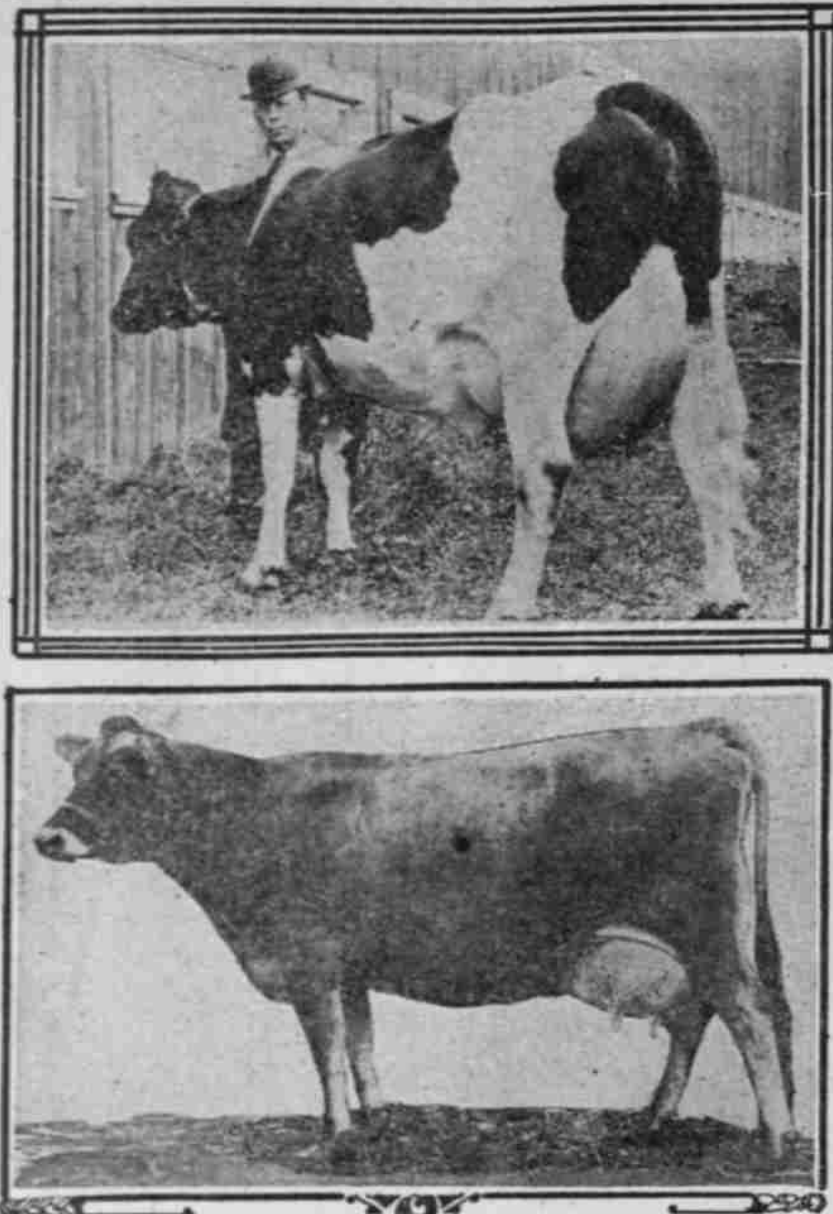


DAIRYING NOW GREAT INDUSTRY

Heavy Milking Herds Developed; Intensive Farming Stimulated



TOP—JOHANNA DE KOL, OF RUSH COURT, HOLSTEIN COW WHICH MADE A WORLD RECORD IN MILK PRODUCTION. BOTTOM—GOLDIE'S NEHALEM BEAUTY, WORLD RECORD JUNIOR 3-YEAR-OLD.

By A. D. Milligan, Editor Rural Spirit.

THE growth and development of the dairy industry in Oregon is of far-reaching interest because it means more farm homes to each square mile, a payroll based on 344 days in the year and the most efficient of all manufacturing enterprises in the state.

