

cured. It will be seen by a perusal of this article that there are but very few staples that can be imported to this county, and that many of these are supplied by other sections of the state.

One Man Farm 240 Acres.

A 240-acre wheat farm run by one man is something that Marion County can point to with pride. It shows the possibilities of farming in the Willamette Valley, for its owner has made money out of it, and is making money every year. It demonstrates that "management" is the secret of success in agriculture as in other pursuits, and proves conclusively that a life of comparative ease and plenty may be had on an Oregon farm.

This farm, an ideal home, is seven miles south of Salem, and is owned by W. J. Culver. Mr. Culver is now well along in years, past 60, in fact, and does not feel like doing a full day's work, yet he runs the farm alone and keeps his work up with the seasons of the year, and short days, but makes every turn count.

The farm is divided into three fields of about 80 acres each, and each field produces a crop of wheat once in three years. The other two fields are not idle in the meantime. One of them is in summer fallow and both are supporting a well-fed flock of sheep. The accompanying illustration will show the rotation of crops to which the fields are put. By thus dividing and using his land, Mr. Culver distributes his work so that he is at no time absolutely idle, and at no time crowded with work. Each year he has an 80-acre field to harvest and a field of the same size to plow and sow. One man can do the required amount of work easily.

As soon as the crop was removed from the field which raised wheat in 1897 Mr. Culver turned a flock of sheep in to feed on the scattering wheat and the clover which is a natural growth in this section of the state. The field will support one sheep to the acre and every sheep will get fat. The coming summer the field will stand in the stubble and the wild oats will try to take possession, only to be eaten by the wool-producers. At some seasons the vegetable growth is rapid, but at all times as many sheep are turned on as there may be feed for. The following year the field will be summer-fallowed, but it will furnish pasture nevertheless. In fact, sheep are pastured on the land after the wheat has been sown and have come up, and until late in the spring of the year it is to be harvested. There are 240 acres of pasture the whole year and with the exception of a few months the whole farm is in pasture.

It will at once be apparent that a field recently summer-fallowed and cleared of wild oats and other noxious weeds will produce a good crop of wheat. It costs very little more to produce a good crop than a poor one, while the financial results of the former are much the greater. It has become almost a settled question that it is not best for land that it be summer-fallowed every other year, and by pasturing his fields one year in three, Mr. Culver attains a nearly as possible ideal in fertility and cleanliness.

This farm includes in all 240 acres, but only 240 acres are in cultivation. The land has been cleared largely through Mr. Culver's industry, and the farm has been furnished with the convenience of a country home.

While Mr. Culver is a believer in diversified farming, he does not carry this diversification to extremes. He keeps a number of hives of bees and some poultry, but only one cow. As he does his own cooking he does not have time to devote to dairying.

The economy of this manner of conducting farming operations will seldom be of more necessity than during the coming season, when farm labor will be so scarce. The mines, lumber camps and railroad camps have attracted so many men that farm laborers are scarce. Under such circumstances the farmer who has a crop of wheat of moderate size and the remainder of his farm produce on the backs of his sheep, is fortunate. Such a method of farming is possible only under such conditions as prevail in Oregon.

80 ACRES.

Wheat1897
Pasture1898
Summer fallow.....1899

80 ACRES.

Pasture1897
Summer fallow.....1898
Wheat1899

80 ACRES.

Summer fallow.....1897
Wheat1898
Pasture1899

Plat showing how a 240-acre farm is divided so as to be operated by one man.

Good Roads.

Permanent improvement of roads and highways has been the purpose of road work in this county in the last four years. As the county extends from the mountains to the Willamette River, it is crossed by many streams which furnish perfect drainage, and in the beds of the streams may be found wash gravel that makes a cheap and substantial surface for the roads. In the more thickly settled portions of the county the roads have been gravelled and are, therefore, good the year round. As the cost of permanent improvement is not great, this work will be extended each year, and farmers in the distant portions of the county will have good highways during the wet season.

Values of Principal Crops.

