

DOING A GREAT WORK

O. A. C. EXPERIMENT STATION HAS SEVEN BRANCHES.

Work is Carried on For Benefit of Farmers Over Entire State of Oregon.

The experiment station of the Oregon agricultural college consists of the central or main station at Corvallis and seven branch experiment stations as follows:

- Southern Oregon branch experiment station, Talent.
- John Jacob Astor branch experiment station, Astoria.
- Hood River branch experiment station, Hood River.
- Eastern Oregon dry farming branch experiment station, Moro.
- Umatilla branch experiment station, Hermiston.
- Eastern Oregon branch experiment station, Union.
- Harney branch experiment station, Burns.

The central station at Corvallis serves the entire state. The results obtained in its investigations of soils, farm crops, horticulture, crop pests, dairy, poultry and animal husbandry are worth hundreds of thousands of dollars each year to Oregon farmers. That they are appreciated is shown by the fact that on the average more than 1000 circulars, bulletins and letters are sent out daily in answering correspondence. Upon these results are based a large part of resident and extension instruction in agriculture. The central station receives no state appropriation.

The Southern Oregon experiment station serves the ten million dollar per year industry and other agricultural interests of the Rogue River valley. It is already recognized as the leading "Pear" experiment station in the world; and its discoveries related to the use of sulphur as a fertilizer for alfalfa in the Rogue River valley are worth more each year than all of Oregon experiment stations have ever cost her.

The John Jacob Astor experiment station was established for the purpose of experimental study of the problems peculiar to tide land agriculture. Oregon has many thousand acres of these lands, most of which are only partly reclaimed.

The Hood River branch experiment station is concerned with investigations of the problems of the Hood River orchardists. The results already obtained in the control of apple scab and in the use of nitrate of soda as a fertilizer have been worth hundreds of thousands of dollars to the Hood River valley this year.

The Eastern Oregon dry farming branch experiment station is probably the most important "wheat" experiment station in the dry farming section of the United States. Its investigations, which are applicable to the entire Columbia river basin, may be grouped as follows:

1. Variety testing and improvement of field crops.
2. Tillage experiments.
3. Crop rotation investigations.

Hundreds of varieties and selections of cereals have been under test during the past five years. Some of these have shown a marked superiority over the varieties commonly grown in that section. Three of the new spring varieties have exceeded the yield of "Bluestem" from 20 per cent to 30 per cent every year. Likewise three of the new winter varieties or strains have given an average yield from 8.3 bushels to 5.6 bushels greater than the local varieties. A four bushel increase in the acre yield of wheat in the counties of Wasco, Sherman, Gilliam and Morrow would at one dollar per bushel bring to the wheat growers of these counties an additional income of \$1,200,000.

The Umatilla branch experiment station was established for the purpose of investigating farming on the sandy lands along the Columbia. Important additions to our knowledge of the action of water in such soils have been gained and a system of handling the water has been devised which is much more economical in the use of both water and labor than that previously used.

The Eastern Oregon branch experiment station at Union is the oldest and most extensive of the branch experiment stations. The work has consisted principally of:

1. Testing of new and old varieties of cereals, forage crops, vegetables and fruits.
2. Breeding experiments with fall wheats.
3. Hog feeding experiments.
4. Cattle feeding experiments.

In eastern Oregon there is a demand for a heavy yielding hullless barley for feeding purposes. The station by hybridization, has produced several new varieties, some of which are excellent yielders and are now known quite extensively throughout the Grande Ronde valley. Varieties of hullless barley with abundant foliage and suitable for hay have been developed. Results in breeding fall wheats have been so satisfactory that we feel confident that the new hybrids which have been produced at this station will prove to be exceptionally valuable.

It is a common practice to finish hogs in a fattening pen on grain alone. This station has demonstrated that more than \$200 per earload can be saved by keeping the hogs on pasture and feeding them chopped grain by aid of the self feeder.

During the past three years extensive cattle feeding experiments have been conducted with profitable and interesting results. It is planned to increase this work as rapidly as possible to meet the needs of the extensive stock raising interests of Eastern Oregon.

