



ISSUED EVERY WEEK BY THE  
**WILLAMETTE FARMER PUBLISHING CO.**  
 TERMS OF SUBSCRIPTION:  
 One year, (Postage paid), in advance, \$4.00  
 Six months, (Postage paid), in advance, 2.25  
 Less than six months will be, per month, 1.25  
 ADVERTISING RATES:  
 Advertisements will be inserted, providing they are acceptable, at the following table of rates:  
 One inch of space per month, \$2.00  
 Three inches of space per month, 6.00  
 One-half column per month, 15.00  
 One column per month, 30.00  
 Sample copies sent free on application.

**THIS PAPER** MAY BE FOUND ON FILE AT GEO. F. ROWELL & CO'S STREET, WHEN ADVERTISING CONTRACTS MAY BE MADE FOR IT IN **NEW YORK.**

IN AN ARTICLE published last week in the FARMER by our friend Mr. A. F. Davidson, of Croston, we make him say "my insignificant cherry trees," etc., when it should be my "magnificent," etc. Such errors are unavoidable sometimes and at the same time annoying to us.

THAT BRIDGE at Salem, to connect Marion and Polk counties, is undoubtedly going to be built, as Salem has voted \$30,000; Marion county donates \$15,000; Polk county refused to do anything, but a number of citizens met and pledged \$5,000, making a total of \$50,000. It will be a convenience indeed.

THE GAME LAW expires with this issue, and we presume that those sportsmen who love to slaughter will begin their work. It is a pity that trespassing is so common throughout the State and that the law is so disregarded when it comes to our wild game. Let the birds alone for awhile yet, as they are not half grown at this time.

OUR FRIEND, the Salem Statesman, seems offended at the Polk county board of commissioners for not aiding our bridge project. We hope the hasty words written will be retracted, as it will do no good to bulldoze a measure through. We entertain but little doubt but that Polk county will aid the enterprise. It is just as well to let that august body take their time, and when they make their final report will be time enough to growl.

HARVESTING has begun in earnest throughout the Willamette valley. The sound of the reaper and the hum of the thresher is now an every day occurrence. As a rule the growth of all products has been good, and notwithstanding a slight lack of rain we shall see as large a surplus as ever come forward from the Willamette valley. Wool has brought a good price, hay is scarce and brings a good price, hops are up in the world again and bid fair to go higher, so we have hopes that other products may pay a higher price. We see no reason why better prices should not prevail throughout the United States generally.

**HOPS.**

Some weeks ago there was a rumor that all the hop-yards in New York State were badly damaged by lice and the product would be worthless if appearances did not change. Since then this news seems to be confirmed and the effect is seen in a very decided advance in hops. The greatest production of hops is in New York State and whenever hops fail there the market responds as at this time. We hear of 12 cents being offered in one locality and 18 in another, and again that holders are asking 25 cents per pound. There is no other item of commerce of equal importance that rules in such an arbitrary manner.

Some time ago (three years) there was the greatest disturbance ever known and the hop men grew rich in a single year. Some men then held for a dollar and a quarter and held until hops fell to 15 cents. We then wrote something concerning hop growing that was generally copied, showing the variations of the market and the inequality of the trade. It was shown that taking a range of fifty years and the average price of hops had been over 30 cents per pound. This was a good price and paid well all who stuck by it. The man who went in according to his means and never flinched if hops were down, or lost his head if they were down, always came out ahead, but there are too many who plant under excitement and sell under discouragement. These must lose and are disgusted with the trade.

It is not easy to estimate the yield of Oregon, or of the United States, or of the world, but some shrewd men are handling hops now that seldom lose by speculation. The producer becomes a speculator too often, and a losing one. He wants to make a big haul and is not satisfied with a safe thing.

It is hardly possible for hops to reach

an extraordinary figure under ordinary circumstances. If hops are going to bear a good price the grower can hold on and realize all there is in it. Every man who sells weakens the market. If the hop grower wants to get his full share he must study the field, learn all the points there are, and then act on his judgment. No man can sell on present information with any reliable certainty.

We notice hop yards that are badly neglected and will not nearly give an average yield, and here we are on the eve of a rise in hops! A man who hasn't faith enough in the business to "stay with it" never should go into it. This is always the case and the country loses a good crop while the individual loses what he has waited and planted for. In many things this same rule applies. Unless you have faith enough to keep your endeavor don't try to raise hops or anything else of an uncertain nature.

