

THE INSTITUTE.

A Series of Interesting Meetings Under the Auspices of the State Agricultural College.

MANY FAUGERS IN ATTENDANCE.

An Instructive and Interesting Programme Successfully Carried Out.

Magnificent Display of Fruits, Vegetables, Cereals and Minerals.

EXHIBIT OF THOROUGHBRED STOCK.

A Meeting that Has Aroused the Interest of Our Farmers, Miners and Stockmen, and which will result in Much Good.

The first annual meeting of the Farmers Institute, held by the State Agricultural College, which commenced in this city last Wednesday, and continued three days, was a grand success in every respect. While the attendance was not as large as it should have been the interest manifested by the farmers, miners and stock raisers who were present shows an awakening to the importance of meetings of this kind, which, by the interchange of ideas and acquiring knowledge of the results of experiments made by others must tend to stimulate a desire to excel and render chances for success much greater.

On Wednesday evening the Institute was formally opened, a large and appreciative audience being in attendance. The meeting was called to order and on motion Hon. L. B. Rinehart was elected chairman and B. F. Wilson, secretary. After a well rendered piece of music, Mr. W. T. Wright, in behalf of the citizens of Union, welcomed the representatives of the college. Professors Letcher, French and Washburn and, also, the visitors from the various parts of the county, in eloquent and appropriate address, in the absence of President Arnold, Prof. J. D. Letcher, of the State Agricultural College responded in behalf of the Institute.

After paying tribute in a few well chosen words, to the beauty and intelligence of his audience, and thanking them by their presence, interest or labor, shall contribute to the Institute success, he proceeded to outline the work that our Agricultural College was doing for the State. Since education has now become so well nigh universal, he showed the necessity of a higher education for farmers. An education that would fit them for the responsibilities and duties of farm life; that would familiarize them with a knowledge of nature and her physical laws; that would teach them 100 acres well and carefully tilled, would produce better results than 200 half cared for; that shows how insects, pests and diseases of vegetation can be as definitely exterminated and as successfully treated by science, as pneumonia or measles in the human frame; that would instill into the mind the habit of scientific thoughtfulness and the necessity of translating it into action; that would give such discipline of mind, body and sympathies as would elevate and enoble agriculture and at the same time recognize manual labor as something to be honored and respected by all. He next spoke of the vital connection between their college and Institute work, in bringing the parents into hearty sympathy and active cooperation with the work of their children at college and in bringing into contact and cooperation, the theory and science of farming and farm culture as taught at the college with the practical knowledge and experience, as learned upon the farm.

He then enumerated the advantages to be gained by a few years' residence in the college, where agriculture and horticulture were taught as science, with every facility for thorough and complete mastery and where the very atmosphere was conducive to a broad and liberal culture; where the students were taught not only how to plow and sow to seed, but also the reason for the philosophy of plowing, as well as the uses of the plow, and the value of the different kinds of soil—were they heavy and the best for growing but knowledge of the soil culture of all the farming and how to apply it in their own fields.

He said that in 1882 the United States Congress passed a law—authorizing any state of the Union to create a

of land provided it would establish a college in which should be taught agricultural and mechanical science, and military tactics, both theoretically and practically; or should require those branches of industrial education to be so taught as a department in any established literary or scientific institution of learning. In 1870 the State Agricultural College was located at Corvallis, and was made a department of Corvallis College—a literary institution under the control and management of the Methodist Church, South. In 1888 the state received it back from the Methodists, severed its connection with Corvallis College, located it at Corvallis, and resumed entire and independent control of the institution, under the name and title of "The State Agricultural College of the State of Oregon."

Its Board of Regents consists of the Governor, the Secretary of State, the Superintendent of Public Instruction, the Master of the State Grange, and nine citizens of the state, and they have absolute control of the management of the college. It now has no connection whatever with any religious denomination or other institution of learning.

The last Legislature made sufficient appropriations to furnish 150 acres of land in addition to the thirty-five acres previously donated by the citizens of Benton county, and to build thereon a large wooden dormitory building, a two-story octagonal barn, and a well arranged brick mechanical hall.

A large commodious, well ventilated and well-lighted brick building which is now used for recitations was presented by the citizens of Corvallis and Benton county as a condition of its relocation at that place. The dormitory building will enable the college to furnish students from a distance with board and lodging for about \$2 a week, while the mechanical hall will contain the forge and machine and carpenter shops—everything necessary for skilled training in wood and iron work. All need not exceed \$150 per annum.

The land and barn fully equip the agricultural department for thorough and successful work in raising and harvesting crops, and in the care and use of farm machinery and stock.

