made from cream that has not had these impurities eliminated.

The cream as it leaves the separator flows into the cream vats, shown in the illustration. It is then piped into the churns. After churning, the butter is worked on the worker and then is taken to an adjoining room and molded into blocks, or "rolls" so called, of two pounds each. It is then ready for shipment.

In addition to the manufacture of butter, the Vancouver creamery is supplied with machinery for the manufacture of condensed milk, evaporated cream, milk sugar, etc. It also manufactures 26 different kinds of cheese, among the more prominent ones being full cream, Young America, German cream, Limburger, Neufchatel, Fromage de Brie, Swiss, etc. In the manufacture of cheese the cream is separated as it is done for the manufacture of butter, after which it is again mixed with the skimmed milk. The object of this is to clarify the milk of the animal matter by running it through the separator. The skimmed milk is also made into cheese separately. The cheese is all made in the manufacturing room, after which it is stored in an adjoining room, where it is cured.

An exception in this programme is made in the storage of Limburger cheese for curing, a separate building located some distance from the creamery being used for the storage of this particular variety, owing to its rather "loud" odor. It might be interesting to many to be enlightened as to the cause of the peculiar odor of Limburger cheese. In all other varieties the whey is expressed before it is molded. This is not done with Limburger, however, and it is the fermentation of the whey that gives that individuality to this variety of cheese. Many have guessed at the cause for this, and many peculiar stories are related, purporting to explain the reason why Limburger cheese smells "so awful."

The principal market for the products of the Vancouver creamery is Portland, but it also sells considerable quantities of butter and cheese in the Sound country as well as in Astoria, Ilwaco, Oregon City and other places.

The creamery is well constructed, and is perfect throughout in its details. It cost about $25,000, and is arranged so as to be operated at a merely nominal cost. Large quantities of water are required to keep the place clean, and this is supplied by an artesian well located beside the building. The creamroom, churning-room, molding-room and storage-room all have cement floors and are thoroughly washed off daily, thus keeping these apartments sweet and clean. The cold-storage room is constructed with double walls with a hollow space between, and an air current is kept in active circulation in this space.

To Mr. Julius Kaupisch, the general manager of the creamery, is due the principal credit for the establishment and successful operation of this very important enterprise. It is true that financial assistance to a certain extent was given him by a number of prominent citizens of Vancouver, but it is entirely due to Mr. Kaupisch's thorough and eminently practical knowledge of butter and cheese-making that the creamery has met with such phenomenal success. This gentleman's knowledge of the business was acquired from long years of practical experience in Switzerland, Germany, France and other European countries, as well as in New York, Illinois and California. The other officers of the company are as follows: Henry Christ, the president, is a prominent capitalist and farmer, and is one of the oldest settlers of Clarke county. He is one of the principal stockholders, and has taken an active and earnest interest in the enterprise from its inception. The other officers have all shown an equal degree of interest in the welfare and success of the creamery since it was founded, and to the combined efforts of all the present prosperous condition of the institution is largely due. S. W. Brown, the vice-president, has been a resident of Clarke county for the past 35 years. He was appointed receiver of the United States land office at Vancouver by President Lincoln and held the position for 20 years. The gentleman is too well known in the community where he resides to require additional extended mention. Hon. W. B. Wells, the treasurer, has resided in Vancouver for the past five years, having removed from Michigan to this place. He has been actively engaged in the lumber business both at his former home and at Vancouver. At present Mr. Wells is not actively engaged in any particular business. Morris B. Wells, who is proprietor of the leading abstract office of Clarke county, is the secretary of the company. He is one of Vancouver's most active and prominent young business men, and he carefully looks after the company's accounts. L. M. Hidden, a director of the company, is one of the proprietors of the Hotel Columbia, a hostelry without a peer in the Northwest. He is one of Vancouver's best-known and most respected business men, and occupies a high position both financially and as a business man in the city where he resides.

The idea of a creamery was a new one, comparatively, to the farmers, and it required persistent effort and a vast amount of energy and hard work to educate them to the point of a proper appreciation of the advantages and requirements of a creamery. The amount of milk received at the start was but 900 pounds, but it gradually increased until the maximum amount received per day last summer was 45,000 pounds. Milk is received from Clarke, Cowlitz and Skamania counties, Washington, and from Columbia and Multnomah counties, Oregon. The full capacity of the creamery is 150,000 pounds of milk per day, and it is, with one exception, the largest individual creamery in the country. The milk of each person who sells to the creamery is tested separately, and the price paid for some is gauged according to the market price of butter and the percentage of butter fats contained in the milk.