**LAUREL HILL ABOLISHED.**

The Cascade wagon road company that now owns the old Barlow route across the Cascade mountains, via Mt. Hood, has made an improvement that abolishes the worst hill and obstacle on the whole route. Every one who has crossed there remembers Laurel Hill, a bold ridge, that fronts the Sandy and makes the worst sort of an ending of the mountain journey. The old Siwash trails always followed the ridges and the Barlow route followed the Indian trails. One reason why the Indians kept on the highest land was to be able to see in all directions, another was because there was very little timber on the highest ridges so the way was but very little obstructed. They made signal fires on high points and always kept on high land to read signals enemies might make against them or friends might make to them. The emigrants took it for granted that the Indians had the best route and never looked for better. The company concluded to investigate and found a good route, without any steep road on it, along the edge of the ravine at the side of the great hill. They had to chop away considerable down timber, which the Indians could not easily do, so went on the ridge. When this new track shall be finished Mr. McCown of the wagon road company says a good team can go from Portland to Mt. Hood in a day. It seems incredible that thousands of people have every season traveled over the Cascade mountains and have climbed or descended this terrible hill for more than forty years and all the time an easy grade could have been had near by it.

**THE OREGON EXHIBIT CAR.**

Last year a car with Oregon products displayed within and without, visited the East and attended various fairs held in Iowa and elsewhere, with remarkable results. Everywhere the newspapers noticed it very enthusiastically and it is seen in immigration that many persons came here because of it. We met a man Wednesday in Portland, who credits that display with his coming, and best of all he is pleased with what he finds here now that he has arrived.

The State Board of Immigration sends out circulars announcing the intention to repeat this enterprise and request all who can to contribute products to be shown. They want grains, grasses, fruits, vegetables, woods and minerals, D. D. Prettyman is general collector but all are asked to take an interest. Articles delivered at any railroad station will be forwarded, if addressed to "The State Board of Immigration, Portland." Having such palpable proof of the good accomplished by the other car our people should spare no effort to make the second even superior to it in value. All contributions should come forward by August 1st.

**TO SAVE OAT HAY FROM RATS AND MICE.**

Last year we filled our barn with oat hay and towards spring found it was cut up and greatly injured by mice; the little vermin infested it in multitudes. They cut it up and tainted it so that horses would not eat it. This is the case so generally that no more need be said; the question is to find a remedy. Mr. A. S. Kightlinger, of South Salem, has for three years made a successful trial of peppermint, which grows very freely on low land especially on the islands of the Willamette. He picks this peppermint plant and strews it on the barn floor under the hay mow, a slight sprinkling. He sprinkles more when half a load is mowed away, and so on. This has proved successful and has always saved his hay from rats or mice. Though simple and easy it is not generally known, so we give it to the public on his recommendation. We are trying it on two and a half acres of oat hay we are putting up and next year we can give our own experience.

**INSECTS AND THEIR ENEMIES.**

The Relations of the Farmer Thereto --How they Originate and How to Depose Them.

BY F. S. MATTERSON.

Nature, lavish of life in the lower orders of creation appears more intent on multiplying than in perfecting the kind. And it will be observed that creatures living on vegetable food are more prolific than the carnivorous, and also that their fecundity is in a corresponding ratio to their size, the smaller the being the more numerous his progeny. And we find also that mankind receives more injury from the contemptibly mean and small than from the more apparently formidable invasions of the large. Against the large animals he can use united strength, or make up by art for deficiency of power. But with those now under consideration it is otherwise. No force can be brought to bear against their non-resistance; no arts can appreciably diminish their amazing propagation. The destruction of millions may be replaced in a few weeks time, nature supplying their want of fecundity.

And here proud man, the lord of creation, is brought to bay by the smallest and lowest of his subjects, and is compelled to rely for his own welfare, and even his existence, not to mention his supremacy upon such of his subjects as voluntarily come to his assistance, and in serving their own purposes, release mankind from his awkward, if not perilous position. This is no fancifully drawn picture. It is the practical and irrefutable fact. Mankind are dependent every day of their existence on the insect-eating birds and predaceous insects to some extent, for were these not continually and actively employed in reducing the numbers of the vegetable eating insects, these, from their prodigious fecundity would in a very few years overrun the whole earth and devour every green thing. Remove the birds and in six years Oregon would be an uninhabitable desert. Locally man may by untiring and expensive labor reduce their numbers and ravages to a minimum for a season or two, but the breach is soon repaired. To the birds then we are to look for our salvation in our present dilemma, unless we are content to pay a price vastly greater than the cost of their encouragement and maintenance. And here I want to quote a little from Horace Greeley's book "What I Know of Farming." A book which has been the subject of much adverse comment, but which in my humble opinion contains more good sound common sense and practical information on the subject of which it treats than any other book of its size ever bound in muslin. Cheap wits and would-be smarties find it easier to ridicule and condemn than to comprehend and indulge themselves accordingly.