Owing to the diversity of its resources, Marion County could not have an entire crop failure and has never had even a failure of half a crop. The wheat crop has failed once in the last 10 years, the hop crop is about once every four years, as also is the prune crop. As harvesting is the chief expense in the latter two crops, a shortage entails but little financial loss. Except in rare instances, the crops pay expenses. The following table shows what Marion County expects to produce each year, and the values at average prices:

Wheat, 600,000 bushels, at 50 cents, \$300,000
Oats, 300,000 bushels, at 30 cents, 90,000
Hay, 40,000 tons, at \$20, 800,000
Apples, 4,000,000 pounds, at 4 cents, 160,000
Lumber, 20,000,000 feet, at 25 cents, 5,000,000
Sheep and wool, 100,000, at 10 cents, 1,000,000
Butter, 600,000 pounds, at 25 cents, 150,000
Lumber, 20,000,000 feet, at 25 cents, 5,000,000
Potatoes, 600,000 bushels, at 25 cents, 150,000

Market for Fuel.

Furnishing fuel for Marion County consumers has suddenly become an enterprise of no small proportions. Salem alone consumes 30,000 cords of wood each year, and all this is supplied by the farmers of the surrounding country. Residents of the county, however, are not content with the fuel they can get from their own land, and many instances are known of men purchasing timbered land and paying for it with the profits from the fuel taken from it. Though the timbered area in the settled portion of this county is growing

gradually less, no person now living will see the time when firewood will need to be imported from other sections of the state.

Sheep and Goats.

Sheep and goats are sources of considerable profit in this county, because the cost of maintenance is small. The animals are turned into the fields of fall-sown grain, and they nibble the green grain until late in the spring. This helps the grain rather than injures it. When the grain gets too large to permit sheep on it, the animals are turned into a field to be summer-fallowed, and they eat down the vegetable growth. Immediately after harvest they may again be turned upon the grain fields, where they eat native clover, which springs up in the stubble. Nearly every farm has its wooded lot, and goats thrive there on vegetation which other animals will not eat. As our Summers and Winters are subject to no extremes of weather, the loss from death of young animals is very small.

Schools.

As Marion County is one of the oldest settled sections of the state, its educational institutions are firmly established and abreast of the times. Not a child in the county is beyond the reach of the common schools, except, perhaps, in the case of a family that has gone far back in the mountains to establish a home. In all the mountain valleys the comfortable schoolhouse will be found, and in the more thickly settled section of the county children are very seldom compelled to walk over a mile and a half to school. Four-fifths of the people have a public school within one mile of their homes. In all the larger towns advanced grades are taught, and in the cities high schools are maintained. Salem is the seat of Willamette University, established in 1844. There are also several other private schools at Salem and other towns in the county. The schools are maintained chiefly from the proceeds of the irrevocable school fund and the county school fund, and only in rare instances is a district tax necessary. Teachers are paid from \$20 to \$35 per month. There are 16,000 children of school age in the county.

Free Rural Mail Delivery.

Salem, Turner and Madras, the centers of the most populous sections of the county, have free rural mail delivery systems, maintained at the expense of the United States Government. Practically all the farmers within a radius of 8 to 10 miles of these towns have their mail delivered at their doors every day. The Government has recently called for bids for carrying mails on eight stage routes that center in Salem, and it is provided that the mail-carriers must deliver mail to farmers along their routes. When this system is inaugurated a few months hence a large majority of the people of the entire county will be within the reach of a free rural delivery system. This is a matter of no small consequence, for it saves the farmer many a trip to town.

Intending immigrants can secure more particular information regarding Marion County by addressing N. J. Judah, secretary of the Salem Commercial Club, or by writing to the Mayors of the other principal towns in the county—Woodburn, Silveston, Stayton and Jefferson.

A. W. PRESCOTT.

WASHINGTON COUNTY.

Paradise for Dairymen—Close to the Northwest's Greatest Market.

Location is the great secret of the present and future of Washington County, and farm labor will be situated. Over one-half of the farmers and dairymen of this county can drive to Portland with a load and return the same day. This proximity to the greatest market in the Northwest makes Washington County an ideal farm for dairy, dairy products and stock raising. This is the great fertility and diversity of

the soil of the plains and bench land being especially adapted for a quality that cannot be excelled. Buyers for the 1901 crop state that, for quality, hops raised in this section are the finest to be found in the Willamette Valley. From present indications, although the price last year was not all that was wanted, there will be a large increase in acreage from year to year. As in all other production, the closeness to market is a valuable factor in this industry, and another benefit is the closeness to help in picking time. Last year's was a very light yield, but notwithstanding this, over 1,000,000 pounds were harvested.

