



**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.**

If the farmer does not sow he cannot expect to reap.

The outlook for farmers improves every day as the season advances.

The indications now are that 1884 will be fully as prosperous as 1883.

The farmer who grows a good crop this season at a reasonable expense will make money.

The exports of breadstuffs in January amounted to \$12,284,781, against \$15,835,577 in January, 1883.

Now is the time to bend every energy towards putting in the crop, for to have a good yield grain must be sown early.

The consumption of all kinds of farm produce—grain, vegetables, butter and eggs, will be much greater this year than last.

The prospect is that we will have an early growing season this spring notwithstanding the warm weather did not set in quite so early.

LIMA beans are grown more successfully if planted in rows, seed six inches apart, than if planted in hills. The rows should be about three feet apart.

It is a mistaken notion that the time has gone by for the Montana farmer to make money. There is still a show for him to grow wealthy at his occupation.

In the spring time is the time for the farmer to rustle. Let him get his seed in the ground and take his leisure while it is germinating and growing.

The duller day for the Montana farmer has gone by. Prosperity is rapidly returning, and though we may never realize "old time" prices, we believe it is still as good a business as any in the Territory.

J. G. PICKERING is sowing the White Russian oats this year. He has tried many varieties and finally settled upon the White Russian as the best. His reasons are that it is very prolific and the grain soft.

Last fall there was a great outcry among the farmers that the railroad had killed their market. This seems now to have been a mistake as the valleys traversed by railroads have a better market than those that have not this advantage.

A Boston gentleman who has traveled extensively throughout the United States was heard to remark a few days since that the potatoes he had eaten since he had arrived at White Sulphur Springs surpassed anything he had ever before tasted.

Our correspondent writing from the Bitter Root valley, says that the farmers of that section prefer to raise spring wheat. Some winter wheat has been sown by a number, and is being grown as an experiment, but there are no large fields of it.

One reason why better crops are not obtained is the failure to pulverize the soil sufficiently fine in preparing it for seed. Just in proportion to the fineness of this pulverization is the soil in condition to give to the growing plant the food and nourishment which it requires.

Every valley presents a scene of life and activity. Farmers in all quarters are busy plowing and sowing. Four-horse gang plows, three-horse sulky plows, broadcast seeders, drills, and harrows may be seen moving over the fields in any direction one may look, and a bountiful harvest and a well filled purse is expected.

An acquaintance of ours who is well posted in farm matters, has examined the Welcome oats, about which so much noise is being made, and asserts that he would not give twenty cents a bushel for it for feeding purposes. He says the hull is entirely too thick and hard. He has thoroughly satisfied himself in regard to the quality of the oats.

One certain cause of the deterioration of crops, one to which enough importance is not generally given, is the planting of *improperly cleaned seeds*. An old farmer of fifty years experience says that he is positive that a correct statement of the yearly loss from the planting of foul seed would be a surprise to many, and knowing the loss resulting from the production of a large proportion of weeds, he is surprised that more care is not taken to plant clean grain, when this can be accomplished with a little extra labor at the fanning mill.

A WRITER in the *Ohio Farmer* says that he is not an old wheat raiser, but has not lived these last few years to no purpose, and thinks he has struck the keynote of success in raising wheat in a thorough fitting of the soil before sowing the seed; and he is convinced that a poor piece of land, dragged, rolled and then refitted until the ground is as mellow as an "ash heap," will produce a better yield of wheat than a rich piece of land poorly plowed, half dragged and the seed scattered among the lumps and clods, and a portion of it without covering or any chance to germinate and obtain a hold.

If Montana farmers will plant a good quality of potatoes on new land, plant them early and water and cultivate them judiciously, we believe the experiment of shipping potatoes east may be made in a small way this fall. There is a question as to the superiority of the quality of the tubers grown in Montana, and we believe they will command a price in advance of the States grown product sufficient for them to bear shipment east. There will of course be a large demand at home for this product, but if we can develop a market for it in the eastern cities, the annual product can be doubled at a very small outlay of labor, and potatoe growing may be made very remunerative.

