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Rocky Mountain Husbandman

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The ROCKY MOUNTAIN HUSBANDMAN is designed to be, as the name indicates, a husbandman in every sense of the term, embracing in its columns every department of Agriculture, Stock-raising, Horticulture, Social and Domestic Economy.

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Agricultural.

There is still a show for the tiller of the soil in Montana to make money.

To raise a good crop it is absolutely necessary to get the seed in the ground early.

The farmers of the West and Far West are the best livers in the known world.

Every farmer should make a hot-bed and grow enough early vegetables for his own table.

The outlook for the Montana farmer is 50 per cent better to-day than three months ago.

We often hear of crop failures from too late sowing, but have yet to hear of the first instance of a failure caused by too early sowing.

The tables of some of the Helena hotels are being supplied with green salads from the hot-house of Abe Newbury, of Prickly Pear valley.

The signs of the times indicate that there will be such activity in the grain market this spring that it will so encourage the farmers that they will plant as large crops as formerly.

Those who have fall plowed land should have everything in readiness to commence seeding just as soon as the snow goes off and the ground is sufficiently thawed to admit of harrowing.

The farmer's table, as a rule, is supplied with the best the land affords, hence he who enjoys sitting down to a good meal three times a day for three hundred and sixty-five days in the year should follow the vocation of farming.

The supplies of grain for Forts Maginnis, Assiniboin and Shaw can be furnished by the farmers of the Judith, Sun River and Highwood valleys for this year cheaper than they can be shipped from the States.

As oats cannot be shipped by rail for less than \$1.80 per hundred, the farmers of Gallatin should find no difficulty in competing to supply Fort Ellis with all the grain it will need, and the farmers of the Yellowstone should likewise supply Forts Keogh and Custer.

The farmer who has not got his land prepared cannot sow early, and the difference he will see between his own crop and his neighbor's, who has made the necessary preparations should be a lesson to him in the future to prepare at least a portion of his land in the fall for early spring sowing.

SCOTCH FIFE WHEAT.

We copy from the *Dakota Farmer* the following on this subject, which is of the utmost importance to Montana wheat growers. There is no question but what Montana will grow as fine a variety of No. 1 hard wheat as Dakota or Minnesota, and there is no

doubt also that our farmers will make the experiment this spring. But since the average grain of this region is greatly mixed, so much so that it is difficult to get a genuine article of clean Scotch Fife wheat. The proposition of Mr. Hubbard is of much importance. Only last week a correspondent to the *Bozeman Chronicle* warned Montana farmers against the purchase of the common Scotch Fife of Minnesota, stating that it was not reliable. But if Mr. Hubbard can assist them in getting a genuine article, we have no doubt their efforts will prove a success. The *Farmer* says:

"In all the talk about wheat and wheat grades," remarks Mr. R. H. Hubbard, the general agent of the millers' association, "the fact should not be lost sight of that it has never been so clearly and forcibly illustrated as in the case of the present crop that the farmers sustain a direct loss and encounter additional dangers by not sowing hard wheat instead of the soft varieties now most in use. Owing to the great increase in the amount of soft wheat raised in the Northwest, hard wheat now commands a premium from 7 to 10 cents per bushel. In addition to this difference in value there is the great loss occasioned by the diseases to which soft wheat is susceptible and from which hard wheat is exempt. Scotch Fife is now the only recognized standard hard wheat, and this variety has never been known to smut, is just as prolific as other varieties when properly handled, is better adapted to our climate, and is the wheat to which we are indebted for the world-wide

eyes stronger the interior of a young wheat plant would not appear much unlike a barrel of potatoes, the potatoes representing the cells. The cells in the plant, much as the potatoes in the barrel, have empty or vacant spaces between one another. If we can imagine some slender plant growing up between the potatoes in the barrel and drawing nourishment from them, we will have a crude illustration of the manner in which the smut parasite attacks the wheat plant. When the wheat begins to head the parasite threads push their way into the young kernels and there find an abundance of food. Here the parasite reaches its highest development, and produces an abundant crop of its minor black spores to serve as seed for the next year's crop. A wheat kernel thus filled with spores is generally a little shorter and thicker than a healthy grain, and is always of a dark greenish color. Upon crushing it an offensive odor is given off by the black, dusty mass of the interior. If we put some of this black dust under a good microscope we shall see that it is made up of round bodies, the individual spores, which in these low plants answer the same purpose as the seeds of the higher ones. When the smutted grains are broken, as many of them are in threshing, the spores adhere to the tuft of hairs on the normal grains and are thus sown with the latter. It has been demonstrated repeatedly that the disease is propagated by the spores, and that the sowing of seed containing smut spores is followed under favorable conditions by a new crop of smut. When we come to

the best Scotch Fife wheat that is to be obtained—the pure, unadulterated and unmixable stuff. It is the best wheat in the world. We propose to offer it to the farmers for seed for just what it costs. If the farmers do not obtain it, it will not be our fault. Every facility will be offered them to procure it, and it will be sold at actual cost, for sowing purposes."

