

WAY TO SAVE SOIL

Rotation of Crops Is Recommended to Farmers.

PLAN OF AGRICULTURAL COLLEGE

Dr. Withycombe Tells How to Increase the Yield of Wheat by Planting Clover on Same Land—Other Advantages.

CORVALLIS, Or., Aug. 18.—(Special correspondence.)—Rotation of crops rather than diversified farming is what the Oregon Agricultural Experiment Station authorities recommend for the farmers of this state. Rotation necessarily involves some diversification, but not the variety in products that is usually implied by the latter term. In diversified farming the producer gives his attention to a number of crops, each of which he intends to place upon the market. In rotation of crops, strictly speaking, the farmer still has one principal crop to which he gives his chief attention and upon which he depends for his greatest profits, but he alternates this crop with others with a view to preserving the productive qualities of the soil. Abandonment of wheat-growing is not the purpose of the changes recommended by the Agricultural College in the methods of farming in Oregon. The aim is rather to make wheat-growing one of the state's permanent and profitable industries, and to this end the farmers are advised to keep their land in the best condition for heavier yields of this staple product. The raising of clover, vetches and rape to be fed to cattle, sheep and swine is only an incident of wheat-growing intended to keep in the soil those qualities which are essential to continued fertility.

Economy in the cost of production is the secret of success in farming, as in almost every other industry. This does not necessarily mean a reduction of the total expense of farming a given acre, but a production of the greatest amount of marketable material at the lowest relative cost. The cost of growing an acre of wheat yielding 30 bushels is little more than is involved in the production of 15 bushels lying idle, in the case of summer fallow, is a waste of labor, if the same results in renewed productiveness can be accomplished by the growing of a crop of clover which can be made to yield a profit in itself. It is because clover has been found profitable, and is also one of the best crops to restore worn-out soil, that it is recommended as an alternate with grain.

Best Plan of Crop Rotation.

The routine that is recommended by Dr. James Withycombe, director of the Agricultural Experiment Station, is a simple one. Clover should be sown in the Spring on a field upon which Fall wheat is growing. Between the middle of February and the middle of March six pounds of red clover and two of alsike to the acre should be sown broadcast over the wheat. On heavy soil the proportion of alsike should be increased to 1. About April 1 there should be scattered over the land about 50 pounds of land plaster to the acre. This is not a fertilizer, but is put upon the land for the purpose of rendering the potash in the soil more soluble. The plaster will cost 50 cents per 100 pounds, or 30 cents per acre, and about 20 acres can be covered in a day. The results will not always show an increased yield of clover in the first year, but the land should be pastured lightly in the Spring until May 1. Pasturing makes the crop mature late, so that the hay harvest is more likely to miss the rains, which often injure clover. The clover should be ready to cut between June 15 and July 1. If the first crop is to be used for silage, it should not be pastured in the Spring. In this case the clover will be ready for the silo early in June. The yield should be about 12 tons of green clover per acre. The advantage in using the first crop for the silo is that there is no danger of injury by rain.

Second Crop of Clover may be Cut

The land can be pastured until the middle of the month the green feed will be plentiful enough to furnish pasturage. The land can be pastured until the middle of December, and from March 1 to the middle of April the next season. A crop of hay or silage can then be taken off in June, and the land pastured freely until time for plowing in the Fall. The field should be sown to Fall wheat, which will be the only crop the following season. The growing of the clover, whether in both Fall and Spring with sheep, swine or calves, but the stock should not be kept on the land when it is too wet. When the wheat crop has been harvested, Fall oats should be sown, together with two or three pounds of rape seed to the acre. Rape will make good Fall and Winter pasture, and the following Spring the land should be plowed for corn. The corn should be planted and cultivated in the usual manner. In the Fall the corn ground should be gone over with a disk harrow: Fall wheat should be put in with a drill, and in the Spring red clover and alsike sown again in the commencement of another routine of crops.

Some Advantages of Rotation.

