

MODERN METHODS ON OREGON FARM

Annual Wheat Crop Enormous and Quality First-Class

Timothy, Clover and Alfalfa Fields Better Than Mint

Thousands of Acres Are Sown to Wheat, But a Vast Area Lies, as Yet, Untouched by the Plow

By E. W. McComas.

ONE of the most profitable industries of the state is the growing of wheat, and while not the greatest of wheat-growing states, it is the most certain to produce and harvest its yearly average. If all her available area were supplied with transportation facilities, there is no doubt Oregon would soon rival the leaders in volume of product.

The culture of wheat in Oregon, as a distinct branch of agricultural activity, began early in the history of the state, in the Willamette Valley, and was a source of much of the wealth of that famous region. The beginning was made on or near the banks of the noble stream from which the region acquires its local name, its broad bosom furnishing an open and accessible roadway over which to transport the golden harvest to the center of population.

As transportation facilities extended likewise the wheat acreage increased, and following the lines of the Oregon & California road, it soon covered all the available area from the Columbia River, through the Willamette Valley south to the California line. Farm was added to farm, and the rich fields gave a golden harvest. "Valley wheat" became a recognized factor in the markets of the world.

Eastern Oregon was as yet virgin soil; a large area of it much richer in those natural elements necessary to the successful production of wheat than the region already developed; a fact hardly admitted at the time the Oregon Railway & Navigation company was constructing its road up the south bank of the Columbia River, through the sagebrush plains and rugged hills of the Columbia Basin. At that time great bands of horses, and herds of cattle and sheep were grazing on the rich bunchgrass pastures, extending thousands of square miles. This same acreage today is one vast wheat field, extending from the Dalles, through the Counties of Wasco, Sherman, Gilliam, Morrow, Umatilla and Union to the Blue Mountains.

Of this vast area, Umatilla County alone produces 1 per cent of all the wheat produced in the United States. The lands comprising this vast wheat field are not surpassed in volume or quality of grain by any other locality in the world. Indeed, it is doubtful if any like area can produce for a series of years the per acre average of wheat which is produced here. Several years elapsed before the residents of this section conceded wheat-growing a profitable industry. Most of them considered the land, except along the streams, of no value, except for pasture, and the better the bunchgrass, the more they were they to destroy it with the plow. Here and there small tracts were broken and seeded, and slowly there was development from bunchgrass and sagebrush to fenced fields of waving grain; and the story of the Willamette Valley was repeated in Eastern Oregon. The wheat farms kept just in advance of the iron horse and bands of steel which are as necessary to the profitable production of grain as are soil, moisture and sunshine.

The end is not yet. Eastern Oregon has scarcely been touched by the magic wand, and a large portion of its area is yet without means of transportation to remunerative markets. There are upon thousands of acres of fertile grass lands its unbroken by the plow in the counties of Harney, Crook, Lake, Klamath, Grant and Joseph, an area which, when reached with proper transportation facilities, will more than double the present annual wheat crop of Oregon. To those of my readers outside of Oregon, I would say come and avail yourselves of this golden opportunity. Nowhere in the world can wealth be wrested from the soil be shown so much in evidence as in the great grain belt along the lines of the O. R. & N. road. To mention the individual cases of wealth would seem like a fairy tale if all were recounted here.