The Harney branch experiment station was established for the benefit of the farmers—many of whom are homesteading—of the great plateau region of central and southeastern Oregon and particularly of the Harney valley. Since its establishment more than 500 varieties of crops have been tested, rates and dates of seeding tests have been made generally, tillage experiments have been started, experiments with dry farming crop rotation are being conducted, the value of rape, alfalfa and field peas hogged or sheeped-off is being determined. Many varieties of fruit and shade trees and bush fruits are being tested. Promising varieties of field crops are being distributed and many co-operative trials are being conducted.

One to six day movable schools are also conducted by the extension service of the Oregon Agricultural college throughout the year, the type of school work being changed during the various seasons.

Any local organization, such as a Farmers' union, grange, or other organization in which farmers of the community are interested, may promote a movable school. In counties having county agents, it is necessary to arrange for the school through them. Such organizations or persons interested in securing a movable school should take up the matter with the extension service, Oregon Agricultural college, Corvallis.

Owing to the heavy demand made for this type of work the past few years and to the failure of some points to meet the expectations of the organizers and the extension service, a few special requirements are being made of all communities requesting this service.

1. Organize a class of not fewer than twenty people for a one day school and of not less than forty persons for a longer school, these people agreeing to attend all sessions requested.

2. Provide a room in which to hold the school or a place for demonstration, take care of heat, light and janitor service, and furnish conveyance to and from the railroad station for instructors in charge of work.

3. Furnish the demonstration material necessary for the type of school desired.

4. Agree to issue 1000 copies of program for the movable school and distribute these as instructed.

The following lines of work will be taken up in movable school work during this year: Horticulture, agronomy, poultry dairy, animal husbandry, home economics, and special subjects as may seem desirable.

STATE BUDGETS INCREASED.

Ten Institutions Ask \$2,033,015.54 for 1917—Not Approved Yet.

The superintendents of the ten state institutions have submitted their budgets for the coming year and the increase is \$395,466.43 over the present year's budget. The total estimated as necessary is \$2,033,015.54. But one institution's needs are estimated lower for 1917 than for 1916. That is the eastern Oregon state hospital which received \$308,159.25 for this year and asks \$250,260 for the ensuing period. None of the estimates have yet been approved by the state board of control. The board is now considering the amounts asked.

The list of estimates is: State hospital, \$750,134; penitentiary, \$253,300; eastern Oregon state hospital, \$259,260; soldiers' home, \$90,830; girls' industrial school, \$78,850; institution for the feeble minded, \$291,450; boys' training school, \$96,009; tuberculosis sanatorium, \$115,426.50; deaf school, \$60,435; blind school, \$37,321.04.

TUITION STILL QUESTIONED.

One Marion County District Objects to Salem Board's Action.

To settle the question of the claim of school district No. 24 for interest on investment and depreciation on equipment in figuring the tuition for pupils attending Salem schools from outside districts, the Salem school board at its meeting this week moved to instruct its attorney, George G. Bingham, to secure an interpretation of the law. The claim of the district for the items of interest on investment and depreciation of equipment in figuring the tuition have been disallowed.

DESCRIBES FIRST LAMP

THOMAS A EDISON TELLS OF EARLY DIFFICULTIES.

Light Without Heat. The Firefly Efficiency, Is The Goal—Research Unending, The Way.

"The first thing to do was to find out what was the best material to use for a light producer," began Mr. Edison. "I soon made up my mind that of all the materials I could obtain in 1877 carbon was the most promising. Paper, jute, palm fiber, grass, tissue paper, coated with tar and rolled into thin sticks, charcoal, hemp—everything, in a word, was tried. Finally on October 21, 1879, I carbonized a piece of cotton sewing thread beat into a loop and sealed it in a glass globe from which the air had been pumped out. When the current was turned on, that black thread glowed for forty hours. That was really the first incandescent electric lamp. It couldn't be put on the market, of course, but it showed unmistakably that electricity could be used for incandescent lighting. I spent about \$40,000 to bring the investigation up to that point, and yet in a way, this was only the beginning. A little later we placed several hundred paper-filament lamps on the market. So I began a hunt for the right kind of carbon. Men were sent all over the world to collect grasses and fibers that looked promising. They brought back several hundred, and out of the lot I selected a certain kind of bamboo that grows in Japan. We made filaments out of that for nine years."