In this rotation of crops there is a minimum of plowing, which cuts down the expense. The plan contemplates that as much as possible of the clover, whether as silage or hay, shall be fed to stock on the farm, so that the salable crop shall go off in the form of milk or meat, while the refuse is returned as a fertilizer to the soil. Besides increasing the productive qualities of the soil, the clover smother out some of the weeds, while others are destroyed when the crop of hay or silage is cut. Weeds not so exterminated should be killed when the corn crop is cultivated, and in the course of one rotation the land should be comparatively free from the foul seed that is becoming such a curse to Willamette Valley farms.

Vetches for Red Soils.

Red soils are not suitable for clover. Owners of such land are advised to use vetches instead, sowing 34 bushels of the seed to one bushel of wheat to the acre in the Fall. The crop may be pastured all the next year, or converted into silage or hay and pasture during the remainder of the season. If no vetch seed has matured, the ground may be used the following season for wheat. The great difficulty with vetches is that when the seed once gets into wheat it can scarcely be gotten out. If vetch seed has matured, it should be allowed to take root in the Fall, and then the ground should be plowed in the Spring for Spring wheat. In this way the vetches will be killed out. Vetches help to renovate the soil, but do not make as good a crop for this purpose as clover. All leguminous plants increase the supply of available nitrogen in the soil, but on account of its long roots, clover is the best crop to restore the soil to its natural state.

To Get Rid of Vetch Seed.

At McMinnville, a few days ago, H. M. Daniels, of the Star Milling Company, told The Oregonian correspondent of two devices he has invented for the purpose of removing vetch seed from wheat, and it will not be inappropriate to describe the process in this connection. The first contrivance consists of two smooth steel rollers placed on an incline and turning downward toward each other. The rollers are placed just close enough together to crush a grain of wheat. The vetch seed, being hard and smooth, slips from the smooth surfaces and rolls down the incline to the lower end of the rollers. By this method the wheat is destroyed for seed purposes. The other contrivance consists of a long, broad canvas belt running upon a slight incline. The wheat containing vetch seed is fed slowly upon this canvas while moving upward. The incline is just great enough so that the vetch seed, being round, will roll downward, but the wheat, which they turn under a good mellowing crop. They let the last crop of clover stand until it has gone to seed, and then they plow it under a deep furrow. The seed will lie dormant indefinitely. Wheat is sown on the land and harvested the next Fall. Late in the season the land is plowed, thus turning the clover seed up again, and Fall oats are put in. The oats and clover grow together. The oat crop is taken off in the Fall, and the next two seasons clover is produced.

No Arbitrary Rule can be Laid Down

governing the number of head of stock that may be pastured on wheat or clover at any season of the year. The farmer should take care not to overstock his farm, but there is little danger from this source. In the fall of the year the clover may be preserved until needed for feed at seasons when pasturage is not available. When thus fed, the manure should be carefully preserved and returned to the land before the next plowing begins. A. W. P.

SIERGE OF AGUA DULCE.

Herrera's Forces Concentrated at the Town.

PANAMA, Colombia, Aug. 18.—Commander William F. Potter, of the United States, in action from the steamer Bolivar, United States Consul Gudgeon, and Post Captain Beers, of the railroad terminal, sailed yesterday on the steamer Bolivar to make a reconnoitering expedition to the coast. They went as far as San Carlos and returned here today. Mr. Gudgeon said the party found no traces of revolution, and without doubt they are concentrated at the siege of Agua Dulce. According to the last reports, the soldiers of General Herrera, the revolutionary leader, had entrenched about 500 yards from the town, where they remained all day because the sharpshooters of General Bert, the commander of the government forces, picked off every man who dared to leave the trenches. The men are exposed to the rain and sun, and in government circles it is believed the position of Generals Bert and Morales is not desperate.

The British Cruiser Phaeton Left Here

hastily Sunday. It is believed she sailed for Havana, Ventura.