Several prominent stock breeders in the state have presented the college with animals from their herds, and it is hoped that other citizens will follow the example of their commendable liberality.

By a recent act of Congress \$1,000,000 is annually appropriated to each State for the purpose of experimentation in agriculture and kindred sciences, and the State Agricultural College has been intrusted with the disbursement of this fund. It is the purpose of the Board of Regents to establish three experiment stations in the State—one in Eastern Oregon, one in Southern Oregon, and one at the college. Several places in both sections have already presented their claims for the location of these stations and there is no reason why Union should not present hers. Almost the first work of the present Board of Regents was to arrange a course of study which would meet the needs of the industrial classes of the State, and make the institution what it was designed to be—strictly an agricultural and mechanical college. It is the only institution in the state that offers a thorough industrial education—both theoretical and practical—to its pupils.

Its requirements for admission are a satisfactory examination in Arithmetic, elementary English Grammar, Reading, Writing, Spelling, and Geography; but a Preparatory Department is connected with the College for the instruction of such students, over 15 years of age, who fail to pass the regular College examination.

In English the course includes English Grammar, United States and General History, Logic, Rhetoric and Political Economy.

In mathematics, Algebra, Geometry and Trigonometry; and in applied Mathematics, Surveying, Road-making, Levelling and Mechanics.

In agriculture, Breeds of Domestic Animals—their characteristics and adaptation, drainage, soil-tillage and rotation of crops, and the origin and formation of soil, and the History of Agriculture, etc.

In Botany and Horticulture the flora of the State is carefully studied, and practical work in budding, grafting, pruning, potting plants and harvesting fruits is waited upon.

In Chemistry and Physics, qualitative and quantitative analysis in addition to the regular class room work is required.

Book-keeping, Physiology, Bee-Culture and Fine Hand Drawing are also taught.

In the department of Household Economy and Hygiene the girls, under the charge of a lady, are taught

sewing and dressmaking and fitting, cooking and physiology, instead of agriculture and surveying.

In zoology and entomology, insect and animal life, in connection with vegetable and plant life, especially where they benefit or injure it, is carefully studied; and the students take part in the application of the remedies for the pests and diseases under consideration.

The mechanical hall is well supplied with all necessary machinery for instruction in wood and metal work, as in the farm for planting, tilling and harvesting crops, and for the care and breeding of stock.

All the students are required to labor one hour per day, either on the farm or in the machine shop, and are allowed to perform voluntary labor upon the farm for which they are promptly paid. By this means many of the students are enabled to reduce their necessary expenses very largely.

The faculty consists of eleven professors and five assistants, who have been selected on account of their fitness for the duties of the chairs which they fill. Instruction in German, French, Latin and Greek is provided for, but none of them are required in the regular three years course.

The discipline, which is military, is firm but not rigorous, and a prompt, cheerful obedience is at all times insisted upon.

The design and aim of the college is to receive the students from the farm, educate them upon the farm, and then return them to the farm to pursue farming, with an education that, instead of driving them from the farm, enables them to follow farming in an intelligent and scientific manner.

After the address of Prof. Letcher the audience was entertained with a duet by Mesdames Lloyd and Cooper; a declamation by L. J. Davis and some excellent instrumental music by Misses Fannie, Edith and Inez Wright.

On Thursday at 1:30 p. m. Prof. French read a paper on the "Different Breeds of Animals and Adaptation to Particular Uses." The Prof. was listened to with great interest. The native home of the different breeds and the conditions of their life there was reviewed. The necessity was shown of continuing our efforts at breeding these cattle here in the same lines in which they excelled at home. The history of our native cattle, so called, was dwelt upon at length. The Devon, Hereford, Polled Angus, Galloway, Short Horn and Durham each received attention and their merits as beef or dairy cattle compared. A chart was shown on which was indicated comparative weights, and gains in weight, of the different breeds of cattle in an experiment at the Michigan Agricultural College in 1888.

A discussion followed by Mr. W. T. Wright, Judge Sanders, Prof's. Letcher and Washburn, Hon. Dunham Wright and L. B. Rinehart and others.

Mr. Wright thought that corn had more to do with an animal's capacity to endure a severe winter than many people believed. He gave it as his opinion that dark colored cattle could endure more than the light colored ones. He thought that the Short Horn cattle were the best for Eastern Oregon.

After the discussion a charming song was rendered by the Misses Driver and Dotson.

