

BEAVER STATE HERALD

Succeeding Gresham Vindicator, Gresham Gazette, East Multnomah Record and Multnomah Record and Montavilla Herald.

EDITORIAL COMMENT

THE World's Work states that Mr. Taft's term of office has been a disappointment. People personally like the president but they distrust him officially.

Mr. Taft has disappointed the West in accepting a tariff that is a revision only in name. He has shown himself to be afraid of trusts and moneyed interests.

The result of a canvas for the State Superintendent made by the editor of the Oregon Teachers' Monthly shows Prof. Alderman of Eugene as the teachers favorite for next state superintendent.

Cook seems to have spent a chilly Christmas—not even the warmth of a friendly smile. But then perhaps Perry would be just as chilly if his records had been examined by the wise men from Copenhagen.

The Rural Spirit issued an exceedingly fine holiday edition. This popular weekly is coming to be a general farm paper.

Barnyard Compost and Maintenance of Fertility.

One of the best indications of a thrifty farmer is the way he takes care of the barnyard manure and how he makes use of it.

Straw or dry earth makes a good absorbent for this liquid portion and can be used for moisture for which well rotted manure requires.

Opinion of chemists, as well as practical men, is that it is best to apply manure to the soil in the freshest state.

Among the farmers there is much uncertainty as to how to apply fertilizer, but it is generally sown broadcast and cultivated in the soil.

PRESERVING TIMBER.

To Achieve Best Results the Bark Should Be Removed. Before timber is subjected to preservative treatment it is customary to remove the bark.

GRINDING ICE SKATES.

Practical and Simple Method of Obtaining the Arc Desired. The accompanying sketch illustrates a practical method of clamping ice skates to hold them for grinding.

Why Metal Melts Quick on a Cold Day.

The reason why metal can be melted in a cupola quicker on a cold day is because the draft from the blower usually comes from the outside.

Universal Cement.

Four parts alabaster plaster and one part of finely pulverized gum arabic mixed with a cold saturated borax solution into a thick paste make an unequalled all around cement for stone.

Weight in Old Tin Cans.

Old tin cans which find their way to the domestic rubbish heap have been turned to good account by the Liverpool corporation.

Making Money On the Farm

II.—Maintaining Fertility

By C. V. GREGORY, Author of "Home Course in Modern Agriculture"

NOT all lands need the drainage, but there are none on which the problem of maintaining fertility is not an important one.

Amount of Plant Food in Soils. These plant foods are present in varying amounts in all soils. In many cases it is necessary to increase the supply by the use of commercial fertilizers.

Maintaining the Humus Supply. Probably the best way of maintaining this humus supply is by the liberal use of barnyard manure.

After clover has been grown for a considerable length of time, especially if green has been plowed under for green manure, the land is liable to become "clover sick."

Making Fertility Available. Gypsum, or land plaster, has a considerable effect in making potassium and phosphorus available.

Probably the most effective way of making phosphorus, potassium or other plant foods available is by tillage. Frequent and thorough cultivation, keeping the soil fine and mellow, favors the chemical processes by which locked up plant food is made available.

It must be remembered, however, that the faster these materials are liberated the sooner will the supply become exhausted. When rotation with legumes, tillage and the application of lime and gypsum no longer produce satisfactory results it is a sign that there is a lack of potassium or phosphorus.

The best substitute for manure is clover. Clover supplies an abundance of nitrogen, the most rapidly used of the three essential elements.

The three essential elements. Three-fourths of the air is made up of nitrogen. Clover and other leguminous crops are able to get nitrogen from this source by means of bacteria which live on their roots.

This is a much cheaper form of obtaining nitrogen than by purchasing it in commercial fertilizers at 10 to 15 cents a pound. It is much more profitable to keep the nitrogen supply fairly constant by the continued use of a rotation with legumes than to add a large amount at one time.



