

Miscellaneous.

FARMING IMPLEMENTS are likely to be scarce during the approaching harvesting season, says the Rural Press, if we are informed correctly. By the market reports for the past two years we find that very few agricultural tools, particularly harvesting machinery, have been imported to California; the large dealers in those articles in San Francisco, having two years ago a heavy stock left over on their hands, by reason of the drouth and consequent limited demand, this fact, in conjunction with a depression in prices last year, discouraged new orders. The commercial embarrassments of the old house of Treadwell & Co., which had an immense stock on hand, which was put upon the market in the midst of the season, by the assignee, at about 80 per cent. of the cost, caused another serious loss to other holders of this class of goods in San Francisco; as, rather than carry a heavy and unprofitable stock for another season, they sold at almost any sacrifice. This heavy stock of agricultural machinery—which they had to hold over—was one of the principal causes of Treadwell's financial embarrassments; and the season had so far advanced before the red tape of a bankruptcy court allowed goods to be put upon the market, that Bradenstein & Co. (who bought the speculation, because it was about half cost) had to hold their threshers, headers and mowers over another year; but the subject has a more serious aspect for our farmers, who have little to do with the profits of commercial speculations, and that is why we allude to the matter now. The coming season promises to be one of the most prosperous for many years for cereals; in short, it will be the great year of this decade. If, then, there is to be a great demand for harvesting machinery of all kinds, and there is not likely to be sufficient to meet that demand, will not the prices go up accordingly. It is possible that the best class of threshers, headers, mowers, and reapers, before Spring may not be found when wanted, for love or money. It would be well for our farmers to look out in time, and be prepared for this possible emergency.

FEMALE TASTE.—A cultivated taste marks a woman of elegance and refinement as decidedly as a knowledge of classical literature does a gentleman; and there is nothing in which female vulgarity is more clearly shown than in the taste of the individual; but it is a question how far taste is natural, and how far it may be acquired. A delicate taste must to a certain extent depend upon the organization of the individual; and it is impossible for any rules to be laid down which will impart taste to persons entirely devoid of it. But this is very seldom the case with women; as it is one of the few points in which women naturally excel men. Men may be, and probably are, superior to women in all that requires profound thought and general knowledge, but in the arrangement of a house, and the introduction of ornamental furniture and articles of bijouterie, there can be no doubt of the innate superiority of women. Every one must have marked the difference in the furnishing of a bachelor's house, and one where a lady presides; the thousand little elegances of the latter, though nothing in themselves, adding, like cyphers, prodigiously to the value of the solid articles they are appended to.

CALIFORNIA, during 1871, produced 23,000,000 pounds of wool, and on the first of December 19,250,000 pounds had been sent by sea and rail to New York and Boston, where it will be manufactured and then returned in large shipments in the shape of casimere and other kinds of woolen goods, to be consumed by our citizens. Such a system of trade can be but most disastrous to our prosperity as a people, and every effort should be made to provide for the manufacture of this wool at home. This is from a California paper. Similar remarks would apply to the way in which much business is done in Oregon.

IRELAND has been said by one of the Jewish papers to be the only European country in which the Jews are given full rights and treated kindly. Such being the case, it is singular that there should be only 258 Jews in Ireland, as a recent census shows to be the case.

The Thames tunnel, thought to be such a novelty, was anticipated by one under the Euphrates at Babylon, and the ancient Egyptians had a Sues canal.

From "The West." THE STATE OF OREGON. Geographical Features, Resources, Etc. BY JOHN S. MITCHELL, OF SAN FRANCISCO. [Continued.] PUBLIC LAND.