It is safe to say that Washington County raises more onions than any other like area in the United States. Thousands of acres are given up to onion culture, and the market is the entire Northwest. The rich beaverdam lands along the Tualatin River and its numerous branches produce wonderful crops, and growers make themselves independently rich in a

while the other leaves the foot of Jefferson street and passes through the rich bottom lands contiguous to Tualatin, Sherwood and Middleton. Each line furnishes a daily passenger and mail service, and an every other day freight service. It is only a question of time, however, until there will be an electric line established through the center of the county, leading out of Portland, as the population is constantly increasing. Along the base line, and near which the Portland-Corvallis branch has its line, resides a population of nearly 10,000. Increase of population will demand a better railway service and more frequent passenger transit.

County Out of Debt.

Financially, the county is in a splendid condition. The floating debt is no more, and each year's taxation provides the revenue for current expenses. This without itself is a gratifying feature, as interest is the bane of industry. No like area in the Northwest can com-

alone commercially does this closeness to a large city affect our people, but it permeates the social life of the community, enters into our school methods, gives us better social tone, gives the farmer his daily record of the world's doings, and in various ways makes him a better citizen, and provides him a better chance to raise his family along modern lines. But no longer does it require a fortune to buy a home here. The old high values have disappeared. Forest Grove, the seat of Pacific University, the oldest institution of learning in the Pacific Northwest, and Hillsboro, the County Capital, are the chief cities. Each has a population of about 1200, and their population is at present increasing rapidly. The school system is organized thoroughly, and leading educators declare it equal to that of any county in Oregon. The last few years has witnessed a wonderful change in the raising of cattle and horses. The old scrub cow has been relegated to the butcher's block,

in respect to commercial advantages. Fifty miles from Portland, with both rail and water transportation, she is brought near to populous centers, which create markets, yet not near enough to lose her identity as a separate community. The largest prune orchard in the world is located at Dundee, in this county. The principal part of this immense fruit tract is owned by Thomas Prince & Sons, whose large driers have this year turned out over 100 carloads of dried prunes. Many driers are located at Newberg, Dayton, Carlton, North Yamhill and McMinnville, some of which prepare other products such as evaporated apples, potatoes and vegetable soup compounds.

Opening of the Coal Measures.

An epoch in the history of the county was marked last July, when an organized company began opening a promising coal mine near North Yamhill. Assays pronounced the coal the best yet found on the Pacific Coast, and the work of mining has

and the region will produce grass in quantity and quality equal to the celebrated "blue grass" country. It has been demonstrated that there are no better clover lands in the United States than in this immediate section; rape, vetches and other grasses are found in suit conditions, and the capacity of land for feeding purposes to a fabulous extent. Stockraising, though not far advanced, has passed the experimental stage. There are at this time in Polk County 83,210 head of cattle, 20,242 head of sheep, 11,427 head of swine and 22,000 head of goats. Every farmer, large or small, strives to have a few head of stock to supplement the farm, and he has learned by experience that the products have greater value in the proportion in which he can utilize them in increasing and maintaining the number and quality of his herds. This forebodes the time when the Willamette Valley will be given almost entirely to stockraising, with farming incidentally thereon.

Dairying is receiving much attention now as a sequence of this tendency toward stockraising. Several farmers have cream separators and many of them sell the milk directly to local creameries. This has led to careful selection of milk cows. The market for Oregon's dairy products is unlimited. The extent to which dairying can be carried on in this county is like Polk County is almost incalculable. To men skilled in dairying this is an inviting field.

This county is the center of goat culture in the Willamette Valley. Oak grub lands stripped of their wood and long considered unprofitable are becoming valuable for goat pasture, and the foothills abound in flocks of goats. The number of goats has increased 7500 the past year, making a total of 22,000 at the present time. There are numbers of pure bred goats owned by U. S. Grant and J. S. Davis, of Salem, of Monmouth, valued at from \$50 to \$150 per head. Mr. Grant has in his flock some does sired by "Pasha Columbia," sold at Kansas City for \$1500, and sired by "Pasha," sold at \$1000, and at the head of his herd is a brother of Pasha Columbia. The quality of mohair raised in Polk County excels because of larger numbers of pure-bred goats here.

Oregon Mohair Superior.