Regarding birds, Mr. Greeley says: "Whenever clouds of birds shall habitually darken our fields in May and less notably throughout the summer, we may reasonably hope to grow fair crops of our favorite fruits from year to year and realize that we owe them to the constant and zealous, though not quite disinterested, efforts of our friends, the birds." And again after giving some account of insect ravages in different sections he concludes with views so nearly my own that I quote at some length: "But whatever might have been the Philistines are upon us. We are doomed for at least a generation to wage war against insects multiplied beyond reason, by the neglect and shortcomings of our predecessors. For generations it has been customary to kill without remorse the birds and let caterpillars, worms, grasshoppers, etc., to multiply and ravage unresisted. We must pay for past errors by present loss and years of extra effort. And precisely because the task is so arduous, we ought to lose no time in addressing ourselves to its execution. The first step to be taken is very simple. Let every farmer who realized the importance of beneficence of birds teach his own children and hirelings that except the hawk, they are to be spared, protected kindly treated, and when necessary fed. They are to be valued and cherished as the voluntary police of our fields and gardens; constantly employed in fighting our battles against our ruthless foes. He who traverses the farm shooting and mangling its feathered sentinels, diminishes its future product of grain and nearly destroys that of fruit. The farmer might as well consent that any strolling ruffian should shoot his horses or cattle as his birds. Begin at home to make this truth felt and it will be easier to impress it on your neighbors. We must not merely agree to let them live but we must cherish and protect them." Not only this, but Mr. Greeley

does not go far enough. In all our schools a natural history branch should be taught as a companion to geography. (and it is really the most important of the two) and teachers should be required to be qualified to teach the rudiments of this useful science, as well as others. Every pupil of proper age should be supplied with natural history text books and every school house should contain a collection more or less complete of natural history specimens, and lectures and illustrations should be a part of the regular school exercises. And the college, the Sunday school and the pulpit should continue the work thus begun. Then we can summon the law to our aid with some prospect of success. Only a few years since the painted robin (*turdus nevius*) which is a regular winter visitor here, was pointed out to me by otherwise educated people as a foreign bird lately imported from Japan.

Tell me what a person reads and I can tell the scope of that persons mind and what is their style of thought.

As to legislation Mr. Greeley recommends "to make it trespass, punishable with fine and imprisonment, to shoot on another's land without his express permission and the cowardly massacre of the farmers humble allies would be checked at once. And when public sentiment had been properly enlightened, might in civilized countries, be arrested altogether." This is all very well as far as it goes, and some additional legislation of this subject is certainly needed. But how can a legislator legislate wisely on a matter without previous information? He might as well undertake to legislate on navigation without knowing a sandbar from a saloon bar.

Mr. J. A. Allen, before the Mutual Ornithological club of Cambridge, Mass., in the English sparrow discussion, says on this subject: "What we need is an enlightened public opinion that shall enforce by statutory enactments the protection of our fruit and shade trees by already well-known available means, making it a penal offense for any one to neglect the protection of any trees on his premises, subject to the attacks of the canker worm, etc.

And Prof. O. B. Johnson, in his prize essay read at the Oregon State Fair in 1880, puts it thus: "But in the absence of adequate laws we can only use our personal influence toward their protection, hoping that in the near future when intelligence shall have ceased to be a crime, we shall have a Legislature with ideas above dollars and cents, and an independence of an ignorant constituency enough to pass wholesome laws to protect the feathered friend from the indiscriminate slaughter that is now so successfully prosecuted by selfish persons."

To be continued

**To Cure Hide-Bound.**

The tightness and harshness of the skin which is known as "hide-bound" are symptoms of feverishness and other disorder due to indigestion, or to some sudden shock to the nervous system of the skin, as by a chill when perspiration is free and copious. This excretion from the skin is then thrown back into the capillaries, and these become clogged, leading to a suspension of the supply of blood to the skin. The remedy is to give a liberal dose of laxative medicine to relieve the system. A pint of raw linseed oil usually has this effect if not it may be repeated in two days. Bran mash and fresh grass are also useful, with some tonics, as dram doses of sulphate of iron and ginger powdered. A thorough sweating by means of violent exercise while blanketed and vigorous brushing and rubbing are beneficial.

