

A Combination That Insures Health and Abundant Crops.

CLIMATIC conditions in Oregon present great variety within an area comparatively limited. The typical features of the climate of Western Oregon are the rains of winter and a protracted rainless season in summer. In other words there are two distinct seasons in Oregon—wet and dry. Snows in winter and rains in summer are exceptional. In Eastern Oregon the climate more nearly approaches conditions in Eastern states. There are not the same extremes, but there are the same features of winter snow and, in places, of summer heat. Southern Oregon is more like Eastern than Western Oregon.

The distinguishing characteristics of Western Oregon are its equability and healthfulness. The state is in the same latitude as Maine, but there is entire absence of the rigors of weather suffered in the Pine Tree state. Owing to modifying influences, the thermometer's greatest range is from zero in winter to 109 degrees above zero in summer. The great primary climatic influence of this region is the Japan current of the Pacific ocean. Warm winds laden with moisture, sweep the ocean, and precipitate their contents first on the coast, where the downfall is greatest, varying from 58 to 75 inches per annum. The moisture still contained in clouds after they cross the coast range is deposited in the Willamette valley, the average at Portland being 49 inches annually. At Ashland, in the south, where the elevation is much greater than in Portland, the average is only 21 inches. When the winds have passed the Cascades to Eastern Oregon, but little moisture remains for that section, the extreme fall for a year being less than 30 inches.

Along the Oregon coast the average temperature in winter is from 30 to 55 degrees, and in summer from 50 to 80 degrees. The average between the coast and Cascade ranges during winter are from 15 to 60 degrees, and in summer from 50 to 90 degrees. It is only on rare occasions that the thermometer passes out of these limits. In the Willamette valley the lowest recorded temperature was in January, 1888, when the themometer was from 2 degrees to 6 degrees below zero, depending upon locality. In the Umpqua valley, at the same time, it was 6 degrees below and in the Rogue River valley 3 degrees below. In July, 1891, the highest temperature prevailed, at 102 degrees, at points in the Willamette valley it was from 100 degrees to 105 degrees; in the Umpqua valley, 102 degrees; in the Rogue River valley 105 degrees to 108 degrees. The duration of extreme weather, either hot or cold, is ordinarily very short, never over three days. During the past summer the average warm weather was higher than usual; but the extreme was 99 degrees. On the whole, physical discomfort from stress of weather of any kind in Oregon is exceptional. A typical rainy day in Oregon is not to be complained of. It is not a storm. It is a drizzle or mist. There is little or no wind. Travel in public streets is not interrupted. It is not necessary to keep indoors. Outdoor work is seldom seriously interrupted, and never for a protracted time. The condition of the country roads is no better and no worse than the average winter road in the Eastern states. Killing frosts seldom occur. Thunder storms are rare. November, 1894, may be taken as a sample of winter month, though, as a rule, there are not so many severe storms as in December and January. November bears about the same meteorological relation to December as in the Eastern states. The record of the weather bureau at Portland shows the following:

Mean temperature, 45; highest temperature, 67, on the 7th; lowest temperature, 32 on the 16th; greatest daily range of temperature, 20 on the 19th; least daily range of temperature, 3 on the 25th.

MEAN TEMPERATURE.

1871.....60	1877.....48	1883.....47	1889.....48
1872.....42	1878.....47	1884.....48	1890.....47
1873.....48	1879.....44	1885.....49	1891.....49
1874.....45	1880.....42	1886.....42	1892.....46
1875.....45	1881.....44	1887.....45	1893.....46
1876.....47	1882.....44	1888.....44	1894.....49

Mean temperature for this month for 23 years, 46.

Accumulated excess of daily mean temperature during the month, 63 degrees; average daily excess, 2.1 degrees; accumulated deficiency of daily mean temperature since January 1, 1894, 477 degrees; average daily deficiency, 1.4.

Total deficiency in precipitation during month, 2.29 inches.

Total precipitation from September 1, 1894, to date, 7.46 inches.

Average precipitation from September 1, 1894, to date, 12.19 inches.

Total deficiency from September 1, 1894, to date, 4.46 inches.

Average rainfall for 24 seasons, 49.51 inches.