**VITRIOLING WHEAT.**

For good yields, and to make the best brands of flour, the wheat must be entirely healthy and free from smut. To arrive at the best plan for cleansing the wheat has cost much experimenting, and it has been the hardest task that our Montana farmers have had to contend with, but those best informed agree that it is an easy matter to do this; that wheat may be kept clear of smut and made hardy by a little painstaking with the seed before sowing. Some farmers destroy smut by the use of lime, but blue vitriol is the most common in use, which is believed to give health to the wheat growing, as well as to cleanse it. The practice of spreading a pile of wheat on the floor and sprinkling it with vitriol water which is adopted by some, is wholly disapproved by our best farmers. The reason assigned is that it is irregular. There will be spots in the wheat that the vitriol will not reach, and therefore the smut germs cannot be destroyed. The best method in use for completely destroying the smut is to thoroughly soak the wheat in vitriol water. To do this, take a whiskey barrel and saw about one-third of the top off. Set it in a room at a convenient place for shoveling in the wheat. Fill the tub two-thirds full of water and stir in enough blue vitriol to give sufficient strength that it will slightly color the wheat, using one pound of vitriol to about eight or ten bushels of wheat. Take a scoop shovel and throw in about one and a half bushels of wheat; stir, and let it remain two or three minutes. Then

remove the wheat to a large willow or split basket, which must be set near the tub on a wide board arranged with grooves on it, so as to lead the vitriol which drains from the basket back into the tub. While the tub is being filled with wheat, that which was first put into the basket will be sufficiently drained to be dumped in a pile upon the floor. It is a good plan while the wheat is in the vitriol to take a skimmer and skim off the dirt which arises to the top. Continue to repeat the operation of filling the tub and then emptying the wheat into the basket, letting it drain and then pile on the floor. This will enable you to thoroughly clean the wheat.

Proceeding in this manner one man can vitriol very rapidly. About one bushel of the wheat should be put in at a time, and ordinarily it should remain in the tub about five minutes. It, however, the wheat is very smutty, it will be necessary to use a little more than a pound of vitriol to the bushel, and to allow it to stay in the tub a little longer than above stated. This depends entirely on the condition of the wheat. The amount that can be vitrioled in a day also depends on the condition of the wheat. The great object should be to thoroughly cleanse it. The wheat may remain in a pile on the floor four days without injury, but it is well to put it into sacks within twenty-four hours after soaking. When it is to be sown with a seed drill it will be ready the following day, but if to be sown by hand the wheat need not remain in the pile more than three hours. This method of preparing seed wheat is used by John G. Pickering, of the Missouri valley, who is the largest and one of the most successful wheat growers in Central Montana. The contrivance for wetting the wheat is his own invention, and it has been adopted by a number of persons who speak approvingly of it. Mr. P. keeps his fields clear of smut, raises good crops of wheat, and puts from year to year, good brands of flour upon the market. He also produces good oats and barley, and one of the great secrets about it is that he cleans his seed thoroughly. He uses his best grain for seed, and vitriolizes both wheat and barley before sowing. The proceeding is precisely the same as with wheat. His fields become very foul several years ago and he adopted this plan of cleaning and is entirely rid of smut.