Primarily, dairying means more to Oregon than any other phase of her industries, because dairying is the least wasteful and the most constructive of all. Wherever the dairy cow walks and feeds she enriches the soil that sustains her. The keeping of dairy cows has restored fertility on farm after farm that had been robbed of producing power through ignorance or careless cropping methods.

The dairy cows utilize the bulkier and cheapest crops that we grow—wild grass, hay and silage—and convert them into milk, butter and cheese, the highest priced commodities that we sell from our farms.

They make a pound of butter from every pound of dry matter consumed in feed. They reproduce their weight in milk every month of the year. They manufacture 10 times as much nitrogenous substance as does the fattening steer and at the same time produce nearly as much fat and an almost equal amount of milk sugar for which the steer has no equivalent. A well-bred Oregon dairy cow produces milk in one year that has a food value equal to the meat from four 1250-pound steers.

Dairying Means Smaller Farms.

Dairying in Oregon bears a sociological interest that too often goes

PATROLMEN IN PORTLAND POLICE.			
1905.....	124	1914.....	210
1911.....	124	1915.....	225
1912.....	127	1916.....	229
1913.....	111	1917.....	262

overlooked. Dairying means smaller farms and therefore more farm homes to the square mile. Dairying means a greater payroll than any other phase of farming because, while 100 cows will keep 100 men, 1000 cows may care for 100 or more of other kinds of stock.

Oregon's dairy industry is not carried on by a few large establishments, but by hundreds of small plants individually owned. Dairying is a work in which the whole family may take a hand if they desire and where idle time can always be turned into productive effort. It is a business that the poor but industrious man can engage in with the least financial requirement and with the greatest assurance of success.

Dairying has undergone a remark-

able development in Oregon and we have become an exporter instead of an importer of butter. The conditions in Oregon are ideal for dairying and our owners of cows have not failed to take advantage of them. Up in the inland where alfalfa grows luxuriantly and tame pastures sustain a cow to the acre dairying is profitable, and likewise in the coast country sections where they grow kyan and vetch, which analyze similar to alfalfa, and everywhere we grow silage, the cheapest of all feeds.