Prevailing direction of wind northwest, 28 degrees; total movements of wind, 5712 miles; maximum velocity of wind, direction and date, 27 miles from southwest, on 28th; total precipitation, 2.76 inches; number of days on which .01 inch or more of precipitation fell, 15.

TOTAL PRECIPITATION.

1871.. 2.77	1877..12.45	1883.. 8.36	1889.. 3.97
1872.. 4.76	1878.. 5.61	1884.. 3.24	1890.. 0.50
1873.. 4.32	1879.. 4.56	1885.. 8.52	1891.. 5.74
1874..10.22	1880.. 3.17	1886.. 1.00	1892.. 4.34
1875..15.77	1881.. 5.91	1887.. 3.43	1893.. 7.76
1876..10.03	1882.. 5.95	1888.. 4.47	1894.. 2.76

Average precipitation for this month for 23 years, 6.05; number of cloudless days, 6; partly cloudy days, 11; cloudy days, 13; dates of frost, light on the 2d, 5th and 21st; killing on the 16th.

The springs in Oregon are delightful; the summers very pleasant. They are practically rainless, and almost always without great extremes of heat. The sky is usually cloudless. Sunstrokes are unknown. It is a common practice of farmers to thresh in the field and stack grain outdoors for week at a time awaiting the opportunity to haul to market. The roof of the farmer's warehouse is the sky, and it seldom leaks. Fall rains usually begin in October. It is a noteworthy feature of Oregon summers that nights are always cool and refreshing. No matter what temperature was recorded during the day, relief comes with sunset.

In Eastern Oregon the temperature is lower, in winter, and higher in summer, than in Western. The annual rainfall varies from 7 to 20 inches. About one-third occurs in the form of snow, whereas in the west the snowfall does not comprise over 5 per cent of the total, and in years is not 1 per cent. The area over which there is less than 10 inches of rainfall is small. Extremes the year round are of minor range.

The influence of the mild climate of Oregon on health is very important. There is complete absence of those atmospheric conditions favorable to the development of bacteria and all cryptogamic and sporadic germs. Because of the divers currents of air mingling with breezes from the Pacific, contagious and epidemic diseases are easily controlled, while such diseases as typhus And cholera are wholly unknown. Even typhoid forms of malaria are easily regulated. The climate west of the Cascades is generally too damp for consumption, but on the plateaus of Eastern Oregon, conditions are most favorable to the improvement and even cure of this class of invalids.

The common valley soil of Oregon is a rich loam, with a subsoil of clay. Along the streams it is alluvial. The "beaver-dam lands" of this class are wonderfully fertile. This soil is made through the work of beavers who dammed up streams and created lakes. When the water was drained away, the detritus covered the ground. The soil of the uplands is less fertile than that of the bottoms and valleys, and is a red, brown and black loam. It produces an excellent quality of natural grass, and under careful cultivation produces good crops of grain, 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. The constituents of this soil adapt the land peculiarly to the production of wheat. All the mineral salts which are necessary to the perfect development of this cereal are abundant, reproducing themselves constantly as the gradual processes of decomposition in this soil of volcanic origin proceeds. The clods are easily broken by the plow, and the ground quickly crumbles on exposure to the atmosphere.

In Northeastern Oregon, adjacent to the Columbia river, although the dry season continues for months, this light porous land retains and absorbs enough moisture from the atmosphere, after the particles have been partially disintegrated, to insure perfect development and full harvests.

In Southeastern Oregon, especially in the vast areas of fertile lands in Malheur and Snake River valleys, the soils are much like those of the Northeastern Oregon region, but there is less moisture. Except in a very small portion of this region irrigation is necessary to successful agriculture. The water supply is abundant and easily applied.

THE STATE'S LEADING DIVISIONS.

The Willamette Valley a Great Garden—Fertility of Eastern Oregon.