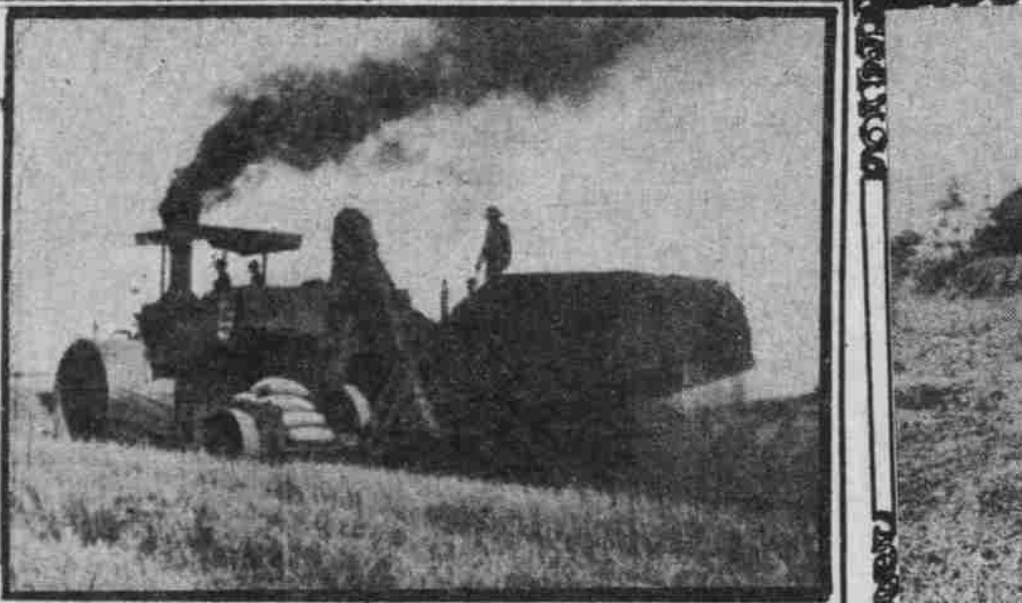
The climate of this vast section of country is ideal for the production of small grains. The wheat produced is



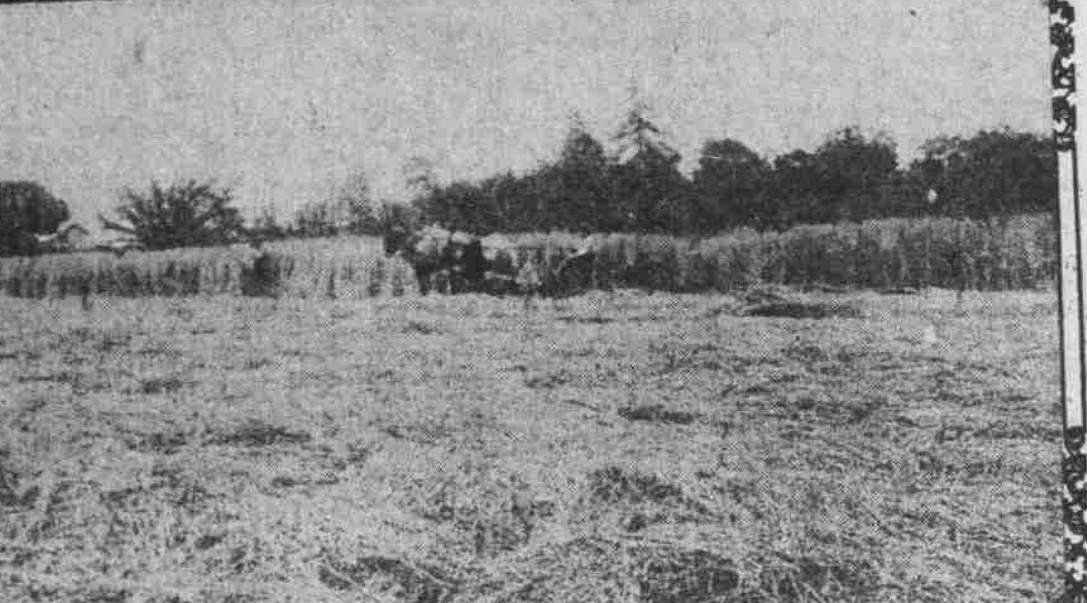
HAYING SCENE IN SOUTHERN OREGON



OREGON WHEAT FOR SHIPMENT TO EUROPE



STEAM COMBINED HARVESTER IN EASTERN OREGON



REAPING HEAVY FIELDS WHEAT IN SOUTHERN OREGON

of good milling quality, carrying a high percentage of gluten and producing a strong white flour. England and Continental Europe must always come to us for a certain percentage of our wheat to mix with their home product, this to insure the flour the necessary whiteness and strength; this is the penalty exacted by nature for furnishing these countries with their limited and highly fertilized lands which give a large yield per acre, but the grain produced is soft and starchy.