Nickels Will Cruise Along the Coast

WASHINGTON, Aug. 18.—A dispatch was sent today by the War Department to Commander Nickels, of the gunboat Topoka, now at Porto Cabello, giving him authority to cruise along the Venezuelan coast, stopping at such places as he may see fit. The centers of activity of the revolution now going on are not so far apart but that the Topoka and the United States vessel in Venezuelan waters will be available at short notice to render any protection to American interests.

Cumana Attacked.

NEW YORK, Aug. 18.—Venezuelan revolutionaries under the command of General Morales are threatening the town of Cumana, says a Herald dispatch from Port of Spain. General Velutini, who endeavored to reach Baranina before his capture by the insurgents, is hastening with his troops to reinforce the government garrison in Cumana.

Will Not Support Brotherhood.

NEW YORK, Aug. 18.—Patrick J. McMahon, of the Electric and Standard Engineers' Association, reports that his association has, by a unanimous vote, refused to support the Brotherhood of Locomotive Engineers in trouble. He was glad, he said, that there was no strike on the elevated railroads, but this would have restored him from his nervous prostration, is, indeed, to be pitied. "Cupidone is one of those stimulants and clearers that have the combined faculty of removing every obstruction from the nervous system, relieving natural vigor and vigor, and restoring the patient to that state of health that gives sunny days and rest to one's mind." Sold at S. G. Skidmore & Co., Portland, Or., for \$1 per box, or six boxes for \$5.

Plumbers in Session.

OMAHA, Neb., Aug. 18.—The annual meeting of the United Association of Journeymen Plumbers, Gas and Steam Fitters of the United States and Canada began in this city this afternoon.

Taken to Hospital.

One of the Saddle Cases Seen for a Long Time.

The man who is taken to the hospital today is supposed to be the "Cupidone" yesterday, when that act might have braced him up until the effect would have restored him from his nervous prostration, is, indeed, to be pitied. "Cupidone is one of those stimulants and clearers that have the combined faculty of removing every obstruction from the nervous system, relieving natural vigor and vigor, and restoring the patient to that state of health that gives sunny days and rest to one's mind." Sold at S. G. Skidmore & Co., Portland, Or., for \$1 per box, or six boxes for \$5.

Olds, Wortman & King

CORSET SALE

Unprecedented Prices on the Royal Worcester Values to \$18.00 for 89c--Wednesday Only

Considering the superiority of the ROYAL WORCESTER over all other corsets, the price we have put upon them for this one day only would have a tendency to create doubt in the mind of a buyer as to the genuineness of the offer. This is explained by the fact that these corsets on sale are discontinued lines which we desire to close out regardless of cost. They are as fine goods as we have ever carried in this corset. They are of black, white, drab and fancy colors, of saten, coutille, broche, Italian cloth, satin and beautiful brocade silk, in fifty different styles, including several of the bias cut, gored straight front. Sizes 18 to 36. The sale is but one day (Wednesday), and the price on every corset 89c



Crockery Department

We are selling a large collection of odd pieces of china and glassware at half price in order to close them out. These consist of berry bowls, fruit saucers, water bottles, toothpick holders, salt cellars, handled lemonades, china plates, sugar bowls, cream pitchers, tea pots, chocolate pots, olive dishes, bonbon dishes, celery trays, and remnants of almost everything else in china. We also have a number of damaged articles which will be closed out at a small fraction of their original prices.

Scissors and Shears

These are a standard quality of cutlery, warranted to hold an edge, and comprise every variety in nickel and japanned goods. There are shears, both straight and bent, and pocket, embroidery, trimmers, manicure, ladies' oval, barbers' and buttonhole scissors, all reduced. Shears, nickel-plated, 6-, 7-, 8- and 9-inch, values 25c, now 15c. Scissors, values to 69c each, for 39c. Scissors, values to 79c each, for 49c. Scissors, values to 89c each, for 59c.

Sheets and Pillowslips

Visitors to our linen department will do well to look at our bed linen. We are making a general reduction on our entire line of these goods.