All the land of Oregon, 60,975,360 acres, became the property of the federal government, and no part of it is subject to any foreign grant. One-sixth of the area has been surveyed by federal surveyors into sections one mile square each; and this quantity of 10,000,000 acres includes the land occupied or sold, and that for which it is supposed that there will soon be a demand. The federal government has given 3,375,786 acres to the State for educational purposes, and 500,000 acres for public buildings, has reserved 1,910,000 acres for Indians, given and sold 3,000,000 acres to individuals for settlement, has granted 1,813,000 acres to assist the construction of wagon roads, has granted 4,500,000 acres to assist the construction of the Oregon and California Railroad, and 3,200,000 acres to assist the construction of the Northern Pacific Railroad. The aggregate of these gifts and sales is 17,278,786 acres, or nearly one-third the area of the State. The greater portion of the railroad grants is promised under conditions which have not been complied with, and the legal title may remain in the federal government for many years to come. The grant to the Oregon and California Railroad Company extends from the Columbia river to the southern boundary of the State, through the heart of the western division, and is of great value. The land is offered for sale to settlers by the European and Oregon Land Company at fair prices.

The wagon road grants extend from Eugene City, by the middle fork of the Willamette, to the eastern boundary of the State; from Corvallis to Yaquina Bay; from Albany, by way of Canyon City, to the eastern boundary of the State; and from The Dalles to the eastern boundary of the State, on the line towards Fort Boise.

The fertile land now convenient of access west of the Cascade Range, and the settlers must expect to pay something more than \$1.25 per acre for desirable farm land, even if entirely unimproved. In the Willamette valley prices range for improved farms from \$5 to \$40 per acre. Many of the people are ready to sell, and those who have the cash to spare, can find great bargains. In eastern Oregon, large areas of excellent land can be purchased at the Government minimum price of \$1.25 per acre.

RAILROADS.

In our time the progress of new countries depends, to a great degree, upon their railroads, and their connection with extensive railroad systems. Provision has been made to connect Oregon with the Middle and the Northern Pacific Railroads. Congress has given 12,800 acres of land per mile for the construction of a road from Portland to Sacramento, a distance of 600 miles, and the cars are running two-fifths of the distance—the road being about 100 miles from the ocean, and parallel, in general course, with its shore. Other roads in the same direction connect at Portland and Sacramento, so as to secure a great coast road from Mexico to British Columbia.

The main Northern Pacific Railroad is to come down the valley of the Columbia river, on the north side, to Portland or vicinity, and to that 25,000 acres of federal land have been given for each mile of the line. Another road, to be about 100 miles long, is to connect Portland with Astoria, and 20 miles of track have been completed. These roads will accommodate the western and northern districts of Oregon, but the southeastern part of the State has no navigable water, and no provision has been made to supply it with railroads.

TIMBER.

Western Oregon is abundantly supplied with timber. The hills and mountains are covered with dense

forests of large conifers, which extend into the bottom lands and there mingle with deciduous trees. The most valuable, and also the most abundant trees of the State, are the red and yellow fir, known to botanists as the *Abies Douglasii* and *Abies Grandis*, and to lumbermen generally as Oregon pine. They frequently reach a height of 250 feet and a thickness of eight feet in the trunk. The wood is hard and strong, and makes excellent frames for houses, and frames and planking for ships, but it is too rough for finishing either the inside or even the outside of houses to advantage. Finishing lumber is supplied by the sugar pine, which abounds in some parts of the Cascade Range, and by the Oregon cedar, both of which grow about as large as the firs, and by the Port Orford cedar, which is found on a small district near the coast, and is fragrant with a terebinthine odor, that is to many persons considered very pleasant. The western yellow pine grows to a very large size, but is more abundant on the eastern slope of the Cascade Range than on the west. The yew and juniper give variety to the evergreen forest. Deciduous trees are few comparatively, the most common being oak, ash, and alder. Neither the oak nor ash timber of Oregon is equal in strength and elasticity to that of the Mississippi valley. No hickory, black walnut, poplar, wild cherry, or butternut lumber is procurable without importation.

East of the Cascades, on the bottom-lands and lower hills, the trees are generally rare, small, and crooked in trunk and limb, with timber of little value for any purpose save burning. On the higher elevation of the Blue Range, however, where considerable quantities of snow fall in the winter, and lie until late in the spring, there are extensive forests of large and handsome trees.

The bottom-lands west of the Cascade Range are generally bare of trees, having been prairies when first visited by white men, but are covered by an abundant growth of indigenous grasses and ferns. In the forests there is a dense undergrowth of bushes and briars, many of which bear fruit, but none of much value. The moisture of the climate is very favorable to the growth of ferns, which give the farmers much trouble in their cultivated fields.