Experts claim that the climate is ideal for the production of high-grade fleeces. A noted spinner in a New England factory says the Oregon mohair is better than any brought from foreign countries. The fleeces are smoother, makes a better thread, is stiffer, softer and runs the spindle faster than any other mohair known. The price received for mohair in 1900 was 25 cents per pound. During the past 10 years the price has ranged from 24 cents to 63 cents per pound, the average for that period being more than 30 cents per pound. The average yield per head is 15 pounds. Our Coast Mountains contain abundant feed to support vast numbers of goats and the land is easily obtainable for that purpose. Fifty-five hundred dollars will buy 1000 fifteen-ounce grade does and 30 bucks. These will yield 4000 pounds of mohair and 800 kids, easily worth \$2000, with cover expense of \$2500 or 47 per cent the first year. After paying the latest estimate of \$350 for the land the gain is 25 per cent upon the investment. These figures are conservative. The Coast Mountains with their foothills vast areas of lands now cheap as measured by the market will one day support a heavy population, and the hills and mountains of Oregon, like Cantabria, will resound with the bleating of flocks and the shouts of herdsmen.

The number of sheep in this county has increased in geometrical ratio the past five years. More significant is the earnestness with which sheepraisers are advancing the breed of their herds. The Mississippi Valley has been ransacked for the finest specimens of the finest breeds, and there is scarcely a grazer that has not enough of the best blood in his veins, as well as numbers of pure-bred animals, estimating the value of the 70,000 sheep above referred to.

In the western portion of Polk County is a belt of timber dense and majestic, composed of fir, cedar, white pine, hemlock, spruce, larch and ewe. There is an area of 29 townships of this timber, of which about 100,000 acres are sold timber. All this is accessible and can be handled by railroads in conjunction with the streams that thread their way in every direction from the mountain tops. The standing timber is estimated at 1,000,000,000 to 15,000,000,000 feet per quarter section. Estimating the whole amount of 6,400,000,000 feet at 50 cents per thousand, a wealth of \$320,000,000 of untouched awaiting the advent of the lumberman, who is even now beginning to arrive from the timber-depleted regions of Maine and the North. The timber is yellow fir, larch and hemlock trees tower 200 to 300 feet high, straight as plummet lines and as smooth as candles to a height of 100 feet. The average girth of these trees is from 3 1/2 to 5 feet in diameter. Tests made by engineers have shown that Oregon fir has under pressure nearly the same strength of Eastern oak, and almost three times that of pine. This timber will be used wherever great length, strength, lightness and durability are in demand, and today is being shipped to all parts of the world. Eastern capitalists are buying holdings in this region as fast as men can convey title to their lands.

Towns of Polk County.

Polk County is dotted over with towns thriving with local trade. Falls City is situated on the banks of the Willamette, well chosen for its manufacturing prospects. This town has a bright future. It is now a center of lumbering industries. Monmouth, the seat of the Normal School, has a good country trade. A large two-story brick building has been completed the past year and is now occupied.

Independence, connected with the outside world by river and by rail, is a great shipping center for hops, wool, wheat, fruits, cattle, etc. It is supported by a rich section of farming country. The public schools are of the best, and the town has one of the finest public school buildings in the state and a very superior system of schools.

Dallas, at the geographical center of the county, the county seat, is a prosperous town and has increased heavily in population during the past three years. It is backed by orchards, hoplands, farms and stock ranches, and an endless expanse of timber, even now coming into market. Educationally, the homeschooler finds all that is desired in Polk County. The public schools are of the best, as are the Dallas College and the State Normal School at Monmouth are both good institutions of learning, each having large attendance and promising future.

The government of the county is and has been conservative. County warrants draw 6 per cent and sell readily at a premium. A new courthouse of stone is under the county's guidance. "This is a model of beauty and convenience."

The people of Polk County are in a prosperous condition, healthy, contented, hopeful. The county is well supplied with every available man, woman and child in the fields, orchards and hopyards, and money has been scattered broadcast among the people. Our men and women are comfortably dressed, well fed, the children supplied with books and tuition, and the schools are crowded. Every man is at work at profitable employment. Flowers are in bloom, fruit trees are decked in putting forth their buds with the thought that this is springtime. The homesaker, as he looks about him on his advent here, exclaims, "This is paradise!"

B. F. MULKEY.

At the Cass copper mine, near Waldo, Or., recently opened by R. B. Whiteside, of Duluth, Minn., for \$100,000, a remarkably rich ledge of copper has just been discovered. At a depth of 200 feet in the upper tunnel, the ore is found in an eight-foot ledge carrying copper values of 1 to 60 per cent has been struck. A large force of men is employed at the mine, and the ore is being rapidly developed and opened up for a permanent and extensive business.