The following statement of the prices paid per pound for butter fats each month during the existence of the creamery conveys better than any other means could the value and importance to farmers of the creamery:

	Cents.		Cents.
October, 1893	30	June, 1894	17½
November, 1893	30	July, 1894	22½
December, 1893	30	August, 1894	25
January, 1894	30	September, 1894	27½
February, 1894	27½	October, 1894	27½
March, 1894	27½	November, 1894	25
April, 1894	22½	December, 1894	27½
May, 1894	20		

The importance and future possibilities of the dairying industry in this section can readily be understood from the foregoing statement, and to whatever extent the industry may grow in future years the honor of being the pioneer factor in developing this industry must be accorded the Vancouver Creamery Company.

PENDLETON WOOL SCOURING & PACKING COMPANY'S PLANT, PENDLETON.

All the Telegraph Lines.

The total length of the telegraph lines the world is about 1,000,000 miles, of which 540,000 are in America and 380,000 in Europe. In the United States alone there are 400,000 miles.

Loose Panther Creates a Panic.

A panther that is supposed to have escaped from a traveling show nearly scared the life out of a family at Farmlands, Ind., the other night, by attempting to enter their house.

GREAT WOOL CENTER

PENDLETON, THE RAILROAD CENTER OF EASTERN OREGON.

Success of the Wool-Scouring Plant Located at This Point—Leading Industries.

PENDLETON is the first important point on the main line of the O. R. & N. Co.'s railroad east of The Dalles. It is 231 miles east of Portland, and a little over 140 miles east of The Dalles. It is the seat and principal trading center of Umatilla county, one of the richest sections of the state, and the city divides with Spokane and Walla Walla the distribution of all the diversified products of the vast stretch of country lying east of the Cascades in Oregon, Washington and Northern Idaho and known as the Inland Empire. Pendleton, while claiming less population than Spokane, has been equally as progressive as the latter city, and it is today one of the most prosperous business centers of Oregon.

In addition to being located on the main line of the O. R. & N. Co., by which the city is afforded transcontinental connection, Pendleton is also the junction of the main line and the Washington division of the same system. The Washington division of the O. R. & N. Co.'s railroad system covers all the best parts of Western Washington and Northern Idaho, its lines traversing all the wonderful wheat belt of the Palouse in Washington and the Bonanza mining district of the Coeur d'Alenes in Idaho. This system also connects Pendleton direct with Walla Walla and Spokane, the latter of which is the largest inland city of the state of Washington. That part of Pendleton's rich tributary district not covered by the O. R. & N. Co.'s lines is reached by the lines of the Washington & Columbia River railroad (the Hunt road), which terminates at this point. This system runs from Pendleton to Hunt's Junction, on the line of the Northern Pacific near Wallula, and from Hunt's Junction it extends to Dayton, a distributing point of considerable magnitude, 37 miles east of Walla Walla. Branching out from the main line of the Washington & Columbia River railroad are a number of feeders which furnish an outlet for the traffic of some of the best settled districts of Oregon and Washington. Pendleton has direct all-rail connection with the East via both the Northern Pacific and the Union Pacific, systems that also cover every part of the Pacific Northwest.

The annual business handled at Pendleton during the period of normal trade conditions amounts to $2,000,000. In 1893 the business of the city fell off some, as it did in every important center of the country. The fall of 1894, however, noted a marked revival in Pendleton's trade, and the place is now resuming all of its old-time activity. The annual shipments of wool from Pendleton are about 1,200,000 pounds, while 2,500,000 bushels of wheat are regularly shipped from this point. The possibilities of an increase in Pendleton's business may be appreciated from the statement that there are today over 100,000 acres of land in Umatilla county and directly tributary to Pendleton that is now practically barren, but which can be made highly fertile by the aid of irrigation. A project to supply water to irrigate these lands has already assumed such shape that a practical outcome of the efforts to build a system of irrigating ditches to cover all of this arid district is already assured.