The harvest season in Eastern Oregon is nearly perfect. The absence of rain, warm clear days and cool nights, from the first of August until October, give the grower abundant time in which to cut, thresh and sack his grain and the method of harvesting, with the combined harvest machines, whereby he is able to go into a field of ripe wheat in the morning and leave it in the evening, with the grain cut, threshed and sacked, ready to haul to the granaries, is not possible in many of the larger producing wheat countries. This method of harvesting very materially reduces the cost of the operation.

Wheat may be sown in this favored state with a positive assurance of an abundant crop, although preference is given to fall-sown crops, as it gives the farmer more time in the Spring to care for his fallowed land.

Much contention exists over the

method of summer fallowing for a crop; the scientist contending it is robbing posterity, but in the face of this contention the practical farmer swells his bank account, accumulates more land and assures his friends and neighbors that his land grows more fertile each succeeding year.

The following data, taken at random, gives the acreage of wheat in this state and crops from the year 1878:

The apparent defection in acreage from the years 1884-1887 to the present time is due to the elimination of the Willamette Valley as a wheat producer, the moisture and soil of that locality making it more valuable for intensified farming. The small acreage in the years 1891-1892 was due to the then prevalent "hard times," the wheat farmer being as much if not more affected by the conditions prevailing than the average business man. There are many opportunities for the young man of today to be a pioneer in certain sections of the state, and within a decade of years become a wealthy landowner, and repeat the history of the last decade.

Year	Acreage	Yield, Bushels
1878	203,000	7,655,000
1879	233,000	12,490,000
1880	220,000	10,100,000
1881	220,000	12,140,000
1882	220,000	12,140,000
1883	220,000	12,140,000
1884	220,000	12,140,000
1885	220,000	12,140,000
1886	220,000	12,140,000
1887	220,000	12,140,000
1888	220,000	12,140,000
1889	220,000	12,140,000
1890	220,000	12,140,000
1891	220,000	12,140,000
1892	220,000	12,140,000
1893	220,000	12,140,000
1894	220,000	12,140,000
1895	220,000	12,140,000
1896	220,000	12,140,000
1897	220,000	12,140,000
1898	220,000	12,140,000
1899	220,000	12,140,000
1900	220,000	12,140,000

SHIPPING GRAIN OVER SEAS

Portland, One of Leading Wheat-Exporting Cities, Sets Afloat Many Cargoes to World-Wide Markets

By Peter Kerr.

WHEATGROWING, one of Oregon's greatest agricultural industries had its origin in this state in the Willamette Valley. Years ago, wheat was the staple article of production by the farmers along both sides of the river. Wheat culture has since extended east of the Cascades and throughout Oregon, Washington and Idaho. Conditions have changed so since the early farming days of the Willamette Valley that in this pioneer wheat district of the state, barely enough of the cereal is now grown for the local millers.

Attention is now being paid to growing wheat in the dry sections of the state that 20 years ago were thought to be worthless, and splendid results are being attained. The combined product of the three states may be expected to reach 100,000,000 bushels within a few years as the result of the improved methods of wheat raising and of new acreage being broken up. The heaviest crop so far has been 60,000,000 bushels for the three states, this yield having been realized in the harvest of 1907.

The climate of the Pacific Northwest seems to be such that while the rest of the country frequently has a poor yield, we nearly always have excellent crops. In fact, such a thing as a crop failure here is unknown, the present season, with its short crop, seemingly being probably the nearest approach to a failure that we have had.