Mr. W. T. Wright then delivered an excellent address on "Dairy Farming." He stated that for the best "gilt-edge butter" the Jersey cow was first and foremost. In this all seemed to agree with him. The points of a good Jersey cow, as established by the American Jersey Cattle Club were cited.

A discussion on this subject followed by Mr. J. M. Selder, Prof's French and Letcher, Mrs. Hendershott and Mrs. J. B. Eaton and others. Mrs. Eaton dwelt at some length on the details of butter making. When trying to make the very best of butter she prefers to take the butter from the churn when the grains are the size of a mustard seed and not as large as wheat grains. After a few remarks by Chairman Rinehart the meeting adjourned till evening.

The evening session was called to order by Chairman Rinehart and L. J. Davis was appointed secretary. The choir rendered a superb anthem, and little Miss Belle Henderson of Sparta delighted the audience with a declamation.

An address on "Roads and Road Building" was then delivered by Prof. Letcher. He showed the necessity of good roads and the vast aid they are to commerce, the development of the country and social intercourse, and cited the effect had on different nations by good and substantial highways. He said that Oregon is badly in need of good roads and that the legislature would do well to make liberal appropriations for the purpose of improving the roads. He hoped that the isolated

valleys and mineral lands of Oregon would soon be brought into easy communication with the markets of the world by the construction of substantial highways. He dwelt at some length on the best methods of building roads and keeping them in repair. He thought that experienced engineers should be appointed for each county whose duty it should be to oversee the construction of all roads.

The address was followed by an instrumental duet by Mrs. Hall and Miss Kennedy. Turner Oliver read an original poem by Judge Brainard, entitled "The Vale of Grande Ronde" and concluded with a declamation entitled "On The Farm." A vocal solo was excellently rendered by Miss Bertha Bloch.

Dr. Jay Guy Lewis of Sparta, was introduced and in a most eloquent and entertaining manner gave a vivid description of Eagle valley and the wonderful ledges and placer mines of Sparta. At the close of his address he presented the mineral collection, which was sent in by the citizens of Sparta, to the Agricultural College. The collection of fruits sent in by the citizens of Eagle valley he presented to the editors of THE SCOTT and REPUBLICAN, with the exception of the big watermelon, which he donated, unconditionally, to Prof. Letcher who had been keeping a wishful eye on it during the entire session. Mr. Davis, of the Republican, thanked the donors on behalf of the press.

A discussion on the diseases of Jersey cattle was then taken up and continued at some length.

A vocal solo was rendered by Mr. Mat Hall, and a piano solo by Miss Fannie Wright.

On motion the thanks of the Institute were tendered to Dr. Jay Guy Lewis, Mr. Benj. Longley, Capt. Craig and Mr. E. A. Barrows for the interest they took in the work and for their labor in bringing so far the exhibit of the products of Eagle valley.

On Friday at 1:30 p. m. Prof. F. L. Washburn of the college was introduced and delivered a very interesting and instructive lecture on the characteristics of fruit pests that now infest the orchards of the state and the best methods of destroying them. In the course of his remarks he gave the results of experiments made at the college farm and described how the green apple could be exterminated with soap, tobacco etc. He introduced a gopher trap which he recommended; spoke of the work of the entomologist, showing the implements used, and hoped that every farmer will soon have a library and exercise his brains as well as his muscles.

Hon. J. H. Hendershott spoke in high terms of the exhibit and gave his ideas of fruit raising. He would set out trees at least 30 feet apart and place two boards in a V shape on the southwest side of each tree to protect it. He thought that there cannot be too much irrigating provided the water runs off. Timothy he thought, was poisonous to fruit trees.

Judge O. P. Goodall delivered an excellent address on "Diversified Farming" and Prof. French spoke upon the success of crops in Oregon.

On the closing evening the meeting was opened by an anthem rendered by the choir. A paper on bee culture written by C. T. Wise, of Eagle valley was read by M. F. Davis; followed by a piano solo, by Miss Fannie Wright; declamation by Harry Walrath; song, by Mrs. Mat Hall; declamation, by Prof. B. H. Moore; song, by Mrs. J. L. Carter; address by T. H. Crawford on "The Advantages to the Farmer of a Thorough Education," followed by remarks by Prof. Letcher.

Some resolutions were offered which we have not the space to give at this time. On motion the thanks of the Institute was given to Chairman L. B. Rinehart for his interest and attendance at the meeting which he acknowledged in a fitting manner.

THE MINERAL EXHIBIT.