AGRICULTURAL PRODUCTIONS.

The agricultural productions in 1869—the latest year for which we have statistics on that point—included 1,750,000 bushels of wheat, worth \$1,500,000; 500,000 bushels of oats, worth \$270,000; 500,000 bushel of potatoes, worth \$300,000; 200,000 bushels of maize, worth \$200,000; 200,000 bushels of barley, worth \$200,000; 5,200 bushels of rye, worth \$5,200; and 75,000 tons of hay, worth \$637,000; making a total value for these articles of \$3,112,200. Of butter, 1,000,000 pounds were made, and of cheese, 105,279 pounds. Oregon is noted for the abundance and excellence of its apples. The annual yield averages 300,000 bushels, or more than 200 pounds a year for every person in the State. The orchards were very profitable for a time—before the orchards of California came into full bearing—but afterwards became unprofitable, and many were neglected, but are now again becoming more valuable. Large quantities of winter apples are shipped to California, the apples of which are not good keepers. The climate of western Oregon is well adapted to pears, quinces, plums, gooseberries, grapes and currants; and peaches, and apricots thrive in Rogue valley, but not in other parts of the State, where there is too much cold or moisture. The number of horses is 50,000, of neat cattle 220,000, of sheep 120,000, and of swine 115,000. The wheat is of excellent quality and is considered a sure crop, and is the main agricultural export.

FISHERIES.

The rivers of Oregon abound in fishes, of which the most important is the salmon, and of these there are half a dozen different species, all large, palatable, and valuable for ex-

portation. Large quantities of salmon are caught every spring in the Columbia river, and either packed in brine, smoked, or canned with just enough seasoning to fit them for the table. The fish weigh from fifteen to twenty pounds each, and can be purchased in the fishing season at one cent per pound. The amount taken annually in the Columbia is not less than 3,000,000 pounds, though three times as many might be taken without difficulty, or without injury to the permanence of the supply. The Umpqua, Rogue, and smaller streams emptying into the Pacific, all have their spring and fall run of salmon. Sturgeon, halibut, flounder, cod, herring, and smelt are also found in the rivers or near the coast, besides many other fishes of less value. oysters exist in some of the bays.

POPULATION.

The population of Oregon in 1870 was 90,923, and is probably not less 96,000 now, or a little more than one person to the square mile. It is, however, very unevenly distributed, more than 60,000 living on a district of not more than 9,000 square miles, in the Willamette valley, making nearly seven persons to the square mile there, and leaving three persons to eight square miles in the remainder of the State. The population in 1850, when Washington and Idaho were still part of it, was 13,087, and in the year 1860, when Washington Territory had been organized, was 52,337, showing a gain of 300 per cent. in ten years. The gain in the last decennium was 73 per cent., and, if the same ratio is preserved for the next thirty years, and we think it will probably be greater, the number of the inhabitants will be 155,000 in 1880, 270,000 in 1890, and 460,000 in 1900. The following table shows the population, according to the U. S. census of 1870, and the taxable property, according to the State assessment of the same year by the counties:

Table with 3 columns: Counties, Pop., Tax. Prop. Rows include Baker, Benton, Clatsop, Columbia, Coos, Douglas, Grant, Jackson, Josephine, Lane, Lincoln, Marion, Multnomah, Polk, Tillamook, Umatilla, Union, Wasco, Washington, Yamhill, and Total.

Baker and Union counties are east of the Blue Range; Umatilla has most its population west of the Blue Range, though some of its territory extends over to the eastern slope; Wasco and Grant are between the Blue and Cascade ranges; Jackson extends across the Cascade Range, though nearly all its population is on the west side; and all other counties are west of the Cascades. By this classification, the region east of the Blue Range has 5,218 inhabitants; that between the Blue and Cascade Ranges has 7,616; and that west of the Cascade Range has 77,936.

Portland may be regarded as the exclusive seaport of Oregon, but when the projected railroad to Astoria is completed, the latter place may become its rival.