Hosiery Sale

All those dainty hose in a large variety of styles, both black and colored, in the drop and lace stitch, solid and mixed colors, all with double, high spliced heels and French toe, values from 40c to 75c, all go this week 27c

Ladies' Neck Ruffs

New, dressy, and in such a variety of styles in black and white effects that every woman can find something among them becoming to her and to suit her purse.

Table Linen

Richardson's bleached satin finish table damask, in varied designs, regular price per yard, 90c, 81c, 76c and 67c

Dinner Napkins

Full size, in a variety of pretty patterns, reduced from \$2.50 doz., to \$1.95

Bedspreads

Full size Marseilles, regular price \$2.25, special \$1.75

Satin cameo, in handsome raised effects, reduced from \$2.00 to \$1.50

Towels

Hemmed linen huck Towels, 18x36 in., ca. 12 1/2c

Cotton Towels

Fancy Jacquard weaves, 19x40 inches, reduced from 12c each to 9c

Twil Toweling

5000 yards of Twil Toweling, soft and absorbent, per yard 3 1/2c

Bathing Suits

CLOSING OUT PRICES

Women's Suits

\$10.00 values for \$6.55

7.50 values for 4.68

6.50 values for 3.98

5.00 values for 3.25

3.75 values for 2.25

2.50 values for 1.75

1.50 values for 1.15

Misses' Suits

\$2.25 values for \$1.50

2.00 values for 1.35

1.25 values for .98

1.00 values for .75

Bathing caps and shoes at proportionately reduced prices.

Sale of Allover Lace

In handsome designs, for waists and yokings. Sale prices range from \$2.15 down to 79c

SCHWAB WILL RETIRE

HIS PHYSICIANS ADVISE HIM TO GIVE UP BUSINESS.

Mind of the Steel Trust President Appears to Be Affected—Will Sail for Europe in a Few Days.

PITTSBURGH, Aug. 18.—A special to the Pittsburgh Dispatch from Loreto, Pa., says: President Charles M. Schwab, of the United States Steel Corporation, has accepted the advice of his physician and decided to retire indefinitely from active business life. He will leave America to seek some quiet nook in a foreign clime where not an echo of the strenuous life he has led can reach him. This information is authentic. Dr. Golden never leaves the Schwab home, and the exact nature of his patient's condition cannot be learned through him. Mr. Schwab is not confined to his bed, but spends much of his time on the wide veranda, which affords fresh air and a sweeping view of the mountain slope. He is always with his wife or his parents.

The strange part of Mr. Schwab's illness is that he is always within view of those who call at his home, yet he will not allow any person to approach him. Here-tofore the visitor to the Schwab home was greeted with a hearty welcome, and a vigorous handshake. Now the visitors are met at the entrance and are told that Mr. Schwab cannot be seen. Intimates of the family receive the same information, and so one is able to converse with President Schwab since he came back to his home.

The presence of sisters belonging to the Order of Mercy at his home may be a night since Thursday was another indication of illness. The nuns were not veiled, but it is generally known that they are nursing the man who has so many times befriended them and their institutions.

"It was after learning that his health was very bad, and that he intended to devote a year's time to recuperation that I passed into the grounds leading to the home on the mountain top," says the correspondent. "Mrs. Schwab said that her husband would not see any person, and had not been seeing visitors for several days. Mr. Schwab sat on a couch within hearing of our voices. A paper was on the table. He exhibited no interest, and made no attempt to move.

"Business associates, it is said, have met with a similar reception during the past two days. Mr. Schwab has been directed by his doctors to bring his mind of all business cares, and he is obeying the order religiously. Inquiry among the people of the town who have conversed with the Schwabs fully corroborated the story that he intends to retire from active business life. His friends, however, declare that if he leaves the United States Steel Corporation it will be at the dictation of any other person than himself."

Schwab's Successor.

NEW YORK, Aug. 18.—The retirement of Charles M. Schwab from the presidency of the United States Steel Corporation is now commonly accepted as determined upon, notwithstanding recent official denials and present reluctance to official quarters to confirm the report. President Schwab's impaired health is the reason for this action.