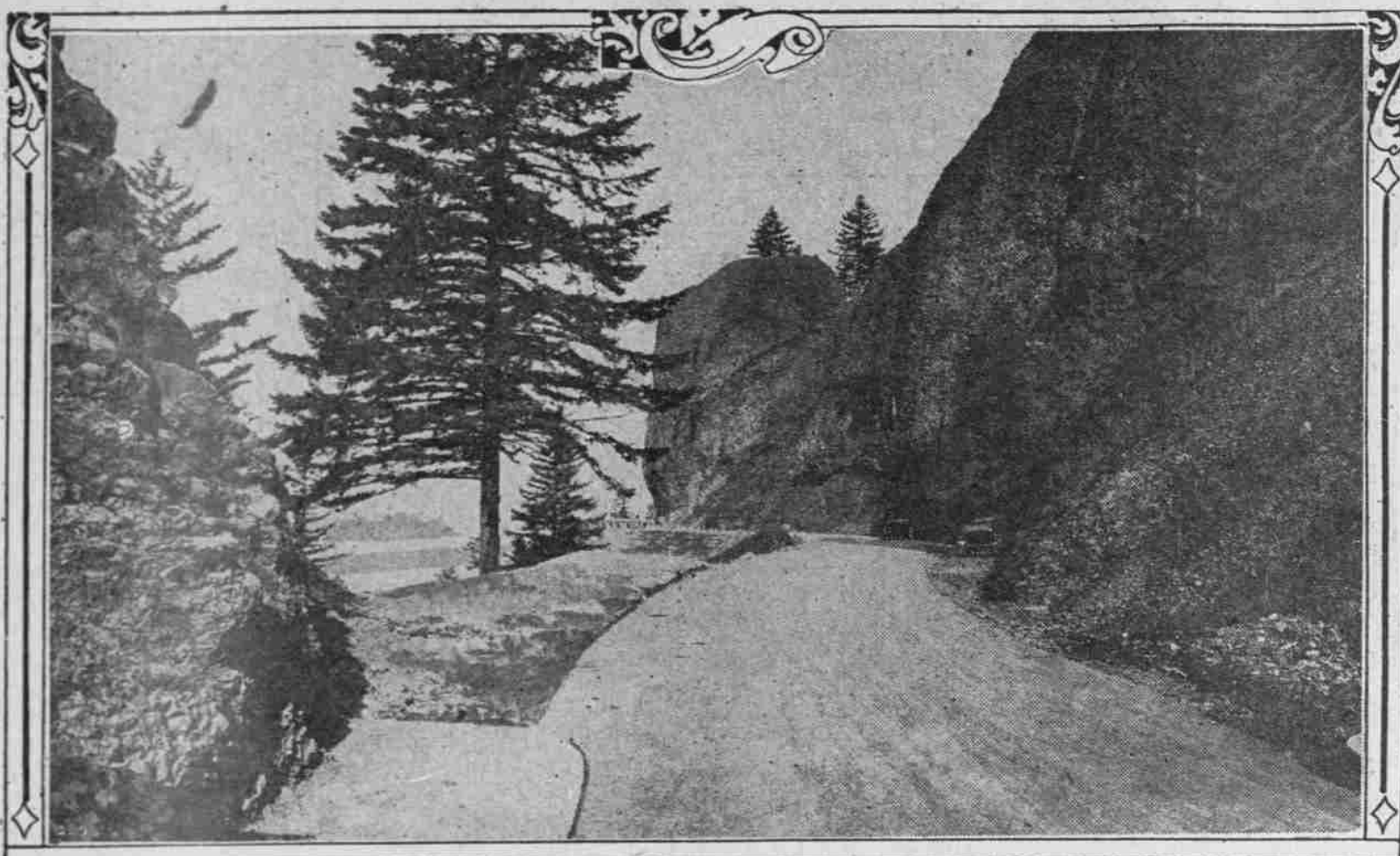
Not only are dairy products produced cheaply in Oregon but the prices received by the producers are good. In 1916 the gross output of Oregon's dairy products amounted to more than \$21,000,000 and in 1917 this will be surpassed greatly because of the record prices being paid. The cost of maintaining dairy cows likewise has increased, but not more so in this state than in others. There is this to say: Oregon has the facilities which, if properly taken advantage of, will enable her to produce dairy products in greater quantity per acre utilized than is possible in any other state, and at less cost per pound. The factors are these: Mild climate, cool summer nights, freedom from disease, long growing season, long pasturing periods. The only drawback is the dry mid-summer months and this is to be equalized by the growing of silage in the early spring season for the purpose of carrying the cows through the dry months and thus making all-the-year use of the silo.

Oregon has gone to the top in dairying partly because of the ideal natural conditions and partly because of the enterprise and ability of the breeders of dairy cattle in the state in their development of heavy milking herds. Oregon owes much to her breeders and particularly to her pioneer breeders who brought to Oregon the best blood that money could buy and thus laid the foundations for herds that have made 13 world records in production and have gone to the National shows and won the championships in competition with breeders from all over the country.