Some six years ago the Umatilla Irrigation Company was formed as the direct result of the earnest efforts of Mr. Sam P. Sturgis, cashier of the First National bank of Pendleton, and one of the best-known business men of the city. This company has already constructed a part of the system it early proposed to build. Water for its ditches is taken from the Umatilla river at a point near Gibbon. Gibbon is at the foot of the Blue mountains on the line of the O. R. & N. Co., 20 miles east of Pendleton, and at a sufficient elevation to afford a flow through all the ditches proposed by the irrigation company. From this point water is now carried by a ditch to Adams, a rich farming town on the Washington division of the O. R. & N. Co., 12 miles distant from Pendleton. This ditch crosses a rich section of prairie land, a district comprising 70,000 acres, which will be reclaimed by this system of irrigation. All the preliminary engineering work has been done on these proposed ditches, and permanent locations are all established. Congress has passed a bill giving the company the right of way for their proposed ditch across the Umatilla Indian reservation, this right of way to be perpetual if the ditch shall be completed before 1896. The entire cost of the system of irrigation ditches outlined by the company will be $320,000. This estimate includes all expenditures already made for surveys, permanent location and construction work; $25,000 has already been spent.

PUBLIC SCHOOL, PENDLETON.

MAIN STREET, PENDLETON.

The feasibility of the proposition to cover all the arid lands of the district tributary to Pendleton by a system of irrigation ditches has been personally investigated by Mr. Ham Hall, of California. Mr. Hall is one of the leading authorities on irrigation in the United States. He unhesitatingly indorsed the project, and pronounced it feasible and an enterprise that would insure the most profitable returns to its promoters. The mileage of the ditches proposed by the irrigation company will approximate 60 miles.

Another irrigation system now under construction through the country directly tributary to Pendleton is that of the Blue Mountain Irrigation & Improvement Company. The ditch of this company receives its water from McKay creek at a point 14 miles distant from Pendleton, and it will irrigate the sagebrush lands comprised in a belt of 25,000 acres and lying south and west of Pendleton. The company has already expended several thousands of dollars in surveys and preliminary construction work on this ditch, and has also secured a right of way through the Umatilla Indian reservation from congress.

A number of minor irrigation enterprises have also been started at Foster, Echo and Umatilla, towns all tributary to Pendleton. These smaller systems will reclaim the arid lands situated in the western and southwestern parts of Umatilla county. It is estimated that the completion of all the irrigation ditches now outlined in Umatilla county will reclaim fully 150,000 acres of rich land, the entire crops of which will be handled either at the Pendleton warehouses or in the warehouses at these outside towns controlled by Pendleton's business men.

COURTHOUSE, PENDLETON.

Pendleton contains a present population of about 3000. It has two strong local banks, and in addition to the large local trade of the city the leading houses enjoy a considerable jobbing and wholesale business. Two good newspapers are established here. One of these, the East Oregonian, has been built up as the direct result of the earnest efforts of C. S. Jackson, one of the brightest journalists of the state. The East Oregonian occupies its own building, a fine brick structure, and it is one of the recognized newspapers of merit on the coast. The Tribune looks after the interests of the republican party in Eastern Oregon in addition to its other important work as a newsgatherer, and it enjoys a local popularity which has gained for it the hearty support of the Pendleton people.

One of the most important factors in the growth and prosperity of Pendleton was the establishment of the plant of the Pendleton Woolscouring & Packing Company's plant at this point early last year. Pendleton, being most favorably located in the center of the woolproducing district of Oregon and Washington, is perhaps the best site for the location of a large woolscouring plant east of the Cascades. The railroad centering here gives most favorable rates on wool shipments to this point, and the competition of the transcontinental lines affords the Pendleton business men the most favorable rates on all Eastern shipments. The mill now being operated by the Pendleton Woolscouring & Packing Company at Pendleton was built last spring at a cost of $20,000. By recent additions of machinery and the erection of adjoining warehouses, the plant now represents an outlay of over $30,000. This investment has proved a profitable one to the owners of the plant and the establishment of the mill here has been of the greatest benefit to Eastern Oregon woolgrowers.

The buildings occupied by this plant are constructed of corrugated iron. The machinery used is a Sargent automatic plant of the latest design. The completeness of the plant, together with an abundant supply of soft water for washing the wool handled, enables the company to turn out a uniform scoured product of a superior quality.