HE two leading divisions of the state are the Willamette valley and Eastern Oregon. The Willamette valley, the principal agricultural region of the state, extends from the Calipooia mountains on the south to the Columbia river on the north. It is inclosed by the Cascade range of mountains on the east, and the Coast range on the west. Its length is about 130 miles, and its average width 60 miles, and it contains about 7800 square miles of very productive land. It is drained principally by the Willamette river, which rises in the Calipooia mountains, and flows midway through the valley to the Columbia river. Into the Willamette on the east pour the Clackamas, Molalla, Pudden, Santiam, Calipooia and McKenzie rivers. Besides the Coast fork of the river from the west, flow the Tualatin, Chehalem, Yamhill, La Creole, Lucklamute, Mary's and Long Tom rivers. Each of these streams flows through a great extent of territory especially fit for agriculture, fruit, stock and timber.

The elevation of the valley above the sea level ranges from 70 feet at Oregon City to 400 feet at the southern extremity.

The level prairies are well populated; but farms are too large and the tendency is to divide them and invite further settlement and more thorough cultivation. The principal staple of production has been wheat, but crops are now more diversified than in the past. Horticulture is receiving great attention. Some of the lands show a special adaptability to hop culture. Oats, rye, barley and all the common cereals are grown in abundance. The country is especially adapted to the production of vegetables of all kinds.

The rolling lands which inclose the level prairies are a very valuable portion of the Willamette valley. The soil is mainly basaltic and sandstone, and of great fertility. In their virgin state these lands are usually covered with brush, and require to be cleared. The conspicuous advantages of these tracts are good soil, natural drainage, excellent water, a climate beyond the reach of malaria, ample supplies of wood, and comparative freedom from early frosts. There is abundant opportunity to secure at reasonable cost large areas of foothill lands. Considerable tracts, mostly wooded, lie upon the upper courses of nearly every one of the tributaries of the Willamette. The foothill lands lie at an elevation of from 500 to 2000 feet. Much good agricultural land is as high as 2500 feet.

The conditions of daily life in the Willamette valley are most satisfactory. Railroad facilities are excellent. Settlements and postoffices are very numerous. Roads are in the main well maintained, though in many instances there is opportunity for very great improvement in this direction for winter travel. In the country the educational advantages are very good, and schools liberally maintained. There is a great variety of academies and colleges throughout the state. Churches are frequent, more in number, probably, than can usually be found in regions of equal population. Taxes are low. Table necessities are cheap. Wearing apparel is as low priced as anywhere in the United States. As a rule, farmers of the Willamette valley live better and more comfortably than in most other parts of the United States. They are more prosperous than the average. They seldom emigrate to another state. A main drawback to the development of the country in the past has been the entire reliance on one crop—wheat—placed by farmers. Diversification of crops and small farms well tilled are displacing old methods, and will be the rule in the future.

Eastern Oregon in extent takes up about two-thirds of the superficial area of the state, and comprises all that region east of the Cascade mountains, except the important counties of Klamath and Lake, which are commonly assigned to Southern Oregon. Its average altitude above the sea level is 2500 feet. Its surface presents a variety of topography and of climate. The territory in the northern part of this great region is pretty much taken up with the Blue mountains and spurs with their accompanying valleys. These latter are very productive, having ample rainfall and a climate without great extremes either in winter or summer. The southwestern portion of the section, notably all that lying south of Malheur river, is dry and requires irrigation. It is expected that the government will shortly reserve 1,000,000 acres of this land for the uses of the state under conditions that offer inducement for settlement and cultivation. The northern central portion is much broken by mountains, which afford good pasturage, and which have beside small valleys of great agricultural richness. The southern central section is the Harney lake region, a leading grazing portion of the state. It is a vast rolling table-land, interspersed with valleys of considerable extent, which are naturally meadows of luxuriant and nutritious grasses. Mining for precious metals is an important industry of this immense region.

Southern Oregon takes up about one-fifth of the state. That part near the ocean has the same characteristics of topography and climate as Western Oregon. Other parts, compassed about with mountains, are drier in summer and colder in winter than Western Oregon. The two principal valleys of this section are Rogue river and Umpqua. The Rogue river valley is about 35 miles long and 30 miles wide on an average. Its soil is especially adapted to diversified farming. The chief industry is horticulture. All kinds of temperate-zone and semi-tropical fruits are produced in abundance, peaches and melons predominating. The bottom lands grow timothy, clover and blue grass. Near Jacksonville there are vineyards that rival those of California.

The Umpqua valley, lying between Rogue river and the Willamette valleys, is adapted to fruit culture. Cereals thrive well, but their culture is not so generally engaged in as in the larger valley to the north. Stock and poultry-raising and woolgrowing are leading industries.