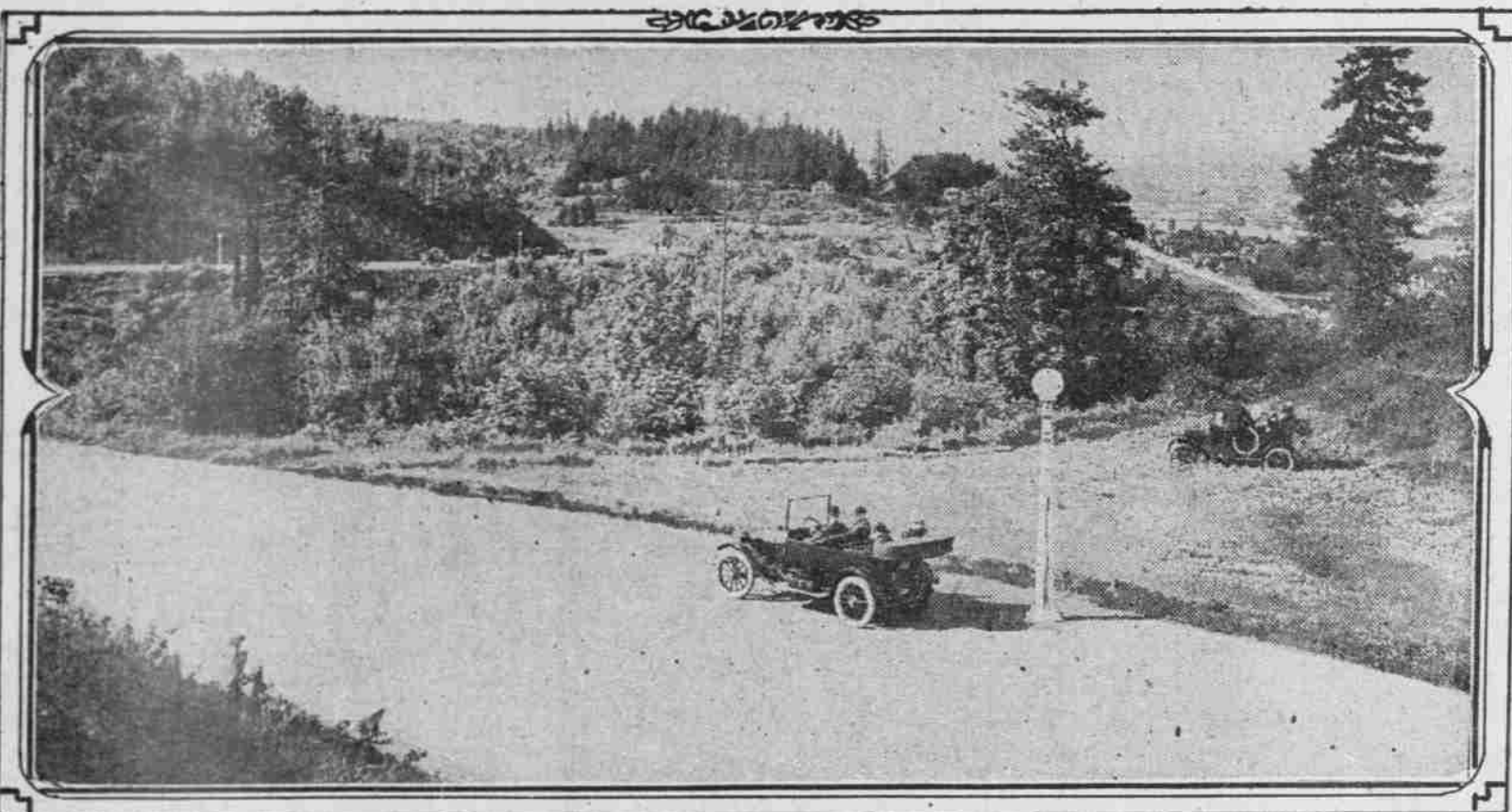
World Production Records Made.

The story of world production records made by Oregon cows is a story of the Jersey breed, because Jersey happened to be the choice of these early importers. Holstein-Friesians, Ayrshires or Guernseys would have given similar results because Oregon conditions are equally favorable for all dairy breeds, but the Jersey breed was the one selected and hence to them goes the distinction.

Oregon today is the strongest Jersey state in the entire West in the number of cows with high production records in official tests made from year to year and there are only two or three states that surpass Oregon in the number of cows with high production records in the official yearly tests, and none if we take into consideration the total number of cows tested in the different states.

BITULTHIC for City Streets
WARRENITE for HighwaysDURABLE
SANITARYNON-SKID
LOW
MAINTENANCE

Columbia River Highway, Near Shepherd's Dell, Paved with Warrenite.