The flat strap leaf turnip may be sown early in August or late in July. Timothy seed and clover also may be safely sown with the turnips in the following manner: The ground is well plowed and thoroughly harrowed and made fine and mellow; the seed is then sowed evenly, and after it is sown one pound of the turnip seed per acre is sown, and the whole are covered by means of a light brush harrow. There is little danger from dry weather when grass seed is sown in this manner, as it is well protected by the covering of soil. Late in the fall the largest turnips are pulled, yielding generally 400 or 500 bushels per acre, and the stirring of the soil by the pulling helps the grass and clover. The small turnips are left and serve as a protection during the winter.

A strip of country twenty miles long by two miles wide around Inkster, Dak., was pounded bare of crops by a terrible hail storm yesterday. The Norwegian church at New Grafton was blown to kindling wood. The damage to crops is estimated at \$500,000.

**Heppner Gazette is Not a Clam!**

Neither is it a mountain oyster; but it is a wordy paper scribbled up in plain U. S. language and printed on a sweat-power press in a part of Eastern Oregon where cords and cords of vacant government and railroad land still lies out doors. It never stole hogs, but it is sometimes borrowed by the neighbors. Sample copy with description of the Heppner hills country, 10 cents in stamps. No discount to bummers. It never sucks eggs. Address, J. W. Redington, Heppner, Oregon.

Farmer's Attention! It is a well known fact that the man that buys the cheapest can afford to sell the cheapest. That's what's the matter with Port & Son, Druggists, No. 100 State street.

J. A. L. Wilson, treasurer of the Chesapeake & Delaware Canal company of Philadelphia, is a defaulter for \$615,200, having issued fraudulent bonds to that amount some thirty years ago. He is missing.

**Cholera  
 Cramps  
 Colic**  
 all  
**Summer Complaints  
 and all  
 Bowel Troubles  
 are cured by  
 Perry Davis'  
 Pain  
 Killer**  
 All druggists sell it.

**SHOPPING BY MAIL!**

Music as easily purchased at a distance of a thousand miles from a music store as at the side of its counter.

Ditson & Co. call attention to their wonderful system of sending music and music books, by mail, to any part of the continent! Packages of music up to the weight of **Four Pounds** go readily by mail. Ditson & Co. are aware that a large portion of those who see and read this advertisement, live at a distance from music stores. All who love music will find the newest and best music books faithfully described in their advertisements. Lists and catalogues free furnished, and all inquiries cheerfully answered by their corps of corresponding clerks. Understand that by sending the **Retail Price** in Money Order, Registered Letter or Postal Note, (or in small orders Postage Stamps,) you can receive by **Express Mail**, any one of Ditson & Co's thousands of music books or ten thousands of pieces of music. Do not neglect this convenient way of filling your house with the best of Songs, of Piano, Organ or any kind of instrumental pieces.

**Oliver Ditson & Co., Boston.**  
 69 and 451 Washington Street.

**Spanish Merino Bucks!**

Bred by Mr. J. H. STROWBRIDGE and bred by his Imported Registered Buck, and out of his premium flock of breeding ewes.  
**TERMS REASONABLE.**  
 Address: **MILK KNOX,**  
 HAYWARDS, ALAMEDA CO., CAL.

**Portland General Hospital.**

Corner Second and Ash Sts.  
**HOME FOR THE SICK.**  
**Turkish, Russian, Electric, and Medicated Baths.**

This institution is complete in all its departments. It is conveniently located. And every effort is made to give the air, diet, nursing and every other thing that is necessary for the recovery of the patient. Special attention is paid to treatment of Chronic and Constitutional diseases by Electric Baths and Inhalation of Oxygen Gas; new recognized as most successful remedies for Rheumatism, Neuralgia, Malerial Diseases, Anemia, Bronchitis, and all diseases of the Lungs, Liver and Kidneys. Private rooms are reserved for patients desiring treatment by other than the hospital physicians and those wishing to take a course of Electric or Turkish Baths or Oxygen Gas. The Baths are elegantly fitted up, and are appreciated both as a necessity and a luxury, especially by those suffering from Age and other Malerial Diseases. Physicians are cordially invited to visit and inspect this institution. THOS. WOOD,  
 317 1/2 St. Manager Portland Hospital Co.

**\$50 REWARD**  
 will be paid for any Grain Fan of name that can be traced and brought back to the factory of the **NEWARK MACHINE CO.** of Newark, Ohio. The Newark Machine Co. of Newark, Ohio, has been manufacturing Grain Fans for over 30 years and has a reputation for making the best quality of fans. If you have any such fans, please send them to the Newark Machine Co. for a reward of \$50.00. The Newark Machine Co. is located at 123 Main Street, Newark, Ohio.