In well-informed quarters it is believed that his retirement will be followed by extensive changes in the membership of the organization. The success has been official denials and present reluctance to official quarters to confirm the report. President Schwab's impaired health is the reason for this action.

can be had on the subject. But there are many positions of choice in the United States Steel Corporation being held by persons who are there on account of personal ties with Mr. Schwab and who remained with the corporation from a devotion to his interests, growing from former association in the Carnegie Company. It has been reported that the presidency would pass to James Gayley, the first vice-president of the corporation. Other rumors have pointed to H. C. Frick.

Not So Sick as Reported.

ALTOONA, Pa., Aug. 18.—C. M. Schwab, president of the United States Steel Corporation, was at Creson last night. Persons from this city who know him and who saw him say that he is apparently in good health. P. A. Schwab, an uncle of this city, who keeps in close touch with the magnate, declared that Mr. Schwab is not nearly so sick a man as has been reported.

"We are not at all alarmed about his condition, although he has been recommended to keep quiet and rest."

"Does Mr. Schwab intend to resign the presidency of the United States Steel Corporation?" was asked.

"Mr. Schwab will answer that question for himself when the time comes. What he has told me is in strictest confidence."

Schwab Going to Europe.

NEW YORK, Aug. 18.—It was learned tonight that Mr. Schwab proposes to sail for Europe Wednesday or Thursday. His friends stated that he was going to spend two months in England, France, Germany and Austria.

Changes in Chinese Tariff.

WASHINGTON, Aug. 18.—The new tariff

if treaty that has been signed by T. R. Shafer, United States Commissioner for tariff revision in China, and by the representatives of six other nations, charges the present ad valorem tariff of China to specific rates. This is in accordance with the protocol. The specific rate agreed upon is based upon the average value of products imported into China during the past 20 years. Under the terms of the protocol this change from ad valorem to specific rates does not need the signature of China. The change will no doubt make some slight difference in the rates of duty, but is not regarded as a revision of the tariff in any general extent.

It is expected that in a commercial treaty the tariff will be changed to a considerable extent. The commissioners on the part of the United States to negotiate this treaty are Minister Conger, Consul-General Goodnow, at Shanghai, and Minister Feeley. The treaty which they negotiate, it is expected, will be completed within a short time.

Blacksmiths Order a Strike.

NEW YORK, Aug. 18.—A strike was ordered today by the International Brotherhood of Blacksmiths and Helpers in all shops where an advance of 10 per cent in wages is not granted. The strike affects shipyards principally, and 1000 men employed in different yards cut work today.

"Eats Inwards."

Boston Journal.

An actor who was accustomed to spend his summers in Wilton, Me., noted when the custom was, a farmer "killed a critter," the liver, sweetbreads, kidneys, etc., were thrown away. He offered to purchase these delicacies, but, though he got the goods, the "sturdy farmer scorned

ARTISTIC PICTURE FRAMES MADE TO ORDER

EXPERT FRAMERS - BEST MOLDINGS - LOWEST PRICES

ANOTHER EXPRESS SHIPMENT OF CHIC, STYLISH, NEW AUTUMN-TRIMMED READY-TO-WEAR HATS

Lipman, Wolfe & Co.