The market for this immense wheat crop of the Northwest is world wide. The main demand is from Europe, where it is shipped in tramp steamers and sailing vessels, and enormous quantities are shipped to China and Central America in the shape of flour. The wheat is also shipped to Japan. The South Africa and even eastward to Chicago, Minneapolis and St. Louis by rail on occasions of crop failures in the East. During the season of 1904-1905, the shipments of wheat to this latter

market from Oregon and Washington were more than 10,000,000 bushels. Other wheat raising countries, in time of crop failure, look to the Pacific Northwest for their supply. In the season of 1902-1903, many million bushels of Oregon and Washington wheat were shipped to Australia, which

ling wheat for the California flour makers comes from Oregon and Washington.

Portland docks present a busy scene during the grain shipping season. Great ocean-going steamers and sailing vessels line the harbor, flying the flags of many nations. Long trains of wheat-laden cars come down the valley of the Columbia River, starting soon after the grain harvest in July. The wheat, sacked, is taken from the cars into the big wheat docks and thence slid into the holds of the vessels lying alongside.

The prominence of Portland as a grain exporting center makes the city a busy place during the winter months because of this one commercial product of the tributary country. The wheat exporting gives employment to large numbers of workmen and distributes a large amount in wages here every year. When there is a heavy crop throughout the interior, the shipping season lasts about all winter, whereas with a light crop, the wheat is sent away within a few months.

Although I have no complete statistics at hand for the year's wheat exports, the total is growing year by year as the acreage tributary to this port increases. With high prices for the cereal during the past few seasons, and with wide areas of new wheat land being given transportation, the wheat acreage is being increased and the shipments are constantly mounting upward.

In addition to the wheat sent afloat here, there are large exports of barley and oats, both to domestic and foreign markets. California annually takes large quantities of both cereals and eastward to Chicago, St. Louis and other such points almost every season.

Better dock facilities are being continuously afforded at this port and there is a steady improvement of the channel to the sea. The Port of Portland tug service, soon to be inaugurated, will take care of the towage and pilotage service satisfactorily. The big wheat docks built here during the year by the Hill interests will add to the importance of this city as a grain exporting center.

BANK CLEARINGS AGAIN INCREASING.

With a financial depression left over from the previous year, Portland shows a slight loss in its bank clearings during 1908 in comparison with the figures for months for 1907. It is a notable fact that the business interests of the city overcame the stringency and went through a Presidential election and still came within a narrow margin of equalling the totals for the preceding year. The final months of 1908 showed that Portland has gotten back into its old stride, for the figures are greater than the totals for the corresponding months of 1907. A comparison of bank clearings, by months, for the past two years follows:

Month	1907	1908
Jan.	\$2,110,348.00	\$1,896,682.21
Feb.	\$2,014,882.00	\$1,216,356.32
Mar.	\$2,927,608.42	\$2,447,121.16
Apr.	\$2,110,628.56	\$2,794,812.31
May	\$2,682,506.98	\$2,255,444.50
June	\$2,974,902.71	\$2,742,422.56
July	\$2,654,828.27	\$2,232,271.97
Aug.	\$2,498,488.69	\$2,427,567.43
Sept.	\$2,172,440.91	\$2,239,544.74
Oct.	\$2,965,229.06	\$2,712,066.38
Nov.	\$2,645,905.06	\$2,588,072.54
Dec.	\$2,877,237.16	\$2,643,322.00
Total	\$350,888,630.97	\$227,027,306.16

*Estimated.

country usually has a heavy surplus of wheat for export.