RIVERS AND HARBORS.

The Great Water-Courses of the State—The Fine Harbors.

IVERS and water-courses abound in Oregon, ranging from the smallest streamlet to the mighty Columbia. The state has no rival in the variety, volume and economical distribution of its water-courses. The Columbia is one of the great rivers of the world, and, except perhaps the Yukon, the largest in North America emptying into the Pacific ocean. Its average width for 300 miles inland is over two miles, and in volume of water it is exceeded in the United States only by the Mississippi. Its rise is in the picturesque mountains of Yellowstone Park, and in its majestic sweep of 2500 miles to the sea it is a highway of wealth and wonder. It has been stated that, in times of flood, its daily increase exceeds the entire increase of the Hudson. With its tributaries it drains nearly 400,000 square miles, and, in its western course, it forms for nearly 300 miles the northern boundary of Oregon. The Columbia is the only river in the United States navigable to deep sea vessels for 120 miles inland. Ocean craft of all kinds find their way easily up the Columbia and to Portland on the Willamette, a distance of 112 miles. For the purpose of maintaining uninterrupted navigation, a Port of Portland commission was established by a recent act of legislature, and through the enterprise and public spirit of the citizens of Portland, the channel to the sea is kept clear of obstructions. Five hundred thousand dollars have already been expended in this work. At no point from Portland to the sea is to be found less than 25 feet of extreme low water.

At several places along the Columbia the freedom of its flow is interfered with by great natural obstructions, which prevent continuous navigation by river steamers. The first of these impediments is found about 160 miles from its mouth, at the cascades of the Columbia. The bed of the river at this point is filled with immense boulders, presenting an absolutely impassable barrier. It has always been necessary to transfer freight and passengers at this point, and to that end portage railroads were built on both sides of the stream. It had always been contemplated that some time a canal and locks would be built to avoid the cascades, and, favorable congressional action having been secured as long ago as 1877, the work was started. It has suffered many delays since that time, but it is now being vigorously pushed, and the prospect is that it will be completed before the end of the present year. The vastness of the undertaking may be appreciated when it is stated that it has required congressional appropriations of over $3,500,000. The general scope of the improvements embraces a complete system of locks and canal and improvements to the stream, extending over a distance of 4½ miles. The actual length of the canal and locks with approaches is about three-fourths of a mile.

The second obstruction is about 210 miles from the ocean, above the town of The Dalles. At Celilo commences a series of rapids 14 miles long. A gorge of the Columbia at this point, about 2½ miles in length, is "the dalles" proper. The average width of the stream through the rapids is 2000 to 2500 feet, except in the gorge, where the entire volume is confined to a space of 130 feet. An appropriation for a boat railway around this point is confidently expected from the coming congress. An initial appropriation of $25,000 for the survey has already been made, and there seems little reason to doubt that in five years the project will be fully consummated. It will be the function of the railway to transport river craft and cargoes bodily around the obstruction. When it is completed, and when the locks at the Cascades are finished, it will be possible for steamers to load at Lewiston on the Snake river and go through to Astoria without breaking bulk. The enormous value of these improvements will be readily recognized. Railroads now traverse the entire region east of the Cascades, and carry their products to Portland and Puget sound. The effect of an open river will be to cheapen transportation and to place the whole inland empire within easier and cheaper reach of the seaboard. The greatest benefit will be to the producer.

The mouth of the Columbia is the scene of a very important improvement. It is really an estuary of the ocean, eight miles wide. Sand and silt carried in suspension by the waters of the Columbia, and washed in from the ocean, were precipitated at the entrance, and formed a bar. It interfered with navigation, and in times gone by vessels could cross only at high tide. A jetty four miles long has been built out from the south point of land at the entrance. It has had the effect of confining the current and deepening the channel, so that there is now 30 feet at low tide, sufficient for the largest vessels in the world. This work, costing less than $2,000,000, is a triumph of engineering skill. It is permanent, and of the very greatest value. It will be wholly completed this year.