The location of this mill at Pendleton has been of direct benefit to the business of the city. From May 1, when it was first started, until November 20 last, the mill was run both day and night. During that time it furnished steady employment to 60 hands, and the payroll exceeded $3000 a month. During the season the mill was operated the management paid out to workingmen in Pendleton for their labor in preparing wool raised in this section for market about $20,000. This expense of preparing the raw wool for the mills has heretofore been paid in the East, thus taking just that much money away from the laboring classes of the Northwest.

The most satisfactory showing made by the establishment of the scouring mill at Pendleton is the direct saving of nearly $30,000 in freight, money heretofore paid to the railroads which have their headquarters in the Eastern centers. During the time that the mill was run to its full capacity it scoured about 2,000,000 pounds of wool, which shrunk about 70 per cent. The expense in freight charges alone in shipping this wool in the grease to the Eastern markets would have been $41,000. The freight charges on the scoured product was $13,500, a direct saving in freight as the result of the scouring of over $27,000. Through local competition a greater part of the money thus saved in freight charges goes to the woolgrowers who sell their wool in Pendleton.

An indication of the benefits which have resulted from the establishment of the woolscouring plant at Pendleton may be gained from the statement that during 1893 but 1,250,000 pounds of wool were received at the local warehouses. Since the erection of the mill, the receipts of wool at these warehouses (only a part of 1894) have been nearly 5,000,000 pounds. All of this wool with the exception of a few carloads found a prompt sale at prices that will hereafter make Pendleton the natural wool market for all the territory east of The Dalles.

A manufacturing industry of importance at Pendleton is the Byers flouring mill. This mill has a daily capacity of 500 barrels. The flour turned out here was awarded the first prize at the world's fair in Chicago. Other manufacturing enterprises established here are a foundry, machine shops, sash and door factory, planing mill and a brewery.

A feature of Pendleton fully appreciated by the traveling public is the advantage afforded in good hotel accommodations. The Hotel Pendleton is a strictly modern caravansary, conducted in first-class style, and it is now recognized as one of the great public-houses of the state.

Information regarding Pendleton and the tributary country will be cheerfully furnished by Messrs. Clopton & Boyd, who handle real estate, both in city property and in farms. This firm makes a specialty of loaning clients money on favorable terms where the security offered is productive farming property.

LA GRANDE.

The Trading Point for a Considerable Part of the Grand Ronde Valley.

A LARGE part of the Grand Ronde valley, an agricultural section second only in size and importance to the famed Willamette valley in Western Oregon, is directly tributary to La Grande. This is a town on the main line of the O. R. & N. Co., 305 miles east of Portland. It is also the point of junction of the main line and the Elgin branch, which runs north of La Grande for a distance of 21 miles, terminating at Elgin.

La Grande has made great strides since the line of railroad was completed to this point. The location here by the railroad company of repair shops, roundhouses and coalbunkers has resulted in the disbursement of large sums of money regularly each month in wages. La Grande is the end of a division on the O. R. & N. Co., and it is one of the most important points for repairs on this great system of roads.

Several disastrous conflagrations encouraged the erection of good brick business blocks at La Grande, and the principal business of the town is now handled in modern fire-proof structures. The place contains today a population of about 3000. It is estimated that the area of the country directly tributary is no less than 500 square miles, and nearly all of this tributary section is capable of the highest state of development.

Diversity of farm products is the characteristic of the Grand Ronde valley. Grain, hay, fruit and vegetables, everything that a fertile soil with the aid of an equable climate can produce, are raised successfully here. In addition to these products, wool, hides, cattle, sheep, horses and lumber are shipped in large quantities from La Grande. The activity noticed in the lumber industry here can be appreciated from the statement that there are no less than 25 saw mills in the immediate vicinity, whose output during the cutting season aggregates 1,000,000 feet a day.

Even during the stringency of the past two years, public improvements at La Grande have been made as they were in former years. During this time several of the main streets have been macadamized, and there have been considerable expenditures of public money for other works of a public nature. All the modern conveniences of city life, including water, electric lights, etc., are enjoyed by the citizens of La Grande.

MAIN THOROUGHFARES, LA GRANDE.

The Grand Ronde river, which flows by La Grande, furnishes a large available water-power, which is utilized at the present time for running one large flouring mill, three planing mills and several smaller manufacturing plants. This power is capable of great development, and it is ample to run any number of factories which will ever be located here.

A BUSINESS CENTER

UNION, SEAT OF THE EASTERN OREGON INSANE ASYLUM.

The Projected Industries—One of the Principal Mining Centers of the State.

