



Rocky Mountain Husbandman

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R. N. SUTHERLIN, Editor

W. H. SUTHERLIN, Associate Editor.

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.

The grain market is still good.

MONTANA fields are burdened with the harvest.

POTATOES should be dug and put in a safe place by the 29th day of September.

THE milling quality of late wheat is often impaired by frost after it is in the sheaf.

THERE is no danger of fall and early spring grain being injured by frost any season.

It is a beautiful sight to look over the grain fields of our valleys at this season of the year.

NOW is the time to speed the plow and get the ground ready to receive the seed next spring.

It is said that the agricultural implement manufacturers, in the single city of Chicago used up annually over 20,000,000 feet of lumber.

FARMERS who do fall plowing, can always get their crop in early, and consequently have an early harvest and get their work through so as to plow in the fall another year.

TOMATOES, cucumbers and other tender vegetables are often protected from frost and kept bearing until freezing nights by covering them with straw. The straw, of course, should be removed during the sunny portion of the day.

A PROMINENT farmer of this valley gives it as his opinion that fruit trees are generally killed by the reflection of the sun's rays on the snow. He thinks it may be prevented by spreading straw over the snow about the tree when spring begins to advance.

PRESIDENT ABBOTT, of the Michigan Agricultural College, states that not less than fifty per cent. of the graduates of that institution adopt farming or some kindred occupation as their calling, and that of those who spend but a year or two at the college, a very much larger number return to the farm.

J. N. MUNCEY, Assistant in the Experimental department of the Iowa Agricultural College, has experimented with five different sized potatoes to determine the number of bushels in a bin, resulting in this approximate estimate: For every 2,150 cubic inches 47.6 pounds can be allowed as a basis to calculate the number of bushels.

Do trees winter kill from not being sufficiently ripe, or is it from a lack of circulation? We listened to a lively discussion on this subject the other day. One party argued that the tree should be dried and allowed to ripen, the other that it should be kept reasonably moist. It occurs to us that a few years of experimenting would soon settle this matter. It is certainly very important that the facts should be ascertained.

THE London Garden: "Prof. F. Grace Calvert has discovered that the carbonates of potash and soda possess the same property of protecting iron and steel from rust as do these alkalies in a caustic state. If an iron blade is immersed in a solution of either of these carbonates, it exerts so protective an action that that portion of the iron which is exposed to the influence of the damp atmospheric air does not oxidize, even after a period of two years. Similar results have been obtained with sea water, to which have been added the carbonate of potash or soda."

THERE is much difference in opinion as to the best time of the year in which to plow different soils. Many farmers are willing to admit that fall plowing is desirable upon heavy soil, but contend that spring plowing is best upon light soils. All are willing to grant that the tenacious character of a clay soil is reduced and its texture opened and rendered less compact by the operation of frost. The lumps fall apart and are disintegrated by the mechanical effect of expansion, caused by the freezing of the water held between the particles. The field, which was left by the plow in a mass of lumps, is mellowed and brought into condition through this influence, which any amount of plowing and harrowing would have failed to bring about.

In an address read before the annual Agricultural convention of Indiana, in January last, the Hon. I. D. G. Nelson, Fort Wayne, Ind., declared that the magnitude and commercial value of the grass crop of this country is greatly underestimated. Leaving out d-tails, it may be said that grass furnishes, directly and indirectly, the life-sustaining food of the world, for without its renovating effects the soil would soon be a barren waste. Neither grain nor vegetables could long be produced if there were no grasses. Clover and grasses of themselves enrich the soil, and cause it to produce abundantly, while all grain and vegetables impoverish it. Nothing we eat or wear is independent of the successful growth of the grasses; and no country or community is prosperous which does not produce them abundantly.

It is surprising, says the New York Husbandman, that any writer who has common sense should advise using Paris green on edible plants, but such recommendations have gone to the public in the columns of agricultural papers. We have also reports of cases where persons have been made seriously ill by eating vegetables on which poison had been used to rid them of insects. Paris green on cabbages will destroy worms that bore into the head; but the heads saved by such means are certainly unfit to eat, no matter how much boiling or other preparation they may have. Let it be known that market gardeners rely on poison to free their cabbages from worms, and purchasers will refuse the fatal viands, for there will be no safety in using them. Whatever goes on the table should be innocuous, at least to the extent that nature makes it so. It is bad enough to mix hurtful substances in flour, sugar, tea and other prepared articles of food or drink, but when vegetables that cannot be adulterated are deliberately poisoned, it would seem that life has a poor chance at the table. Leave the fruits and garden stuffs as they are made and there will be safety in eating; but with poisons, no matter how used, there can be no safety.

THE FENCING OF THE GREAT PLAINS.

Another change in the methods of cattle raising on the plains is the outright ownership and the fencing of lands. In the wild herding of the past it has never been considered necessary to own a foot of land.