California, once a great producer of wheat, has turned its attention to other things until its production of the cereal has been lessened and it now does not raise enough wheat for its own consumption. The great bulk of the mil-

SHIPPING STATISTICS OF PAST TWO YEARS THAT SHOW PORTLAND TO BE ONE OF THE GREATEST WHEAT AND LUMBER EXPORTING CENTERS IN THE WORLD

MONTH.	WHEAT—FOREIGN.				WHEAT—COASTWISE.			
	1906.	Value.	1907.	Value.	1906.	Value.	1907.	Value.
January	2,922,256	\$1,616,428	842,997	\$597,026	221,877	\$188,160	39,977	\$29,583
February	2,379,790	\$2,063,505	652,735	\$470,636	332,930	\$12,999	52,168	\$39,343
March	1,431,987	\$1,304,974	505,535	\$360,122	184,829	\$11,557	23,094	\$24,890
April	1,187,115	\$939,694	712,732	\$500,396	211,969	\$84,427	82,477	\$65,996
May	1,447,783	\$1,237,763	693,094	\$596,458	458,830	\$33,228	232,017	\$172,423
June	437,044	\$384,134	193,870	\$168,814	552,826	\$45,002	75,862	\$64,426
July	199,948	\$183,455	83,455	\$73,500	202,267	\$167,152	89,226	\$75,443
August	1,111,578	\$1,559,210	628,507	\$440,062	460,000	\$39,601	75,416	\$64,104
September	1,821,050	\$1,846,700	1,119,455	\$1,022,000	462,184	\$30,927	124,301	\$105,642
October	701,071	\$12,308	1,135,821	\$1,029,032	202,969	\$18,741	167,730	\$142,554
November	202,825	\$33,174	2,710,587	\$2,659,078	275,000	\$25,760	174,608	\$148,332
December	1,010,736	\$11,728,128	9,226,454	\$7,742,962	5,415,292	\$2,968,532	1,196,832	\$944,169
Total	18,010,736	\$11,728,128	9,226,454	\$7,742,962	5,415,292	\$2,968,532	1,196,832	\$944,169

MONTH.	FLOUR—FOREIGN.				FLOUR—COASTWISE.			
	Barrels.	Value.	Barrels.	Value.	Barrels.	Value.	Barrels.	Value.
January	82,701	\$321,958	85,813	\$216,224	22,379	\$5,991	7,664	\$20,656
February	28,245	\$124,947	123,882	\$316,464	22,232	\$4,948	14,576	\$39,204
March	51,808	\$206,032	190,208	\$623,160	24,718	\$105,143	7,311	\$29,244
April	19,028	\$76,111	88,345	\$244,443	18,698	\$79,042	9,655	\$38,620
May	78,629	\$312,861	244,705	\$716,085	26,796	\$10,232	10,028	\$38,444
June	60,801	\$244,438	186,876	\$698,382	24,093	\$12,213	14,124	\$56,536
July	45,268	\$153,799	21,904	\$86,850	18,415	\$7,264	16,772	\$67,088
August	83,647	\$346,548	21,941	\$86,850	12,184	\$5,782	12,301	\$48,202
September	50,723	\$202,892	164,238	\$606,625	18,981	\$8,669	13,544	\$52,262
October	16,000	\$66,250	1,135,821	\$1,029,032	20,849	\$8,483	12,729	\$51,141
November	150,109	\$606,446	1,135,821	\$1,029,032	10,000	\$4,000	24,000	\$96,000
December	1,010,736	\$11,728,128	9,226,454	\$7,742,962	25,000	\$10,000	24,474	\$97,194
Total	684,648	\$2,648,592	1,421,629	\$6,257,941	256,292	\$1,096,363	164,456	\$674,402

MONTH.	LUMBER—FOREIGN.				LUMBER—COASTWISE.			
	Feet.	Value.	Feet.	Value.	Feet.	Value.	Feet.	Value.
January	11,552,642	\$142,995	3,773,662	\$47,205	6,149,450	\$73,988	9,141,872	\$127,124
February	7,450,858	\$94,940	3,913,092	\$49,129	4,409,000	\$52,968	12,482,000	\$202,245
March	12,376,863	\$154,709	6,976,909	\$87,387	7,640,000	\$91,680	21,630,000	\$267,300
April	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
May	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
June	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
July	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
August	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
September	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
October	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
November	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
December	12,376,863	\$154,709	6,976,909	\$87,387	6,840,224	\$82,083	8,212,000	\$124,650
Total	100,886,324	\$1,284,202	\$6,255,245	\$1,321,743	11,403,874	\$137,536	\$9,617,722	\$1,273,890

*Last half of month estimated.