UNION is one of the old established trading centers of Eastern Oregon. It is the judicial seat of one of the richest counties in all that part of the state lying east of the Cascade mountains, and it is the trading center for a district rich in mineral, forest and agricultural resources.

Before the line of the Oregon Railway & Navigation Company's railroad was completed from Portland through the Grand Ronde valley, the trade of which is principally handled at Union, the country in the immediate vicinity was one of the richest stockraising districts in the Northwest. Many fortunes were made in those days in the stock business here, and it was this wealth which formed the basis of Union's future prosperity. The men who made money in raising stock in the Grand Ronde valley and on the adjacent ranges of the foothill districts were those whose principal possessions were in the section of country directly tributary to Union, and the principal part of the money thus made was invested in this town and in the development of the resources of the country tributary. The completion of the line of railroad through the valley encouraged the rapid settlement of the country over which vast herds of cattle had formerly run, and it was the cutting-up of this district into many small farms which has made stockraising here on the scale it was formerly conducted an impossibility. Considerable stock is yet raised in the Grand Ronde valley and in the foothill districts adjacent, but the stock is principally in small bands, and the great stock ranges of the past, which furnished grazing ground for thousands of head of cattle, are now cut up into hundreds of small farms, farms that are today among the most productive of the state.

In an article on the Grand Ronde valley, which immediately follows the present article, much valuable information can be obtained of Union's tributary country, and as descriptive of one of the most productive parts of the state the article in question will well be worth a careful perusal.

The immediate location of Union is in the center of the county of the same name, and at the southern extremity of the rich Grand Ronde valley. Flowing by the city is Catherine creek, which furnishes at this point a valuable water power, ample for all the purposes of manufacturing. Union is on the line of the O. R. & N. Co., 318 miles east of Portland, and it is 36 miles west of Huntington, where the latter road makes direct connection with the Union Pacific system for all points East.

The present poulation of Union is in the neighborhood of 2000. It is a prosperous business community. The public buildings are all modern types of architecture, and chief among these notable structures are the courthouse, the city hall and the public school. These are all fine brick buildings. The cost of the public-school building was $20,000, and it is one of the best-arranged structures devoted to educational purposes in the state.

Among the public improvements at Union especially worthy of mention is the fine gravity water-works system. The water for domestic use in the city is taken from Catherine creek to a point about two miles distant, and it is led into the city under a pressure of 110 feet. The fire department is well organized, and, with an abundance of water under a strong head, the city has every protection against all danger of a great conflagration.

Daily stages leave Union for Medical Springs, Sanger and Cornucopia. Union has direct connection with the depot of the O. R. & N. Co. by the well-equipped motor line of the Union Railway Company. East of Union is a belt of as fine timber as is found in any part of Eastern Oregon. The management of the motor line contemplates an extension of the line to tap this rich belt of timber, which would insure a most profitable traffic to the road, and the construction of this extension would be a most important factor in the future prosperity of the city.

Union is one of the most important shipping points on the line of the O. R. & N. Co. in Eastern Oregon. The shipments from this point comprise livestock, wool, hay, grain and lumber. In time the mineral output of the tributary mining district will afford a considerable part of the traffic handled by the railroad from this point, and the development of these mines will be of benefit not only to Union, but to all of Eastern Oregon.

During the past few years experiments have been made in Union county in the production of sugar beets, and with excellent results. This work has been done under the direction of the Union Promoting Company. As a result of this experiment, a sugar-beet factory will be built at Union during the present year by a strong Chicago company. The factory when completed will have a capacity for handling 200 tons of beets a day. The construction will include the expenditure of no less than half a million dollars. The establishment of this industry at Union will support, directly and indirectly, from 1500 to 2000 people. It will be built on a site adjacent to the western limits of the city.

At the last session of the state legislature an act was passed providing for the establishment of a branch insane asylum at some point in Eastern Oregon. The appropriation made for this purpose was $165,000. The act stipulated that the new institution should be located at the most desirable point in the eastern part of the state, climate, healthfulness of the surroundings, fertility of the soil, quality of water, price of fuel, etc., to be carefully considered in selecting the site. After a most careful examination of the different points in Eastern Oregon, both by the state building commission and a competent board of physicians, Union was selected as the seat of the new institution. The site includes about 600 acres of choice land, lying southwest of the city. The buildings for the asylum will be erected during the present year.