Terwilliger Boulevard, Overlooking Portland, Paved With Warrenite.

WARREN BROTHERS COMPANY, Journal Building, Portland, Oregon

FARM OUTPUT TOTALS \$180,000,000

Oregon's Soil Production Makes Big Gain in Valuation in 1917

By F. L. Kent, Field Agent, United States

THE Oregon farmer, in common with his fellow workers throughout the Pacific Northwest, has had a little war of his own with climatic conditions in the production of the 1917 crop. Beginning with the fall of 1916 the lack of moisture greatly retarded fall plowing and seeding. Summer-fallow land in the wheat belt did not have sufficient moisture for proper seeding until too late in the season, hence the usual fall seeding was done "in the dust" or

growth of pastures and ranges, which, combined with early snows, necessitated the feeding of hay to range stock about a month earlier than usual. Deep snows and continued cold weather throughout the winter, in the principal stock sections, still further added to the increase in normal feed requirements. As a result the hay supply was entirely exhausted in most sections and hay and grain had to be shipped in and sometimes hauled considerable distances. A big expense thus was incurred, and there was some loss of stock from inability to obtain feed. In many cases the short rations nec-

OREGON FARM PRODUCTION IN 1917.	
Grand total.....	\$180,000,000
General farming.....	\$1,000,000
General livestock.....	\$1,000,000
Dairy products.....	\$1,000,000
Fruit.....	\$1,000,000
Poultry and eggs.....	\$1,000,000
Wool and mohair.....	\$1,000,000

postponed until spring. With a poor start, the fall-sown wheat was not in condition to withstand the unfavorable winter conditions, and about 20 per cent of the acreage planted in the fall was resown in the spring, either to wheat or other grain. In a normal season this winter killing of the fall-sown wheat is almost negligible.

The 1916-17 winter conditions were even more unfavorable for the production of livestock. The lack of early fall rains prevented the normal

essarily fed in the late winter and early spring put the stock in very poor condition to go on the range later. To still further add to the burden the "spring opening" was three or four weeks later than normal.

The farmers' "spring drive" was hindered by the late opening already referred to and by the continuance of cold, wet weather until late in the season. Still further to complicate the problem, the summer season was very short of rainfall in some sections

there was absolutely no rain after the middle of May, and many fields of such crops as corn, potatoes and beans did not get a drop of rain from seed time to harvest. Then just for good measure the "weather god" threw in some hot winds during July. All things considered, there probably never has been a less favorable season for crop and livestock production in Oregon than that of the year 1917.

But fortunately there has never been a better harvest season. Even with the shortage of labor it was possible to harvest all crops, even including hay, fruit and hops, with practically no loss due to weather conditions. And the good prices prevailing gave a total value to the aggregate 1917 crop considerably in excess of the value of the bumper production of 1916, for which very good prices also were obtained.

Notwithstanding the unfavorable conditions prevailing, the 1917 farm production for Oregon was far from a crop failure, as that term is understood elsewhere. The grand total farm production of Oregon, including livestock, for 1917, amounted approximately to \$180,000,000. The following figures, compiled from various sources, cover the crop output:

Crop	Amount	Value
Winter wheat, bu.....	8,400,000	\$10,120,000
Spring wheat, bu.....	4,563,000	8,317,000
Cats, bu.....	11,000,000	8,310,000
Barley, bu.....	2,278,000	5,505,000
Corn, bu.....	1,202,000	2,344,000
Rye, bu.....	328,000	501,000
Potatoes, bu.....	7,700,000	3,950,000
Hay, tons.....	1,800,000	21,115,000
Clover seed, lbs.....	1,750,000	420,000
Beans (dry), bu.....	1,000,000	1,000,000
Hops, lbs.....	5,000,000	1,000,000
Miscellaneous.....		4,052,000
Total value.....		\$85,000,000

Prices Higher in 1917.
In 1916 the foregoing named crops were larger in every case except dry beans, but the value per bushel or per pound was considerably less. It was estimated that these general farm crops had a value in 1916 of about \$70,000,000, as against an estimate of \$85,000,000 for 1917.