The Columbia river is the leading Oregon harbor. Other important harbors are Coos bay and Yaquina bay. The government has expended very large sums in their improvement, and the work is not yet complete. The plans at Coos bay contemplate the expenditure of about $2,000,000, of which about $500,000 has already been appropriated and expended. The design here is to construct jetties so as to confine the water and increase the depth on the bar. At this time there are about 20 feet at low tide on Coos bay bar, sufficient for ordinary vessels. Coos bay abounds in timber resources and has rich adjacent bottom lands. Besides it has important working coal mines. The necessity of the improvement of the harbor is apparent. A railroad is now in course of construction from Coos bay to Roseburg, a distance of less than 100 miles.

About 60 miles south of the Columbia river is Yaquina bay. Government works are in course of completion at this point. The plan includes construction of two jetties, one on the north and the other on the south of the harbor. Great progress has been made. The depth of the channel on the bar has been raised from seven to 16 feet at low tide. The immediate resources of Yaquina bay are mainly agriculture and timber. Yaquina City is the terminus of the Oregon Pacific railroad, which extends eastward across the Willamette valley and to the summit of the Cascade mountains. It is designed ultimately to complete the railroad to an Eastern connection.

Between Yaquina bay and the Columbia is Tillamook bay. It is eight miles wide and 12 long. It is an excellent harbor, with a safe channel across the bar. The resources of Tillamook are its timber, agriculture and fisheries. Dairying is extensively engaged in.

Other harbors are Netarts bay, Alsea bay, and Port Orford. Besides these, Rogue and Umpqua rivers, which empty into the ocean in Southern Oregon, are navigable.

The Willamette river is next in importance to the Columbia. It is navigable to deep-sea vessels as far up as Portland, 10 miles from the Columbia, and for river craft at favorable stages as far up as Eugene, 126 miles. It drains the entire extent of the productive Willamette valley, and gathers up in its course 42 streams, large and small.

The Snake river forms a part of the eastern boundary of the state, and is a main fork of the Columbia. It has been navigated by light-draft steamers to a point within 125 miles of Salt Lake City. Important streams in Eastern Oregon are the John Day and Deschutes, flowing north and emptying into the Columbia. Each with its windings is about 200 miles long. In Northeastern Oregon are the Powder, Grand Ronde and Umatilla rivers, all clear and swift streams, watering large areas of fertile valley lands. The Owyhee and Malheur rivers traverse Southeastern Oregon. The former rises 500 miles southward in Nevada, and empties into the Snake where that river becomes the Eastern Oregon line.

The rivers and their multitude of tributaries of Oregon, and an infinity of springs, cover the entire state so completely that scarcely a square mile (except in the limited arid region) escapes their touch. Their scenic attractions are very great. There is a very large number of waterfalls, affording unlimited water-power and in many cases spectacles of rare beauty. The mountain streams are amazing in the variety of their charm. They abound in trout and other fish, and are a source of unfailing delight to the fisherman and the sojourner, as well as to the permanent residents. These streams and rivers have been a highly useful factor in the development of the state.

AGRICULTURE AND ITS EXTENT.

It Has Reached High Development and Brought Rich Returns.

HE industries and prosperity of Oregon are based on its agriculture. The various valleys, table-lands and foothill districts present opportunities for cultivation of the soil excelled by no other state in the Union. The mild and beneficent climate, allowing engagement in outdoor occupation of some kind every month in the year, is an advantage to the husbandman, and, besides, it aids in the highest degree the growth of abundant crops, and their easy and complete harvesting. The favorable conjunction of soil and climate have insured successful cultivation every year since the first settlement, and a failure through drouth, pest or any other cause has never been recorded. The arable area of the state is very large, and there is little land, outside the mountains, that will not yield some kind of a crop—wheat, barley, hops, rye, oats, hay, pasture, fruit, or vegetables, or timber, or mines. There is little waste land.

Seeding time in Oregon is a protracted season, continuing even to Christmas, and in the spring from February to May. The harvest may last several months. Threshing is invariably done in the field and grain is stacked in the open air.