In these few words Mr. Edison tells the story of the first electric lamp. A week from tomorrow, the twenty-first day of October, now known as "Edison Day," is the birthday of the electric lamp.

"No invention is perfect, and the incandescent lamp is not an exception," continued Mr. Edison. "Light without heat is the ideal and that is still far off. The electric incandescent lamp of today has the cheapest form of filament that has ever been produced, but some day it will be cheaper and colder than it is. There is a good deal of truth in the saying that the firefly is the ideal. It is, so far as coldness goes. But its color is against it. You couldn't use a thousand-candle firefly to match colors, and you wouldn't want the insect to light up a street, because his light would be a hideous greenish yellow. But some day we will get reasonably near the firefly for efficiency without copying his disagreeable color. The task needs much investigation, much research of the kind we did in 1879. The research that we began then is still going on, and it always will go on. Somehow, each new discovery opens up the way to another."

"A laboratory is indispensable nowadays to produce an invention," he remarked. "The General Electric company has one of the largest in the world in which to develop new ideas or to improve old processes. They hire inventors now like bookkeepers. That is because the whole character of manufacturing has changed. Companies that handle a lakel of dyes at once and convert whole train loads of ore into iron and steel at a single operation have problems to consider that were not worth while bothering about fifty years ago. It pays to save a few cents in handling a ton of material, and therefore it pays to invent a way of saving those few cents."

"You can improve, but you can't change human nature," said Edison. "It is hard, it always will be hard, to drive a new idea into the world's head. No one likes revolutions, even though they are for the best. The more important the invention, the bigger is the revolution, which means the harder your struggle to overcome prejudice. It takes a Niagara of advertising to make a man play the piano acceptably with pneumatic mechanism and a punched roll of paper instead of very badly with ten stiff fingers. You can imagine how hard it was to get whole cities illuminated with the electric incandescent lamp. Perhaps business men will invent some quick way of making the world see the point of a new invention. It seems to be quite beyond the powers of an ordinary inventor."

Will Not Call Pupils.

For the benefit of relatives and friends City Superintendent Ford asks that an announcement be made of the school rule which prohibits calling a student during periods. Students may receive messages after periods, if necessary.

Timekeeper Is Injured.

William McKern, timekeeper at the Willamette Valley Lumber company's logging camp above Black Rock, was struck by a trip line Wednesday morning and the ligaments of his neck were painfully injured. McKern was taken to the Dallas hospital Wednesday afternoon.

6 per cent Farm Loan

ON FIRST CLASS FARMS

Long Time Prepay Privilege

—WRITE—

H. E. MORTON, Dallas, Okla.

WRITES OF GRAND RONDE BOY.

Journal Reporter Tells of Sampson Simpson's Clever Art Work.

In a signed article in The Oregon Journal Sunday, Alfred Powers tells of the art work of Sampson Simpson, five year-old Grand Ronde Indian boy. Sampson cuts clever pictures from a cardboard. His only instrument is a pair of cheap scissors. No one has ever given him any training yet his work is surprisingly good. His studio is the back steps of the reservation store or his own humble home. His materials are the cast-off paste board boxes that come to the store. He can't even has his pair of scissors except when his mother is not using them for the family's sewing or when he takes them without asking.

Doings of the "Drys."

The regular meeting of the Union Dry committee was held in the annex of the Evangelical church on last Tuesday evening and was presided over by Mrs. Jennie Gibson who has succeeded Rev. McConell as county chairman, presence of church work having necessitated the resignation of the latter.

The publicity committee have placed large signs on five of the churches reading "Brewer's Amendment, vote 315 x no; vote dry, 316 x yes;" thus signifying the attitude of these churches toward the amendments in question. Meetings that will be of vital interest to Polk county voters are being arranged for and will be held in neighboring towns and school houses between this and election day. These will be announced in the county papers. The regular meeting of the county committee will be held in the Evangelical church next Tuesday evening at 7:30. Everybody welcome. G. E. E.

Lost—Two Good Overcoats.