An Eastern company has recently purchased a site at Union on which a large creamery and cheese factory will be built in the spring. The Grand Ronde valley is essentially a dairying section in addition to its other resources, and the location of a creamery at Union will add both to the prosperity of that city and of the rich section of country adjacent.

In the vicinity of Union are a number of hot mineral springs, which are today attracting considerable attention. Two miles west are the famous Craig springs, visited annually by hundreds of people. Six miles to the northwest of Union is the hot lake, a body of water which in certain parts of the lake maintains a temperature nearly at the boiling point. The medical springs are 15 miles to the southeast. Hot springs bubble out of the hills in many places near Union, and the waters of these springs are all valuable for medicinal purposes.

The Union Land & Investment Company has made especial efforts during the past year to induce immigration to Union county. They recently ran two special excursion trains from South Dakota to Union. From the work this company is now doing it is expected that the opening of the spring will note a decided increase in the number of people arriving in Union with the view of taking up their homes in the immediate vicinity. The large sums to be spent at Union during the coming year in the erection of the branch asylum, sugar factory, creamery, elegant new hotel, and in the extension of the Union railway, insures the place a prosperity which will equal that of any interior point on the coast.

Union county, of which Union is the seat of justice, contains 1,955,000 acres of land, of which about 1,500,000 acres are surveyed. The unsurveyed portions contain rich mines, valuable timber resources and vast ranges where cattle can graze nearly throughout the entire year. The Grand Ronde valley alone in this county contains 300,000 acres of as productive land as any in the state. The principal watercourses of the county are the Grand Ronde, Pine, Eagle and Powder rivers, all of which water valleys which are highly productive.

Among the rich mining districts directly tributary to Union are those of Cornucopia, Sparta, Sanger, Telocaset, and Catherine creek. These districts are today but partially developed, but they contain some of the most promising prospects in the state. These districts are all reached from Union, and the trade from these mines principally comes to this point.

One of the best-known banks of Eastern Oregon is located at Union. This is the well-known First National bank, established July 1, 1883, with a capital of $50,000. The bank occupies its own building, and is under the direct management of Hon. W. T. Wright, one of the ablest financiers and best-known men of the state. The bank has been one of the most important factors in the growth of Union, and it has added directly to the importance of the tributary farming district.

OREGON ROLLER MILLS, UNION.

A leading manufacturing industry at Union is the fine roller-process flouring mill conducted by Messrs. Wright & Davis Brothers. This mill is run by water power furnished by Catherine creek, and it is one of the most complete flouring-mill plants in the state. The flour turned out by this mill not only enjoys a large local sale but it also finds a market in distant parts of the state and at outside points.

In addition to the plant known as the Oregon roller mills is the Pioneer mill, owned by Ed Kiddle. The capacity of each of these plants is 100 barrels a day.

The leading mercantile houses of Union are conducted by Messrs. Wright & Davis Brothers, and Foster, Bridges & Co. The stocks of merchandise carried at Union are large, and, with the various demands of the trade which frequents this point, these stocks are kept as complete as the stocks of the largest stores of the more important points in Eastern Oregon.

Two good papers are published at Union. The leading paper here is the Eastern Oregon Republican, published by the Eastern Oregon Publishing Company. The officers of this company are L. J. Davis, president, and M. F. Davis, secretary. This is a semi-weekly publication. In addition to the Republican, Union supports a weekly paper called the Scout, which enjoys a good circulation.

Suicide and Insurance.

Springfield Republican.

Clauses in life insurance policies providing that the company shall not be liable to payment in case of the policyholder's suicide will not always avail, according to a decision just given by the United States circuit court of appeals at St. Louis. Dr. L. H. Robbins, of Lincoln, Neb., held a policy for $5000 in the Travelers' Life Insurance Company of Hartford, and the policy provided that in case of suicide, whether the victim was sane or insane, the company would not be liable for the sum named. Dr. Robbins accidently shot himself in the foot, the wound brought on lockjaw, and in a paroxysm of pain he cut his throat and died. The company contested payment and the lower courts held that the accident to the foot was the primary cause of death, and the throat-cutting only an intervening cause. This view is upheld by the court of appeals.