Oregon is best known throughout the world for its wheat. But it is not a single-crop state, though perhaps some years ago it deserved that appellation. Wheat cultivation has grown steadily, though it has lost its relative importance. The proportionate amount of wheat raised for export in Oregon exceeds, perhaps, the output of any other state. For years Oregon has produced over one ton per year for every man, woman and child within its borders. Horticulture has during the past few years assumed special importance, and the state is taking rank as a producer of fine fruits, in some particular varieties being superior to California. Oregon prunes are rapidly acquiring the name of being the largest, most delicious and toothsome grown. The large number of premiums awarded to Oregon fruits at the world's fair attests their superior merit. Horticulture, its history, condition and prospects are discussed fully in another part of this paper. The sugar beet has during the past year attracted attention, and the early establishment of refineries is anticipated. Experiment has shown that the Oregon beet has commercial value and is especially adapted to sugar-making purposes, possessing a large proportion of saccharine matter. The soil of the state, especially of the bottom lands, is particularly fitted for root vegetables of all common descriptions. The natural grasses are perhaps without equals anywhere. Alfalfa produces three or four crops annually, and in places reaches a height of three or four feet. Red clover yields two or three crops a season. White clover produces excellent crops. The bean crop is something very fine. Pumpkins and squashes have no superiors.

Wheat—As in most other Northern states, wheat is the chief product of Oregon. Farmers during the past two years have suffered from low prices, but less than their fellows in most other states. There have been enormous crops, with no profitable market. The trouble is of course not common to the state, but to the world. The average bushel of Oregon wheat exceeds the 60-pound-to-the-bushel measurement, running from five to nine pounds in excess. The berry is plump and heavy. Valley wheat commands a special price in the European markets, being used largely for pastry purposes. The yield averages from 20 to 30 bushels per acre. An average of 40 bushels and higher is very common. The state produced in 1894 14,000,000 bushels on 700,000 acres—the heaviest crop ever known.

Two-thirds of Oregon's wheat is raised east of the Cascades. The early opening of the Columbia river means much for the farmers of that great region. It is certain to enhance the value of their products.

Other Grains—Oats are a staple product of Oregon. For feed it largely supplants the use of corn, so commonly fed in the Middle West. The production per acre is from 40 to 75 bushels. The average weight per bushel is above the 34-pound standard. Rye and barley are also common crops, and buckwheat is raised in limited quantities. Corn thrives well throughout the state, but its cultivation is not generally engaged in, except in Southern Oregon. Flax is grown in many places for export, producing from 400 to 800 pounds of clean fiber per acre. It is an excellent crop to rotate with wheat.

Hops—Within a very few years hops have taken rank as a leading industry. The area of land fit for general hop culture in the United States is limited, and it has developed that the Pacific coast offers peculiar advantages for profitable production. Parts of Clackamas, Marion, Linn, Lane, Benton, Polk, Yamhill and Washington counties, in the Willamette valley, are now largely surrendered to this product, with most satisfactory results. It is claimed that there are attached to the industry in this district the advantages of a certain crop, early bearing of vines, large yield, low cost of production, freedom from disease, facilities for securing cheap poles, as well as fuel for drying, and cheap picking. The crop in Oregon averages from 1200 to 2000 pounds per acre. The hop louse has recently appeared, but is kept under thorough control by scientific spraying. The price paid for hops covers a very great range. The average cost of production is not more than 10 cents per pound, and some growers, it is claimed, have reduced this figure to 8 and even 7 cents. The last year the price has been low, due to exceptionally heavy yields throughout the world. It is probable that in the last 19 years the average price to Oregon growers has been at least 20 cents per pound. In 1894 Oregon produced 53,000 bales of hops, against 28,000 bales for 1893.

Vegetables—The variety of vegetables grown is very wide. The list includes potatoes, cabbages, onions, parsnips, cucumbers, celery, peas, beans, pieplant, asparagus, beets, cauliflower, tomatoes, carrots, radishes and many others. Garden products likewise include watermelons, cantaloupes, muskmelons, citrons, and so forth. The quality of all these table products is unexceptionable. The quantity produced in a given space is remarkable.

It is difficult to give a stated price for land in Oregon. Average farming land, under cultivation, brings $15 to $50 per acre. There are farms for less and for more, depending upon quality, location and other conditions. Railroad and other uncultivated land is to be had at a very low figure. Good fruit lands in Southern Oregon will average from $50 to $100 per acre. The average price per acre is gen-