NOVELTY FLANNEL WAISTINGS In Very Latest Striped Effects, 50c, 60c, 75c

BARGAINS FOR THIS WEEK AT

DRUGGISTS SUNDRIES

COUNTERS

Standard Goods Only, at Prices That All Shrewd Buyers Will Greatly Appreciate

Table listing various goods and prices: Winslow's Pure Glycerine 5c, Winslow's Glycerine and Rose Water 5c, Washing Ammonia, extra strength 4c, Pure Mixed Birdseed, lb 5c, Dickinson's Witch Hazel, large 15c, Lyon's Tooth Powder 11c, Pasteurine Tooth Paste 12c, Sazodont 15c, Arnica Tooth Soap 15c, Myrrh Tooth Soap 15c, Mennen's Talcum Powder 11c, Frostilla 14c, La Blache Face Powder 26c, Oriental Cream 95c, Espey's Cream 15c, Malvina Cream 20c, Malvina Lotion 29c, Camelline 29c, Pears' Fuller's Earth 14c, Ayer's Hair Vigor 62c, Carter's Hair Renewer 39c, 4711 White Rose Soap 10c, Packer's Tar Soap 11c, Pears' Glycerine Soap 11c, Pears' Unscented Soap 9c, Pure Castile Soap, 4-lb bars 35c, Pure Castile cut cakes, small 3c, Pure Castile cut cakes, large 6c, 10c Tooth Brushes 6c, 20c Tooth Brushes 8c, 25c Tooth Brushes 15c

50 PER CENT REDUCTION ON ALL BRISTLE GOODS

Table listing various goods and prices: Alcock's Porous Plasters 6c, J. & J. Belladonna Plasters 6c, J. & J. Strengthening Plasters 4c, J. & J. Antiseptic Absorbent Cotton, 1 oz, 2c; 2 oz, 4c; 4 oz, 8c; 8 oz, 16c; 16 oz, 25c, J. & J. Court Plaster, yard rolls 39c, Wilhoff's Safety Syringe \$1.50, Alpha Bulb Syringe 68c, Goodyear Fountain, 2-qt. 79c, Lady's Safety Syringe 59c

BULK PERFUMES

Table listing various goods and prices: Piver's La Trefle, oz. 49c, Piver's Aurea, oz. 49c, Piver's Rosiris, oz. 49c, Piver's Sen Teur, oz. 49c, Guerlain's Jlickey, oz. 49c, 4711 Perfume, all odors, oz. 29c

SPECIAL PRICES ON SPONGES, CHAMOIS, WHISK BROOMS AND TOILET ARTICLES

Petticoats

Made of fine mercerized black saten, deep pointed accordion-plaited flounce, trimmed with narrow ruffle, made over deep plain flounce, finished at the bottom with narrow full ruffle. 100 of these petticoats on sale at \$1.50

New Flannelettes

A grand collection of new Flannelettes for kimonas, wrappers, waists, etc., in Persian and striped designs; new shades and color combinations just received; now is the time to best make 12 1/2c

Laces and Embroideries

Table listing various goods and prices: 2500 yards Cambric Embroidery, regular 12c and 15c yard; at special, yard 9c, 5000 yards machine-made Torchon Laces, 1 1/2 to 3 inches wide, special, yard 3c

He proffered gold.

Not long after he observed as he walked through the village that he was the cynosure of all eyes, and was followed by a wondering, if not admiring crowd, chiefly of the young. "Aha!" thought he, "I cannot escape my fame; my glory as an actor has followed me even to this obscure hamlet." And he was mightily puffed up till he overheard one yodel shout to another: "Bill, there goes the fellow what eats inwards!"

A Wealthy Citizen.

"That man Moneybags has so much money he doesn't know what to do with it." "Indeed! How much has he?" "Well, I don't know exactly; but he's got so much he doesn't have to endow colleges to get his name in the paper." Baltimore News.

Professor Aganias Honored.

BERLIN, Aug. 18.—Professor Alex Aganias, the naturalist, has been appointed a member of the civil division of the Order Pour Le Merite.

Advertisement for 'FORCE' cereal featuring a cartoon character and text: 'Jim Dumps would swear at everything... That girl upstairs who tried to sing... The janitor out for "money or life"... The cook, who ruled both Jim and wife! But others now must swear for him; He swears by "FORCE"—he's "Sunny Jim"!'. Below the cartoon is the word 'FORCE' in large letters, followed by 'The Ready-to-Serve Cereal'. Text below: 'a toothsome food and a splendid nerve tonic. Sweet, crisp flakes of wheat and malt—eaten cold. Splendid for an invalid. We have used almost every cereal on the market, but none that is as good as "FORCE". Beef or chicken broth poured over "FORCE" makes a splendid meal for an invalid. The yolk of an egg beaten into hot milk and mixed with "FORCE" also beneficial to weak folks. (Gifts furnished on application.)'