Oscar Hayter hasn't just decided what he will wear as a top coat this winter. He has tried two overcoats but both looked good to someone else and departed. While in California this summer the first one was stolen and Friday at Independence the second one went the same route. The matter is under advisement.

Begins Endowment Campaign.

Dr. Myron W. Haynes, secretary of the endowment campaign for McMinnville college, will start a campaign for the \$25,000 which it is hoped McMinnville will contribute towards the endowment of the local institution.

NO PROTECTIVE MEASURE FROM DEMOCRATIC CONGRESS

"You couldn't get a protective measure out of a Democratic congress sectionally organized any more than you could get a revival meeting out of a disorderly house."—From Mr. Hughes' Speech at Chicago.

BURSTING A BUBBLE.

The Democrats who sought a criticism from Dr. Charles W. Eliot of Mr. Hughes' acceptance of the presidential nomination got one, but not the kind they wanted. Dr. Eliot was heartless. Instead of helping the Democrats keep the supreme court bubble in the air he pricked it with a pin when in his letter he said of Mr. Hughes' action: "Most Americans will think that, having tried the life of a governor and the life of a justice of the supreme court, he had a right to give effect to his preference for political service."

Mr. Lansing is credited with the belief that the case against Great Britain in account of the blacklist is so weak that it ought not to be pressed. What, then, did Mr. Polk mean when he called the attention of the British government, "in the gravest terms," to "the many serious consequences" to be apprehended if it were not withdrawn?

He Proposes. "But I don't love you, Ingomar." "In these days that is no reason for not being engaged to a man."—Louisville Courier-Journal.

Pendleton Normal School

Proven Necessity

(Copied from Portland Oregonian.)

MONMOUTH, Ore., June 26.—The Oregon Normal school opened this week . . . students enrolled largest on record for state Normal in Oregon. . . . how to care for large student body a problem. . . . 800 being crowded into auditorium with seating capacity of 550. Galleries filled with extra chairs. . . . More than 150 students seated on platform. . . . New boarding houses completed, additions to existing houses built and tents used. One hundred sleep on upper floor of school. . . . The official school report gives 150 grade pupils in Monmouth, for teacher practice.

Read what those who have elected to handle affairs of your state and who are thoroughly informed regarding school conditions in Oregon have to say concerning measure 308 on the ballot at the election:

By James Withycombe, Governor of Oregon: "Oregon is unquestionably in need of more normal school work and Pendleton is the logical place for school of this class in Eastern Oregon."

By J. A. Churchill, State Superintendent of Public Instruction: "I trust that the voters of the State will assist in raising the standard of our schools by establishing State Normal School at Pendleton."

By P. L. Campbell, President of the University of Oregon: "At least one additional Normal School is urgently needed in Oregon."

By W. J. Kerr, President of the Oregon Agricultural College: "Since the people of Pendleton are initiating a measure for the establishment of a Normal School at that place it will give me pleasure to support this measure."

By J. H. Ackerman, President Oregon Normal School at Monmouth: "A careful analysis of the situation will convince one that Oregon needs a Normal School in Eastern Oregon and Pendleton fills all the government requirements. . . . Resolved, that it is the sense of the County Superintendents of the State of Oregon, in convention assembled, that the best interests of the schools of the State demand increased facilities for the training of teachers, and that we, therefore, endorse the initiative measure to establish a Normal School at Pendleton."

By Mrs. Charles H. Castner, President of the Oregon Federation of Women's Clubs: "I most heartily endorse the location of said Normal School at Pendleton."

Prof. Robert C. French, Former President of the Normal School Located at Weston: "An immediate establishment of such a school at such central point such as Pendleton would prove a great boon to the State of Oregon."

B. F. Mulkey, Ex-President Southern Oregon Normal School: "I shall support the location of an Eastern Oregon Normal School at Pendleton."

State Board of Regents of Oregon Normal School declares that "the necessity for additional school facilities in Oregon is apparent."

Portland Chamber of Commerce endorses measure 308 and says Pendleton most logical location for normal school in Eastern Oregon.

308 X YES IS A VOTE FOR YOUR CHILD

(Paid Adv.) Eastern Oregon State Normal School Located at Pendleton. By J. H. Quinn, Secy., Pendleton, Ore.

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