Unfavorable Conditions in Oriental Markets Affect Flour Milling; Outlook Is Brighter for Coming Year

By T. B. Wilcox, President Portland Flouring Mills Company.

BEGINNING in 1907 and more particularly during 1908, the milling business has been steadily declining, both in volume and in profits. Trade with the Orient has been particularly reduced, due to the large amounts of flour imported in 1907 by Oriental merchants, and the high prices necessitated later on by the prevailing high prices of wheat.

The large amounts of flour which accumulated in the Orient, together with the declining price of silver, resulted in the failure of a good many small dealers in the Orient, and the embarrassment of large concerns, and there has been a general disposition to avoid further importation of stocks.

The financial condition in the Far East and the losses resulting in not only the importation of flour, but in other merchandise, resulted also in the failure of several Japanese native banks and a general falling off of business. During 1908 and 1907, on account of the large amount of flour demanded, there were established in Japan a dozen or more mills of capacity varying from 200 barrels a day to 1000 barrels a day. In Hongkong a mill of 2000 barrels a day was completed and put in operation, and the introduction of these new mills had no small effect upon the volume of the Oriental trade for flour, but increased the demand for wheat from the Pacific Coast. The operation of the Japanese mills in 1907 and 1908 has resulted in serious losses and the mill at Hongkong was completely wiped out of business early in 1908.

The price of silver, into which all purchases for the Orient must be converted when sold in that country, has constantly declined until it has reached now a price lower than any prevailing since 1882, with the exception of 1901, when the Chinese war indemnity was paid by China, and the entire business trade greatly unsettled. At the present price of silver with the high price of wheat prevailing on this Coast, the cost of flour in China is from \$11 to \$12 a barrel, at which price the country where wages are no higher than in the Orient, it is not to be wondered at that the consumption is reduced, and I look for no material improvement in that direction until such time as the price of silver is advanced, or wheat materially cheaper, and the latter I do not consider probable in the near future.

The bulk of the flour trade of the Pacific Coast mills is with the Orient, and comments on that trade covers the bulk of the business. There is, however, considerable business in Central and South America and the Pacific Islands, all of which is represented in the local statistics of shipments to California. Trade in this direction has somewhat increased and has been more satisfactory, and with a population of many millions on the west coast of the South American continent with a purchasing power equal to that of any people of Europe, it seems likely that this trade will increase still further. Particularly will this be true with more frequent and rapid steamship service, and further exploitation of the field.

California wheat production has been so recent of late years, that the demand for Northern flour and wheat in that state constantly increases, and although much of the California trade is supplied from Kansas and Minnesota either in flour or wheat, the latter mixes to advantage with Northern wheats and together are ground by the California millers into a satisfactory product. This, however, is not to meet the demands of the California local consumption, the exports from California being practically nothing.

Portland and the Sound continue to send small consignments of flour to Europe, but the most of this trade is supplied from the Atlantic Coast. Were it not for the increased population of the Northwest and the great home consumption of the higher grades of flour, the milling business would be in a bad way at the present time, but this trade shows a constant increase year by year, indicating an influx of population, and is rapidly becoming a more important part of the milling business. The reduced output of flour by the mills of the Northwest has so limited the production of flour that extraordinary prices for mill feed and similar productions have prevailed, the production being inadequate to meet the demand.

The outlook is not particularly encouraging, the wheat crop being but little more than one-half that of the previous year,