The corn crop estimate is on the basis of matured husked corn. As a matter of fact, a very large percentage of the corn acreage grown in Oregon is cut for silage purposes.

Perhaps the most marked change in crop production in the state was the elimination of at least one-half of the former hop acreage and the planting of this old hop land to beans and sugar beets to a very large extent. Owing to the lack of summer rainfall the re-

planting. However, with the high prices prevailing for beans, it did not require a very large per acre yield to produce a profitable return.

Livestock sales for 1917 showed a material increase in value over 1916. County Assessors' reports of the 1917 enumeration indicate a material increase in the number of cattle, a slight increase in number of horses and mules, a very slight decrease in sheep, and a considerable decrease in number of hogs. But the higher values prevailing in 1917, particularly for sheep and hogs, made the total returns from stock sales considerably in excess of 1916.

Livestock Values Increased.

Choice young ewes sold around the \$20 mark in numerous instances. The writer saw the transfer of one band of 5000 head of young ewes for which the owner received an average of \$18 per head (\$90,000 for 5000 head). Fat hogs averaged much higher throughout the year than ever before. Cattle values

also advanced somewhat over 1916, while horse and mule values were not materially different from the preceding year.

Prospects for the 1918 crop are very favorable. While the fall of 1917 was pretty dry, there were some September rains which greatly improved the conditions of pastures and permitted some seeding of wheat. Seeding "in the dust" was much more general than last year, and the November and early December rains, followed by fairly good growing weather, have been very beneficial to all of this early-sown grain,

as well as permitting of reasonably safe seeding in some districts since the early December rains.

Reports indicate that the fall-sown acreage is larger than usual. Since we have just had two unusually severe winters in succession, the "old inhabitant" and other weather-wise prophets are predicting an open winter for 1917-18. No hard freezing weather prior to this date would seem to give good grounds for this prediction. Anyway, we are sure that the real winter will not begin until at least a month later than it did last year, for

that length of time already has passed. Right now it appears probable that the most serious menace to the harvest of a big crop in 1918 will be a shortage of farm labor. This will be felt during the spring seeding season, but not so acutely as at harvest time. In 1917 the supply of farm labor was just about equal to the demand. But a large percentage of the thousands of men who have enlisted during recent months has come from the rural districts, and the absence of these workers from their former duties is sure to be felt next spring and fall.

Denny-Renton Clay & Coal Co.
Portland :: Seattle

The "Cheap" Road Costs Twice the Price of a Good Road

Do you realize what this means? The so-called cheap road has cost twice as much as the VITRIFIED BRICK ROAD at the end of thirty years, while the Brick Road gives four-times the good road service.

There is a prevailing opinion that paving with brick is far too expensive for general use, but the mistake that we have always made and which is now coming to be understood by the large majority of thinking people is that we have taken into account the initial cost only.

A study of the total cost, figuring in a conservative charge for maintenance for a period of several decades, will convince even the most skeptical that there is but one way to beat high taxes in road construction—

Build for the Future—Pave With Brick

The Westport Lumber Company

With mills located at Westport, Oregon, and city offices at 1400 Northwester Bank Building, Portland. The sawmill has a daily capacity of 100,000 feet of lumber, which can be shipped either by rail or water, being on the S. P. & S. Ry. and on the Columbia River. Is specially equipped to handle long and large timbers, a supply of logs suitable for same being always on hand, with planing mill capacity to which large timbers up to and including 24x30 inches in size.

A number of modern houses are owned by the company and are leased to employees with families. The single men are taken care of in a very comfortable hotel in which steam heat, hot and cold water in each room, shower baths and other modern conveniences have been installed, the welfare of the men being considered of vital importance and improvements made with this object in view.

A prosperous town of about 700 inhabitants has grown up at Westport, the natural location of which is perhaps the prettiest of any small town in the state.