While it was not generally known that an exhibit of the produce of the country would be made, the display at the court house though not as extensive as it otherwise would have been, was truly remarkable. The collection of ores from the mines of Sparta and vicinity placed on exhibition by Dr. Jay Guy Lewis, which was supplemented by a number of magnificent specimens from the cabinet of Hon. J. A. Wright, attracted much attention, and must convince any one of the remarkable richness of the Sparta mines. Some splendid specimens were on exhibition from the "Del Monte" mines which embrace a group of four claims giving an ownership of 6000 feet lineal by 600 feet wide. On this gold bearing quartz lode, several hundred feet of tunnels and shafts already done, show large bodies of valuable ore, and the present owners, Messrs. Henderson & Rapelje are now putting up expen-

sive steam hoisting and pumping machinery, and an incline shaft on the ledge will be sunk 300 feet below the present workings and at each 100-foot level a drift will be run on the ledge 100 feet either way from the shaft. When this is done a plant of 100 tons daily capacity will be immediately built by the present owners.

The "Gold Ridge" group from which were some rich specimens, embraces the "Gold Ridge," "Legal Tender" and "Hidden Treasure" owned by Henderson & Rapelje who are doing extensive development work and are now mining a rich free gold on pan in a 262 foot tunnel.

The "Dolly Varden," "Golden Gate" and "Oro Dell" had each a nice collection and are evidently coming bonanzas.

The "Montezuma" owned by Mesdames Lewis & Henderson is rich in free gold and sulphurets and will no doubt enrich these enterprising ladies.

The "Marotte" mine has lately been sold to Chicago and Milwaukee parties for the sum of \$15,000 and the present owners are doing extensive development work preparatory to putting up a large milling plant to handle their ores.

The "Maggie" and "Mint" owned by Cook & Younger show a large line of interesting samples and are undoubtedly rich properties.

"Silver Queen," "Free Thicker" and "Tom Paine" mines show a fine line of gold bearing ore and give promise of great wealth to their owner, Dr. Jay Guy Lewis.

The "Edna May" owned by Mrs. Dora B. Scott of La Grande, shows a rich variety of ore and the "Mogul Chief" owned by Mrs. Sparks, of the Hotel Sparks of Sparta, is among the most promising mines of the Sparta district.

The "Gray Eagle" and "Union" owned by Messrs. Clough & Reed have already furnished 800 tons of ore to the arastra, which in return yielded the owners \$9,620 in bullion—the exhibit from this property is large and interesting.

The finest free gold specimen on exhibition was from the "Blue Gulch" mine owned by C. D. Read, who is doing extensive work on the mine.

The W. W. Mining company on Paddy's creek showed rich ore, and a ten days run with their arastra gave a clean up of \$600 with plenty of ore on the dump and in sight.

Pat. Long showed rich ores from his mine on Powder river. The "Copper King" owned by Lewis, Buckland and Garand is a rich copper mine if one is allowed to judge by samples shown.

Perhaps the most interesting sample in this large exhibit is a specimen of sulphate of alum, from the mine owned by Joe. Dolby of Big creek, which is reported by Prof. Lewis as the finest article of alum found in the United States transportation is all that is needed to make this a great bonanza.

THE CORNUCOPIA MINES.

The exhibit from these mines, in charge of Mr. W. R. Usher, was an excellent one and attracted the attention of every visitor. The samples from the "Red Jacket" mine, owned by the O. G. M. Co., were magnificent as were also, those from their "Union" mine, and the "Last Chance" mine, owned by Carey and Co. The richness of one or two of these mines has never been made known by the owners but is said to be marvelous.

Some superb specimens were shown from the "Forest Queen" mine formerly owned by Cox, Allen, & Perkins, but now sold to a Scotch syndicate.

The "Galena Ledge" owned by N. Schoonover, F. Ballard and N. Tarter, also showed some excellent specimens. The specimens from the Cornucopia mines, placed on exhibition by Mrs. Bolles, among which were horn silver samples and a gold bar, were very pretty and interesting.

A large piece of ore from the "Way Up" mine, owned by Bolles, Senior, Usher and Reeves, was the center of attraction. It was literally full of gold. The ore from which this piece was taken assays \$50,000 to the ton.

THE EAGLE VALLEY EXHIBIT.

Among the display of country products the exhibit made by Eagle valley was prominent and elicited the most attention. That Eagle valley is a veritable Garden of Eden and possesses a soil and climate peculiarly adapted to the culture of semi-tropic fruits and grasses was proven beyond question by the great variety and superb quality on the exhibit. The exhibitors from Eagle valley and the samples sent in by them are as follows:

- M. Reeves—Grapes, apples and broom corn.
- Capt. C. H. Craig—Vegetables and fruits.
- James Holcomb—Peaches.
- Mrs. Nellie Beck—Prunes and pears.