FIG. IV—LOADING MANURE SPREADER.

think, if no manure at all is available, some humus may have to be supplied from some other source. This is especially true if the soil is naturally poor in humus.

Another method of adding to the humus supply is by mowing a crop of clover about haying time and letting it lie on the ground.

"Clover Sick" Soil.

After clover has been grown for a considerable length of time, especially if green has been plowed under for green manure, the land is liable to become "clover sick."

The judicious use of clover or some other legume will effectively solve the humus and nitrogen problems. There remains the question of the potassium and phosphorus supply.

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DAIRYING IN CHINA.

The Water Buffalo Leads the Cow as a Milk Producer.

The buffalo is China's best dairy animal. The Chinese cow is bred as a worker rather than for milk and beyond feeding her calf has almost lost her claim to being a dairy animal.

The water buffalo is used primarily for farm purposes, but it is milked to a limited extent and is China's best milk producing animal, with a milk fairly rich in fat.

On Beauty's Crown.

In blissful seasons none goes by, Of modest size and flat, She saunters perch'd upon her head A hat.

By imperceptible degrees It flourished and grew fat, But still we quaked not when we saw A hat.

Last summer great it grew in girth, Squeezed those by whom she sat, With fear and dread we saw her sport A hat.

This fall still larger things she wears Which men are moved to dread, She dons—we cannot show it all— A hat.

—New York Sun.

Read the Want Ads. on page 8.

Goodner & Ritzer

REAL ESTATE and INSURANCE

Boring, Oregon

Railway Mail Clerks Wanted

The Government pays Railway Mail Clerks \$800 to \$1,200, and other employes up to \$2,500 annually.

PORTLAND RAILWAY LIGHT & POWER CO.

FREQUENT RAPID COMFORTABLE

Springwater Division

Table with columns for STATIONS, EASTBOUND, and WESTBOUND. Includes stations like PORTLAND, LENT'S, and LINSEMAN.

TROUTDALE BRANCH

Table for Troutdale Branch with columns for STATIONS, EASTBOUND, and WESTBOUND.

CAZADERO BRANCH

Table for Cazadero Branch with columns for STATIONS, EASTBOUND, and WESTBOUND.

TROUTDALE BRANCH

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a Daily Except Sunday. A. M. figures in Roman. P. M. figures in black.

For Oregon City, Cazemah Park and way points, change cars at Golf Junction.

For Lents, Mt. Scott and east side points, change cars at Lents Junction.

General Offices, First and Alder Sts., PORTLAND, OREGON.

CRESCENT BAKING POWDER advertisement with logo and text: "Raises the dough and complies with all pure food laws."

Monuments advertisement: "MARBLE AND GRANITE Monuments. All kinds of Cemetery Work. Estimation on all classes of Work. W. W. MINAR."

Expressing, Draying advertisement: "Express No. 1. J. H. HOSS. Phone 14X Gresham, Ore."

Gresham Harness Shop advertisement: "For SADDLES, HARNESS and ALL HARNESS ACCESSORIES. GUST LARSON, Prop., Gresham"

E. B. MORELOCK AUCTIONEER advertisement: "20 Years Experience. REFERENCED. Dr. A. Thompson and J. S. Thompson. MONTAVILLA, - OREGON. Phone 1863"

J. M. SHORT, M.D. S. P. BITTNER, M.D. advertisement: "Physicians-Surgeons. Gresham, - Oregon."

OTT BROTHERS DENTISTS advertisement: "Gresham, - Oregon"

L. D. MAHONE ATTORNEY-AT-LAW advertisement: "Real Estate, Probate and Corporation Law. Prompt Attention to All Business. 618 Henry Bldg. PORTLAND, OREGON."

LUMBER advertisement: "\$6 a thousand on 16 ft. and 24 ft. Rough, 1x4, 1x6, 1x8, and on 2x4, 2x6, 2x8. All Kinds Dressed Lumber. Will deliver anywhere. Straus Lumber Co. PHONE 446"