The most that was done was to secure a water privilege—that is, to locate a strip of land along a river or inclosing a spring. But with the great increase in business, the constant arrival of new cattlemen and the formation of companies backed by large amounts of capital, it was inevitable that clear titles to the ranges and indisputed possession should be demanded and obtained. This process is going on to-day. Large strips of land are purchased from week to week, and small herders who have been grazing on them are forced away. In this State many of the ranges are being fenced, although in the extreme western part there are still large sections of free land. Of Texas a stockman says: "Texas will place her public lands on the market at an advanced price and in a more systematic manner. Several entries have been made in anticipation of this change—one of 60,888 acres, to be stocked with cows and Hereford bulls—another of 100,000 acres, which will be fenced—but one of the largest tracts ever obtained from Texas was one of 3,000,000 acres, the consideration for which was the building of a state house to cost over a million dollars. This tract, thirty miles wide and one hundred and fifty long, runs south from Pan Handle and along the New Mexico line. These ranges, with those in New Mexico, to be available, must be fenced in large tracts." While the ranges have been open the cattle have wandered for hundreds of miles, gathered up only in the spring at the round ups. Under such conditions the business has been highly profitable, but far better results are looked for under the new dispensation, when the ranges are fenced, grazed by improved cattle and not overstocked. But the transition involves some curious features.—N. Y. Tribune.

THE annual value of the poultry and eggs consumed and sold in the United States amounts to the sum of \$475,000,000, or more than any other product except corn, which is only about five million of dollars more. The quantity of eggs which are imported yearly amount to millions. There is ample room for more poultry producers. The business of egg-raising lacks systematizing and organization. Why should we import eggs?

The Poultry Yard.

GOOD results may be obtained by using Leghorn cockerels with hens of the large breeds. The cockerels from the large breeds should not be used until about the first of the year, in order to give them time to fully mature.

ONE pound of good, sound wheat, though seemingly costly as compared with screenings, is really worth more than two or three pounds of the latter, as more nutriment is contained in a pound of wheat than in several of screenings. It is not economy to feed inferior food to fowls, especially at this season.

T. S. Gold, of West Cornwall, Conn., says that the worm which produces gapes in chickens is propagated in the ground. He has grounds so infected that it is impossible to raise one out of a dozen chicks when allowed to range on it, while adjoining fields are entirely free from the malady.

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FARMERS who have kept a strict account with their stock say that a pound of poultry can be made for less than a pound of pork, yet the laboring man who has to buy both feels that he cannot afford to buy poultry very often, as it costs more than other meats. This leads the Concord Monitor to remark that the poultry-growing business may be much extended before the market will be over-stocked so as to bring the price down to where it will not pay to raise.

THERE is really no such disease among fowls as diphtheria, but there is a disease somewhat analogous to it, though it is only one of the forms of roup. Roup is among fowls what colds are to humans. It therefore comes in many shapes, being the result of dampness and exposure. No medicine is equal to warmth, and the disease is not contagious at all times. In what is styled diphtheria the symptoms are very similar

to that disease, even including the white lining of the throat. Hyposulphite of soda, given in solution, a teaspoonful three times a day to each fowl, is an excellent remedy, but when cases of roup reach such severity as to become of a contagious nature, there is nothing so good as an axe and a deep hole.

HOW TO AVOID DISEASE.

Your chickens frequently die, and it is almost an impossibility to raise every chick that is hatched, more especially where the broods are large. It does not follow that whole broods should be lost. That so many die is the result of carelessness and negligence. Unforeseen accidents happen in every one's experience, but can be avoided the second time. The gapes is not the worst disease known to the fraternity, for when this difficulty is once thoroughly understood it may be avoided. There are always some weak, puny birds among the broods, that can never reach healthy maturity. It is better for these to drop off while young, as no amount of care or nursing can be of avail. The strong, robust ones can be raised. To avoid weakness, which is the handmaid of disease, the fowls should not be closely bred. In order to secure strong chicks from the start, the breeding birds should be young, and in full vigor. They must be well fed and cared for. Then the chicks come from the shell strong and active. To avoid weakness, feed this strength with strong, hearty food.

Eggs from well kept hens are better than those from poorly fed fowls; therefore, it is better to keep the fowls well. If the chicks are well fed, and kept dry and warm, they are proof against all disease. It is only the poor, half-starved ones that are attacked with disease. A strong, vigorous constitution will withstand a good deal. Moistened meal, as many young beginners are apt to think, is not good food for them. It is almost an impossibility for them to endure it day after day, even if freshly wet, and not in an acid and fermenting state. Chicks should be given whole grain, and fed corn as soon as old enough to manage a kernel, which they will do quite young. Strong, hearty food is sure to prevent gapes, and full crops keep the young blood in rapid motion.