In the towns, many of the adult people are New Yorkers and New Englanders, and in the country mostly natives of Missouri, Illinois, Indiana, and adjacent States, and people of strong character and enterprise, as might be inferred from the conditions under which the country was settled. They are kind, sociable, and hospitable; their descendants will be highly educated, and their state prosperous. The settler who comes to make his home among them is received as a friend at once, without ceremony, unless something in his manner, or the circumstances of his arrival, throw suspicion upon him. In western Oregon, the population is permanent; in the eastern districts, much of it is migratory.—Indians were formerly numerous in Oregon, but the present number is small, and all are friendly with the whites.

(Concluded next week.)

Agricultural.

DRAINING.

This subject is being agitated somewhat in the columns of the FARMER, and is no doubt one of vital interest to the agriculturist. The first question to be answered in connection with this, as with any other matter, is, "Will it pay?" If it will not, there is no use making any application of it. If it will, all of course will be interested. The farmer, who accumulates his gains by hard labor, is no exception to the rule. This being a permanent investment, the question will not be, will it pay in one or two years, but will it eventually pay the principal invested, with a fair return in interest? We have known instances where a piece of ground would produce a crop of wheat which averaged twenty bushels to the acre, without any extra fertilizing, caused to increase its yield from six to ten bushels per acre by draining.

Many reports might be given to show the returns from this system, but we will not now stop to enumerate them, but will give some of the advantages to be derived from it.—One great advantage, particularly in our rainy climate, is, the ground may be worked at any time when properly drained; whereas, if not drained, seeding is frequently delayed until too late for crops to mature. Draining prevents very effectually all injury from drouth, for the reason that the land does not become soaked and muddy, but keeps mellow, and does not bake, or form a hard crust over the surface. We would like to enter into details on this subject, but our space will not permit, and we will give a brief mention of a few of the advantages of underdraining. These, we hope, will suggest a train of thoughts to the farmer, and also induce some of our friends to take up this question, and show the probable cost of underdraining where a system of tiling is introduced.—Underdraining dispenses with open ditches and deep dead furrows, it lengthens the season for labor, and vegetation; it prevents the cracking of stiff clay soil; also assists in pulverization; it admits of thorough admixture of manures; it permits absorption of fertilizing substances from the air; supplies air to the roots; it warms the soil by the heat passing downward; it renders the soil more friable; it prevents its heaving with frost; it admits of the easy eradication of weeds; it admits of the passage of heavy-draught vehicles without injury, and one advantage, greatly needed in this country is, it admits of the pasturage of animals in winter without injury to the soil or the grass. These are a few of the many advantages offered. We stop here, hoping to hear from some friend who has studied up this question more thoroughly.—Dallas Republican.

Cause of the Deterioration of the Wheat Crop.

Frederick Watts, Commissioner of Agriculture, in a recent letter says:

"The experience of many years has led me to the conclusion that the deterioration of the wheat crop is mainly attributable to the improper and untimely use of barnyard manure. In our practice the clover sod is turned down and planted with corn. The ground is again plowed in the spring, and sowed with oats, and upon the stubble of this crop all the manure of the barn-yard is put; then plowed again, and sowed with wheat. This delicate plant is thus subjected to the rawness and grossness of barnyard food, with all its germs of flies, worms, lice and bugs—seemingly a sufficient cause of the unsuccessful growth of a grain so pure and delicate as wheat. Corn is the hog of plants, and will devour food of any quality and thrive upon it. Here, then, upon the sod, to be plowed for corn, is the place for barn-yard manure. Bury it deep, and when the corn is cut off, break the stubble even with the ground during winter. In the spring harrow the ground well, sow your oats upon it and roll it. You will thus keep your manure where you put it, and not subject the oat crop to being thrown down by it. When this crop is removed, bring your manure to the surface by deep plowing and thorough tillage. The barn-yard manure having thus received proper preparation, is a fit food for the wheat plant. Experience has taught me this lesson. On my farm in Pennsylvania I never fail to raise a satisfactory crop of wheat, and I have known no such thing as Midge, Hessian fly, or army worm."

From an interesting article in a recent issue of the London Times, we learn that steam cultivating machinery is coming into very general use in England. One large firm have been sending out from eight to ten plowing engines per week, most of which are for use in districts where they can be hired by several different farmers.