Alec Tarter—Tomatoes and onions. W. H. Tobin—Fruits, tobacco, table vegetables, castor beans and plantain. Joseph Beck—Five varieties beans. Fuller & Holstien—Peaches and amber cane.

C. T. Wise—Strained honey. Harry Barrows—Brownview apiary—Colony of bees, honey etc.

W. R. Usher—Corn, prunes, pears, peaches, beets and potatoes. Benj. F. Longley—Cabbage, potatoes, barley, varieties of wheat, parsnips, carrots and alfalfa.

John Frasier—Beets, onions and potatoes. E. R. Samis—Cabbage, onions and potatoes.

Frank P. Lee—Potatoes and cabbage. G. W. Moody—Peaches and alfalfa.

UNION AND COVE.

S. J. Benson—Potatoes, corn, apples, pears and plums.

Wm. Hutchinson—Perfection sugar ball potatoes and corn.

Wm. Dolbs—Durban potatoes, apples, cabbages, onions, wheat and barley. W. D. Biedleman—Third crop of alfalfa.

J. B. Thompson—Black walnuts, crab apples, hops, apples, plums and potatoes 2 1/2 lbs.

W. F. Davis—Transcendent crab apple. Hall Bro's—Wheat.

M. E. Walker—Blackberries and corn. Robt. Shaw—Castor beans, corn, hops, squash, apples and potatoes.

A. J. Goodbrod—Melons, cucumbers, ground cherries and celery. Sam'l Truesdale—Turnips 6 1/2 lbs.

Poor farm—Cabbage, squash and beets. Sol. Seamens—Onions.

Mrs. N. Tarter—Clapps favorite pear. Mrs. M. J. Chancey—Buckeyes.

Geo. Tinkham—Potatoes, cabbage and millet. J. D. Carroll—Beets.

Mrs. W. F. Davis—Pears, apples and corn. J. H. Corbin—Crab apples and pears.

Mrs. S. O. Swackhammer—Blackberries. M. S. Warren—Apples, crab apples and squash.

Mrs. James Hendershott—Corn, apples, prunes, turnips, potatoes, pickled, fruits, and big sun flower. Herman Geer—Oats.

J. E. Hough—Snake cucumber. RARE PLANTS AND FLOWERS.

Mrs. S. O. Swackhammer—Sea onions, fuschias, rex begonia, rare variety geraniums, and crucifixion plant. Mrs. W. F. Davis—Cactus, cactus, Madame Pollock, and ivy geraniums and bouquets.

Mrs. E. E. Pursel—Roxina, fuschias, and bouquets composed of many different species. Miss Ida Davis—Rose geranium.

Mrs. O. F. Bell—Boquet of rare flowers. Miss Mollie Foster—Double begonia, and calla lily.

Mrs. George Wright—Boquet. Mrs. Mollie Thompson—Boquet.

FINE STOCK EXHIBIT.

The exhibition of fine stock which took place in the court house yard Friday forenoon was extremely good. The exhibitors and the stock they had present were as follows:

Mr. A. T. Neill—Short Horn cattle—"Ada Maple," "Lena," "Sharon Rose," "Belle Walker," "Cardinal Rose," "Lord Joe," "Lady Dora," "Betty," "Pointer" and five head of beef steers. Mr. Neill also, had his pet deer "Ben" on exhibition.

Hall Bro's—Thoroughbred horse "Cleveland" sired by Norman Percheron horse, dam Clydesdale, two years old, weight 1,300 lbs.

N. F. Ficklin—Five Holstien cows, two years old, and one Jersey cow. E. H. Lewis—Jersey cow.

E. F. Springer—Thoroughbred stallion, "Richard III" height 15 1/2 hands, weight 1050 lbs. Mr. Springer, also, had several other fine animals on exhibition.

Little Fred Nodine—One pair twin steers, weight 3,950 lbs. These were beauties and are the same that were spoken of in our last issue as having been sold to A. H. Johnson for exhibition at the Portland exposition.

J. Q. Shirley—Short Horn cows; three splendid "Christmas" steers, weight 1,500 lbs each; one hog, weight 700 lbs.

Dr. Deering—Race horse "Bellfounder Chief."

If the names of any of the exhibitors have been omitted in the foregoing it was entirely unintentional on our part and we trust they will overlook it. It is to be hoped that all will hereafter take an interest, and that these meetings, so auspiciously begun, will grow a favor and importance.