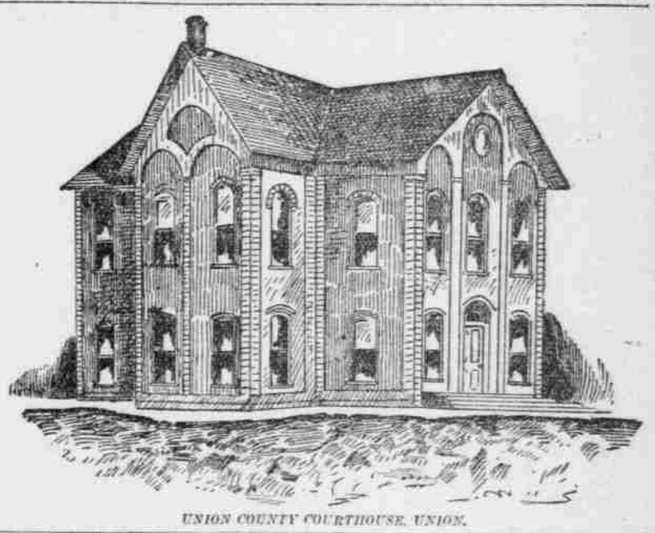
GRANDE RONDE VALLEY.

The Most Fertile Part of Eastern Oregon—The Crops Produced.

THE garden spot of Eastern Oregon is the Grand Ronde valley, which lies east of the Blue mountains, the range which divides Eastern Oregon and a part of Southwestern Washington, extends north and south through Eastern Oregon and a part of Southwestern Washington. The first town of importance reached by the line of the O. R. & N. Co.'s railroad, after crossing this range on its extension eastward, is La Grande. This is at the edge of the Grand Ronde valley which extends away from this point for a distance of about 35 miles. It is about 18 miles wide, and comprised within its limits are about 300,000 acres of as rich farming land as is found in any part of the coast.

Immigrants to Eastern Oregon are especially interested in the Grand Ronde valley. In appearance it resembles in its virgin state a well-kept park. In some parts of the valley the soil is a black loam many feet deep, while the soil of other portions of the valley is made up of this same rich loam mixed with a very productive volcanic ash. All over the valley water in abundance is found only a few feet below the surface. Although the rainfall of this part of Oregon is not greater than it is in some of the arid belts of Southern Idaho, yet crops have never failed in the valley, and the farmers here are not compelled to incur the heavy expense of building irrigation ditches, as everything grown here attains its greatest perfection without the use of water for irrigating purposes.

Grain is the great staple crop of the Grand Ronde valley. Wheat here gives an average yield of about 25 bushels per acre, and yields have been recorded as high as 80 bushels from a single acre of ground. Some farmers here even claim that the average yield of wheat on this land will run no less than 35 bushels to the acre. Barley yields 75 bushels to the acre, and the price of 1 cent a pound usually received for this crop attests its high quality. There is a good market for oats raised in the valley during the years of any activity in business, this crop selling for from 25 to 40 cents per bushel, and the yield of oats to the acre runs about 70 bushels. Meadow land in the valley, which produces as high as 4½ to 5 tons of timothy to the acre, has been seeded on natural turf without the soil even being stirred by a plow.



UNION COUNTY COURTHOUSE, UNION.

Enormous crops of vegetables are raised in the Grand Ronde valley, and they attain the dimensions of the prodigies in the vegetable line displayed at the average county fair. A yield of 800 bushels of potatoes to the acre has been recorded in the Grand Ronde valley, while a yield of 500 bushels is often gathered from a single acre of ground.

As a fruit-producing section, Grand Ronde valley is fast earning a reputation as one of the most favored sections of the state. Prunes, plums, pears, peaches, apricots and berries are varieties that do especially well here. A single prune orchard in the Grand Ronde valley yielded returns of over $700 an acre in 1892, and the yield of a single acre of prunes in this section often sells for $256. The apples for which Oregon received the first prize at the world's fair in Chicago were grown in the Grand Ronde valley.

The hills which encircle the valley of the Grand Ronde are covered with bunch grass, and they afford fine grazing grounds for cattle. The bunch-grass-fed cattle of these ranges bring the highest prices in the Portland and Eastern markets, and the mildness of the climate enables stockmen of this part of the state to keep stock on these ranges throughout the year, without other feed than the natural bunch grass affords.

Advanced Study.

Cambridge university has recently taken up the question of degrees for advanced study and research. The council of the senate recommends the appointment of a committee to confer with Oxford and other universities to secure common action on the subject, and calls attention to the scheme for post-graduate studies already in operation at Harvard.