OREGON PEACHES COMPARED WITH A SILVER DOLLAR AND WITH A HALF DOLLAR. GROWN BY C. H. STEWART, ALBANY.

ten years from the harvest of a five or ten-acre tract. This land also is marvellously rich in those characteristics that make great yields of all root crops, and Portland gets a greater per cent of her vegetables from this section.

Fruit is raised successfully here. Growers have been progressing in this regard, and orchards are doing much better now than in the past. The law regulating spraying has borne good fruit. In a double sense, thousands of pounds of prunes are dried and shipped each year, and prunerasing is yet in its infancy. The hill lands, at the county edges, are very prolific as to prunes, and trees bear younger than on the plains. Grapes are raised in profusion, and much wine is manufactured for home consumption. Nowhere in the world are finer or better prunes produced. English walnuts bear splendidly. As to cherries, here is where you get them. Owing to the high hills surrounding the county in its entire circumference, frosts are very rare at bloom time, and visitors from abroad tell us that ours are world-beaters. At the recent state fair it was the unanimous opinion of all who visited the Washington County display that the cherries were the best in the pavilion and that is saying a great deal, as Oregon's reputation is established.

Although this is a county of agriculture and dairying, yet the manufacturing is not unimportant. There are flouring mills at nearly every town and village of importance, and as a consequence very little wheat is shipped for export purposes, except in the manufactured article. Much flour is ground for the Oriental market, and this is on the increase.

Small sawmills dot the streams here and there, and besides manufacturing for the local demand, thousands of feet of lumber are shipped abroad. At the head of the streams there are yet millions upon millions of fine merchantable timber, which in a few years will bring much wealth.

Transportation Facilities.

The Southern Pacific Company has two lines traversing the county from east to west. One line runs out of Fourth street, Portland, passes over the mountain, through Beaverton, Redwood, Hillsboro, Forest Grove, Dilley and Gaston,

and the scrub horse has been sacrificed to the Linton horse reducer. Fine herds of Jersey and Shorthorn now graze in the meadows, and the finest draft horses, Percheron and Clydesdale, are being bred. Hillsboro. L. A. LONG.

YAMHILL COUNTY.

Undisputed Agricultural and Horticultural Paradise of Oregon.

It has been an undisputed claim for years that Yamhill County is the agricultural and horticultural paradise of Oregon. The claim is not only made within, but is conceded without her borders. It is based upon several important and justifying facts. Though she has no town exceeding 2000 in population, she ranks sixth in the state in taxable wealth. She is, and has been for years, almost strictly an agricultural section. Her wheat crop for 1901 is estimated at about 3,000,000 bushels. About 90 threshers are operated each season, and a fair average is 50,000 bushels. Yamhill has been one of the leading hop-growing counties for the past five years. The product last year is estimated at 200,000, or about one-twenty-fifth of the state's crop. Of a total area of 27,545 acres, 11,848 acres are tillable. Her topography is simply unexcelled. Lying to the west of the Willamette River, her territory comprises the

Population Growing.
Over 1000 people have immigrated to Washington County since the last census



WHEAT GROWN ON THE McFARLAND RANCH, NEAR ALBANY, OR. THE LARGER MAN IS SIX FEET TALL.

was taken, and every train brings new families. People who are looking for Oregon homes are beginning to appreciate the nearness to a large and constantly growing city like Portland, and are settling where they can have the advantage of a daily market and a daily paper. If they desire it, they find people here thoroughly metropolitan, as must be the case where so large a portion daily visit the Northwest metropolis. For years past when the Oregon County lands were high, buyers went on into the interior, disinclined to consider the law of averages. Those who bought now realize that they have a market of 100,000 people just across the boundary, instead of 40,000. And in this feature, largely, is the future of this fertile section. Not

broad valleys of the North and South Yamhill Rivers and their tributaries, merged into and thus expanding the great general valley of the Willamette to an extent not equalled at any other point on either side of that river throughout its length of miles. Lying to the west of this natural farming section to an average distance of 12 miles is Yamhill's allotment of the Coast Range Mountains. Easily accessible, yet seemingly placed out of industry's way, here is territory that gives scope and ready vent to the poetic side of a man's nature in the enjoyment of the beauties, comforts and privileges of mountain, forest and rivulet. There is untold wealth of timber and water power.

The county is very favorably located

Possibilities of Stockraising.

If the future of this section is to be determined by its adaptability there is little doubt that stockraising along with incidental farming is to be the employment of our people, and the source of revenue at no distant day. The climate is mild and equable, especially fitted for growth of stock with a minimum of food and care,