**ERGOTISM.**

The late sensational reports of the appearance of the foot and mouth disease in Kansas having been satisfactorily exploded by the surgeons who investigated the matter, the following notes of the real trouble may be of interest to stock raisers. The examiners decided that the direct cause of the loss of feet and limbs is from freezing, being rendered sensitive to the cold for want of circulation in the extremities, which was retarded by the ergot poison contracting the blood vessels. The highest authorities agree that ergot, when taken as a poison, produces the disease known as ergotism, and this disease is of two kinds—spasmodic or convulsive, and the gangrenous. The symptoms in man of the spasmodic form are, irritation of the skin, coldness of the body, cramps and numbness of the limbs, and pains in the head and back, followed in from one to three weeks by gastralgia, giddiness, fainting and convulsive movements of the muscles; frequently the skin becomes spotted with vesicular eruption. Great exhaustion and craving for food ensue. The gangrenous ergotism begins with weariness and pain of the limbs; the skin grows dull in hue, and at last dry gangrene attacks the extremities, and when death does not supervene, the parts affected are generally lost. The poisonous action of ergot on various animals has been shown by the celebrated chemists, Boujean, Diez, Gross, Parola, Wright and others. Boujean was the first to produce the extract known as "ergotin," used in medicine to check hemorrhage. Ergotism in animals is found to produce the following symptoms. It causes first: redness of the eyes and ears, then coldness of the limbs and swelling of the joints, and finally gangrene of the extremities and intestines, and death during convulsions. The highest authority on the subject is that in animals gangrene always attacks the legs, resulting, whether in warm or cold weather, in the sloughing off of the parts affected—the same as the telegraph has informed us is the case with the cattle disease in Kansas. Ergot is of a parasitic origin, attacking rye principally, but also some other starch-producing cereals. When this vegetable parasite begins to perform its work in the ear of rye a fermentation takes place, and

there exhudes from it a sweet yellowish mucous, which after a time disappears, the ear loses its starch and ceases to grow, and thus by a chemical change the rye is transformed into ergot which, according to the same authorities, has power of reproduction, especially when it falls upon wet earth. Hence it may be scattered and spread in various ways—in the shipment of hay or grain in which it is found, or the moving of cattle which have fed on it. The ergot grains have usually marked features which distinguish it from rye, principally in this—the entire absence of all starch, it is hard and brittle, it has two lateral furrows, while rye has only one, a disagreeable rancid taste, and it has a faint fishy odor. Many of the most serious epidemics in both man and beast have been traced to ergot poisoning, the latest of which among the human family, of which medical authority gives any account, was in Loraine and Burgundy in 1816, which swept off thousands of their inhabitants. This epidemic was directly traced to ergotized rye flour. The rye being raised in damp, cold soil, which condition of the soil is found to be particularly favorable to the reproduction of ergot. Whether "gangrenous ergotism" is contagious or not, that is, whether it can be transmitted by contact, carried in the clothes, or by contact between animals, is, according to latest authorities, left in doubt. All agree it is epidemic, however, attacking large numbers at a time, and covering large areas of territory.—*Breeder and Sportsman.*

**The Poultry Yard.**

Eggs always command a good figure.

LIME sprinkled about chicken roosts, it is said, is a good preventative against lice.

Thin shells are caused by a lack of gravel, bones, etc., among the hens laying the eggs.

A LINING of tarred paper in poultry houses is recommended as a preventative for lice.

MANGEL-WURZELS are economical food for poultry, boiled and mixed with middlings.

NO MORE profitable employment can be found in the Northwest than the establishment of good poultry yards.

A KETTLE of boiled potatoes, with a sprinkle of meal, will be found a very good kind of feed for all kinds of poultry.

POULTRY demands good care and good feed to be profitable; and to succeed in raising poultry a judicious system of feeding must be followed, for fowls will not pay if half starved, and their condition is not much improved when over-fed, for they will soon become fat, lazy, and useless both breeding and laying.

FARMERS as a rule are too liable to neglect their poultry, and let them shift for themselves, and as a result their poultry yard is generally composed of old hens or late hatched pullets, or both; and even if one of the old hens should bring off an early brood, a little neglect during the cold, wet weather of early spring will generally prove fatal to the tender chicks. A little experience will soon show that one cannot afford to neglect his poultry, for there is no animal on the farm that feels the effect of careless management so quick as a laying hen; and take a lot of hens in good laying condition, even of some of the best improved breeds, and a little neglect on the part of the keeper will soon shut off the supply of eggs.