Strength and activity keep the animal's blood in motion, and this promotes growth. All of this is brought about by giving good food, and keeping the chicks clean, dry and warm. Anything which retards growth and interferes with temperature and action, promotes disease. Any dampness of apartments where the fowls are confined at night or throughout the day, brings on roup, which is often incurable. Dampness and cold, chilly quarters provoke the gapes, which often ends in death. Chicks can endure quite a degree of cool air, if it is dry, without receiving injury, but dampness and cold are almost sure death. The diseases to which chickens are subject may all be avoided with care and forethought. Fowls are regular in their habits, and strict regularity should be observed in feeding.—Covr. Country Gentleman.

FEEDING CHICKENS IN AUTUMN.

To get early chicks in the spring many persons will begin to hatch them late in the fall, and as no greed stuff will be within reach, the matter of feeding the young chicks is something that requires consideration. The chief difficulty is that the chicks die from constipation at about the age of two weeks. They will often grow well at the start, appear active and lively, and with seeming health in every respect, begin to droop and die.

The first point to be observed is regularity in feeding. There should be certain hours, and the chicks should have all they can consume without waste. For a large number of young chickens chopped eggs are expensive, but if a few eggs are mixed with milk, the mixture slowly cooked, and oatmeal added while cooking until it thickens the mass stiffly, a good food will be prepared. Let it become cold, and then crumble it into little pieces for them. This makes a good morning meal and should be

followed by potatoes and cornmeal mixed. Scald the meal first and add the potatoes. Chopped cabbage, onions, turnips, or any other vegetable may be fed in a raw state, but such food should be chopped very fine. The last meal should comprise wheat screenings, to which may be added seed of any kind, such as millet. This allows four meals daily and will answer well for the first week. After that time the eggs may be omitted, and bean soup thickened with oatmeal and cornmeal substituted. Occasionally the second meal may be composed of clover tea thickened with corn meal and a little rye or wheat flour. As the chicks get older, feed whole corn and cracked wheat at night. At all times there should be within easy reach of the chicks finely powdered oyster shells, bone meal and screenings. The water should be clean and the feed should be given in little troughs or on boards. By thus giving a variety at regular hours, and often, the chicks will thrive because all the wants of the system will be supplied.

The Household.

OPALIN CAKE.

This very delicious cake consists of five parts, and can be baked in layers, or as marbleized cake. It makes a large handsome cake either way:

Yellow Part.—Yolks of four eggs, one cupful of sugar, two tablespoonfuls of butter, half a cupful of milk, one and one-half cupfuls of flour, and one teaspoonful of baking powder. Flavor with orange.

White Part.—Whites of four eggs, one cupful of sugar, two tablespoonfuls of butter, half a cupful of milk, one and one-half cupfuls of flour, and one teaspoonful of baking powder. Flavor with pineapple.

Brown Part.—Yolks of four eggs, one cupful of sugar, two tablespoonfuls of butter, half a cupful of milk, one and one-half cupfuls of flour, and one teaspoonful of baking powder. One cake of sweet chocolate grated, and one teaspoonful of vanilla.

Red Part.—Whites of four eggs, one cupful of sugar, two tablespoonfuls of butter, half a cupful of milk, one and one-half cupfuls of flour, one teaspoonful of baking powder and one tablespoonful of blush, flavored with rose. This may be made a more delicate shade of red by using half the quantity of blush.

Lavender Part.—Two eggs, two cupfuls of sugar, two-thirds of a cupful of butter, half a cupful of red raspberry jelly, dissolve in hot water sufficient to make a cupful of liquid, three cupfuls of flour and one teaspoonful of baking powder.

Baked Berry Rolls.—Roll biscuit dough thin in the form of a large square or into small squares. Spread over with berries. Roll the crust and put into a dripping pan close together until full; then put into the pan water, sugar and pieces of butter. Bake them. Serve with any of the pudding sauces.

Potato Puff.—Dress three cupfuls of well-boiled and washed potatoes with salt, butter and cream, making them moist. Beat well with an egg whisk, and when light and smooth, add three eggs well beaten separately. Beat again thoroughly, pile high in a dish, and color in a quick oven.

Salad.—A very good salad may be made of cucumbers and tomatoes. Line the salad bowl with lettuce and fill it with sliced tomatoes and cucumbers in alternate layers, with salt, sugar and pepper on each layer, and cover with salad dressing.

Barn Meal Zephyrs.—One full cup of Indian meal, two scant cups of boiling water, one tablespoonful of butter, two of sugar, a little salt, two eggs, the yolks stirred into the batter, the whites whipped light and added the last thing. Bake in heated gem irons in a quick oven. Use no baking powder or soda.

Rice Pudding Sauce.—A large coffee cupful of sugar, one-fourth pound of butter, beat till very light, break in one egg beat very little, after the egg is in add one glassful of brandy or wine. Steam or use cold.

Bread Pie.—Soak a slice of very light bread in a pint of rich milk. When it is quite soft, beat it through the milk, adding a well beaten egg and four tablespoonfuls of sugar. Flavor with nutmeg. Bake in a rich crust and you will find it delicious.