The Poultry Yard.

PECULIARITIES OF POULTRY.

It is hardly possible, says a correspondent of an esteemed Eastern paper, to select any one breed of poultry which can be relied on to give general satisfaction, i. e., one that makes good mothers and is also superior as egg producers. Of all the breeds known and generally raised there are but few of either class, light or heavy, and are kept by practical poultry-keepers who raise both chickens and eggs for market exclusively. These breeds are chiefly white and brown Leghorn, light and dark Brahma, Plymouth Rock and some of the Cochin varieties. Some of these, when crossed, make good sitters and mothers, as for example, a cross between Leghorns and Brahmas, or Leghorns and Plymouth Rocks. The Plymouth Rocks have been termed the farmer's fowl, because they combine in an unusual degree the qualities of good egg producers and mothers. But it is hardly possible to reach perfection in any one breed. Probably the

FEEDING TROUGHS FOR HENS.

The practice of throwing soft feed directly on the ground should at once be abandoned by every farmer and poultry keeper. It is extremely wasteful, as well as filthy to throw their food on the ground when it is soft or covered with poultry droppings. Whole grain, however, may be scattered on clean ground, or, perhaps better, if the hens are confined, it might be slightly covered with the soil, if it is dry, or with some other clean, dry material, and let the fowls scratch it out, as it will give them exercise. Feeding troughs should be constructed in such a way that the fowls may eat soft food without being permitted to get into it, to scratch or foul it in any manner. These troughs may be easily and cheaply made by the exercise of a little ingenuity, and the use of a few pieces of boards, lath and a few nails.—*Ex.*

The Household.

Rice Cake.—Mix two ounces of ground rice with six ounces of flour and one teaspoonful of baking powder; rub in gradually one ounce fresh butter and two ounces of sugar; beat up an egg in a quarter of a pint of milk, with a little lemon flavoring. Have ready some small putty pans well rubbed with butter; half fill each with the above mixture, and put quickly into a slow oven. Bake for half an hour.

Apples for Dessert.—Boil rice very soft and mix with it a well buttered pudding dish. Lay over it a layer of sliced apples, using an easily cooked, milky tart variety. Add another layer of rice and another of apples until the dish is full. Add a little water to keep the rice from becoming too dry on top, and bake until the apples are done. Or pare some apples and remove the core without cutting the apple in two. Fill and cover them with boiled rice, allowing a cupful of uncooked rice for each half a dozen apples; tie in a cloth and boil until the apples are done. Eat with cream and sugar. Another excellent dish is made by filling a pudding dish with sliced apples, dredging occasionally with flour as they are laid in the dish; then season with sugar, cinnamon and a few bits of butter, pouring in just water enough to make them moist, but not really juicy when done. Cover the dish and bake. When partly cool serve on plates, adding two or three spoonfuls of cream for each person.

Water Cake.—Beat two eggs with one cupful of sugar; add one and one-fourth cupfuls of flour, into which two heaping teaspoonfuls of Royal baking powder have been sifted. Stir all together. Then stir in one-fourth cupful of boiling water. Bake in three tins. When cool put together with jelly, or anything you prefer. If not wanted immediately, turn a flat gallon crock over it, and it will keep moist for several days.

Cookies.—Three cupfuls of white sugar, one cupful of butter, one teaspoonful of soda, dissolved in one cupful of cold water, 8 cupfuls (scant) of flour; nutmeg or caraway seeds. These are rich cookies. Bake quickly.

Corn Bread.—One pint of corn meal, two tablespoonfuls of wheat flour, 1 tablespoonful of butter or lard, 1 egg, 1 teaspoonful of salt, 1 quart of milk.

Fruit Cake.—Two cupfuls of sugar, two cupfuls of butter, one cupful of molasses, one cupful of milk, one teaspoonful of soda, five pounds of raisins, currants and citron.