**EGGS WITH A DIFFERENCE.**

The difference between an egg laid by a plump, healthy hen, fed with good, fresh food daily, and an egg laid by a thin, poorly fed hen, is as great as the difference between good beef and poor. A fowl fed on garbage and weak slops, with very little grain of any kind, may lay eggs to be sure, but when these eggs are broken to be used for cake, pies, etc., they will spread in a weak, watery way over your dish, or look a milky white, instead of having a rich, slightly yellow tinge. A "rich egg" retains its shape as far as possible and yields to the beating of the knife or spoon with more resistance, and gives you the conviction that you are really beating something thicker than water or diluted milk.

But the proof of the egg is in eating it boiled. We fear few of our city friends know the luxury of perfectly fresh, well

conducted eggs—eggs that contain the concentrated and refined essence of Indian corn in a finer state than any boasted "maizena" or "corn starch" offers us, with a touch of phosphate from the wheaten bran, and an indescribable flavor, composed of delicacy and deliciousness, which must be enjoyed in order to be understood. But when you get such an egg, "make a note" of the true way of cooking it. Do not, like the absent-minded philosopher, put your watch into the sauce-pan and hold the egg in your hand to see how long it should boil; but have a covered bowl filled with boiling water. When you sit down to breakfast see that the bowl is emptied of the partly cooled water, your eggs put in, and the bowl filled at once with boiling water to the brim, the cover placed over it, and in nine or ten minutes, by your watch, remove the eggs to your plate, and with some nice butter and a slice of good try toast, it will make a breakfast that an epicure might envy.—*Poultry World.*

**The Household.**

**ABOUT BISCUITS.**

There is a legend current among housewives that the ability to make good biscuits consists not particularly in recipes or experience, but in a certain mysterious power called knack. And furthermore, one must be resigned to the fact that this most enviable star is variable, and one must be prepared to endure complacently at any time a suspension of good luck. For instance, if your biscuits are not perfect you have only to say, "I generally have nice biscuits, but now for a few days I have had bad luck" and your company are satisfied that you have done your best, having only to regret that they called at the wrong time. It is also widely known that when the housewife puts forth her greatest efforts to present a sample of fine biscuits on the occasion of some particularly distinguished callers, that they generally lack just a little of being dismal failures. Then, also, when there is no one to get lunch for but the baby and the dog, lo, they come out of the oven wonders of perfection.

I was about six years learning to make biscuits, during which time I never partook of a palatable one at the house of a friend but what I would say, "Your biscuits are beautiful. Won't you tell me how you made them?" I would invariably receive general directions about as they are given on the yeast powder cans, and the added and emphatic sequel, "but then it's all in the knack." During my experience I tested the virtues of a great many recipes, and made samples of all of them. One said, "mix soft and quick." I was soft enough to do so, and my result was a pan of something like compressed pancakes. "Have the oven very hot." I did, and my biscuits appeared well blacked for a performance that did not take. "On account of the adulteration of yeast-power, use double quantity." I "doubled" with no result. "Use plenty of lard and butter." I used these melted indigestibles until the family announced that they were hygienically "used up." "Use no shortening." I did just so, and when I put the biscuits out for the dog he gave me one sad look and went away without his luncheon. Finally I was initiated into a rational way of making biscuits. My benefactor came to the house to have charge of things while we were all away. We returned unexpectedly one day and found him kneading at the table. "What are you making bread?" I said. "No, biscuits." "Why, I never saw any one knead biscuits." But he kept on kneading all the same, till I saw that this dough was as puffy and spongy as yeast dough. When he placed them in the oven, which was as cold as we generally have it for yeast bread, the heat of the oven was slowly increased till the biscuits were brown. All this was new to me, but the result was something surprising. The biscuits were white, flaky, tender and light as French rolls. My benefactor said: "You want to use just two teaspoonfuls of yeast-powder to a quart of flour; mix well with the dry flour. Use butter or cream; mix them hard enough to handle, using cold water or milk. Knead them well until a dent made with your finger rises quickly. Let them have a chance to raise in the oven before you get it too hot. Don't get worried, but take your time. Then, if they are not good, blame the groceryman.—*Cor. Rural Press.*