Pie Crust.—Mix one cupful of lard with four cupfuls of flour and a little salt. Then sick it together with as little water as possible. Sufficient for four medium-sized pies.

Graham Sponge Roll.—Take a cup and a half of graham flour, three tablespoonfuls of hot water, one teaspoonful of saleratus, one cupful of sugar and three eggs. Beat the water and saleratus into the cup of sugar and stir them into the flour. Beat the eggs for ten minutes and add to it. Butter a long biscuit pan, and bake it thin for fifteen or twenty minutes. Turn out on a soft towel, spread jelly over it and roll up. When cool cut like jelly cake.

Biscuit.—Sift two heaping teaspoonfuls of Royal baking powder, with three cupfuls of flour, four tablespoonfuls of butter (less if lard is used) one cupful of lukewarm water and a little salt.

Fig Cake.—A cupful and a half of sugar, one cupful of butter, one cupful of sweet milk, two and a half cupfuls of flour, whites of eight eggs, three teaspoonfuls of baking powder, two pounds of chopped figs. Half of this makes a good sized cake. The figs that come in square two-pound boxes are the best.



MERINO SHEEP.—Property of C. M. Clark, Whiteoater, Wis.

reputation attained by Minnesota flours. Would it not be wiser to sow such wheat as is in demand rather than that which buyers and millers do not want? It is a fact well established that smut reproduces itself, and that the farmer who sows smutty wheat next spring will have no one but himself to blame if his crop was graded down on that account. The farmer ought to understand this, if he does not already. I came across a very clear statement of this fact to-day, made by Professor Bessey, of Iowa, in a letter to the *New York Tribune*. The matter is pertinent to the current matter, and worthy of republication. Here it is:

"The term 'smut,' is popularly applied to two quite different diseases of the wheat plant. In this country it generally means a disease which leaves the grain nearly its normal size and shape, but filled with a black dust of very disagreeable odor. It is a true disease, and like many diseases of animals and man, is the result of the growth of a parasite plant. This wheat parasite consists of slender threads of microscopic size, which insinuate themselves between the cells and tissues of the young wheat plant, drawing therefrom the nutriment matters, and thereby reducing considerably the general vitality of the affected plant. As is well known an ordinary plant consists of a great number of cells, each resembling a microscopic bladder, filled with protoplasm, water and some other substances. Were our

the question of preparation it is at once evident that whatever will destroy the spores or eliminate them from the seed wheat, will in so far lessen the liability to the disease. As the smutted grains are lighter than the normal ones, they can be floated out by throwing the seed wheat into water and violently agitating it. The common 'smut mills' of the miller may also be used, although in this case there is considerable danger of mechanical injury to the normal grains. In whatever manner the smutted grains are removed it must be borne in mind that many spores adhere to those which are not smutted, and those spores must be removed or destroyed or but little good will come from the operation. This last may be accomplished by the use of caustic lime, which may be applied in the dry state to the wetted wheat after the washing spoken of above. A solution of bluestone (copper sulphate) is also much used by English farmers for the purpose, and appears to destroy the life of the spores without injuring the wheat.

"Now, the millers are interested," continued Mr. Hubbard, "in the product of the best wheat. They are interested in it, if for no other reason, in behalf of the success which brings prosperity, and peace and harmony between purchaser and buyer. A great deal of the trouble with the wheat dates back to poor seed. The association has purchased and will continue to procure

or ten practical poultry-keepers are agreed that for eggs alone the best breed, where proper attention can be given them, is the Leghorn, either white or brown. Other breeds, as is well known, have proved in some cases equal to the Leghorn; but this is generally accepted as the popular breed for egg production. But as layers are useless with sitters and sitters are nearly always variable in temperament and value, one of the most important points for the successful poultry keeper to look to is the quality of his 'sitters.' Poetical as it may seem, there is an individuality about sitting hens. Nor does this individuality belong to any particular breed. Some hens will raise more chickens in one season than others will in a life-time. I have in mind a large hen of some indefinite cross-breed that would hatch and care for from fifteen to twenty chickens in a brood, and as soon as it was possible to leave them she would be found sitting again ready for another brood.

Another desirable quality in a sitting hen is that of a quiet temperament. And yet it is possible to have them too much so, for some of them are so stupid and indifferent as to crush both eggs and chickens without seeming to care. On the other hand, I have known a hen so nervous and excitable that she would crowd herself through a two-inch space in a coop on the slightest provocation.

It is very important that every farmer keep a good flock of poultry.