



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.

RIPENING berries and blooming roses beautify our mountain dells.

For the genuine luxuries of life, go to our green country homes. No people in the land live so well as they.

UP-LAND hay is decidedly the best for horses, and everyone who keeps a team for service should have hay of this kind.

We anticipate that the grain market this season will be very steady, and prices will range about as now; possibly a shade lower.

THE harvest is well under way in the great States east of us, but it will be several weeks before the sickle will be a broad in our Montana fields.

THE small fruit crop of Montana this season is very prolific. Every stream is lined with gooseberries, and every mountain slope with strawberries.

If the farmers would only look at the large number of fish that are being deposited on their lands by irrigating, they would see the necessity of screening their ditches.

NATIVE grasshoppers have done considerable damage in the Missouri valley. A 60-acre wheat field of E. P. Smith's, a few miles from Canyon Ferry, was completely destroyed by them.

A MAN at Hawkinsville, Ga., has started an opossum farm. His acres are stocked with them and fenced with wire netting, and as the animals breed rapidly and find a ready sale, he expects to make it pay.

WILD hay makes a very good feed, but the average meadow is so mixed with fox-tail and wire grass that the general hay crop is not first-class, and the necessity of cultivated meadows becomes very apparent.

HAYING time is nearly here and ranchmen should put up all they can. The consumption is increasing every year and the time is not far distant when it will be considered the most profitable crop that can be grown.

THE giant grape vine of Santa Barbara, California, has become celebrated, but a younger vine near it threatens to suppress it. It is twenty-five years old, has a circumference of three feet and eleven inches, and in 1882 bore over three tons of grapes.

A GLANCE at Montana farms clearly reveals the fact that the best meadows are those that have been made so by irrigation. Our bench lands, when well irrigated, will the second year produce from one and a half to two tons of blue-joint hay. And this is the best grass that Montana produces. There is no good reason why every farmer may not have a meadow of this kind. One ton of this kind of hay is worth two tons of slough-grass hay for horse feed. Timothy might be quite as good and yield more than blue-joint, but to produce it the land must be properly seeded. In the case of blue-joint seeding is unnecessary.

AN expert in strawberry culture asserts that in transplanting the strawberry the runners should be left on to the length of six inches. The ends of the runners are then to be bent down and buried with the roots, and act as suckers to draw nourishment to the plant until new roots are formed. In this way, he contends, plants will thrive under conditions which would otherwise prove fatal.

THE fruit orchard of J. V. Stafford's on the Missouri valley is one of the finest in all Montana. He is now marketing from one hundred to three hundred gallons of berries per week. He has in addition to a large small fruit orchard a number of very promising apple trees, of which fully sixty are bearing this season. Some of them are large varieties. Mr. Stafford is fully satisfied that he can make fruit growing a success and thinks his only mistake was in not commencing it ten years earlier.

EXCELLENT feed for horses may be made of barley cut when partially headed out. After cutting allow it to cure and then stack in small stacks. A number of our farmers are in the habit of cutting and curing both wheat and barley in this manner. A second crop may be easily raised by flooding the stubble immediately after raking up the grain. Cut it about the first of August, or earlier if far enough advanced, and there will be plenty of time for the next grow to come before cold weather. We advise farmers when their grain is thin and heading out short, to cut it and raise a second crop. In the second growth several stalks will come from one. Considerable hay may be made in this way from thin spots in the fields. It makes better hay than meadow, and is especially recommended for stallions and uares that have colts.

IN THE HAY FIELD.

Every year we read of the importance of cutting hay early in the season, and yet each recurring year we see a large amount of grass standing uncut until fully ripe. Experience and experiments have both proved beyond a doubt that grass or clover should be cut at about the time when it is in full bloom. It is then sweet, digestible and nutritious. If allowed to stand longer the saccharine juices begin to disappear, and it commences to turn to an indigestible woody fibre. It may be necessary sometimes to go to a little extra expense in order to get the hay into the barn at just the proper time, but this additional expense will be far less than the loss on the hay it allowed to stand and ripen. The profit on the cows next winter depends largely on the condition in which the hay reaches the barn.

Even greater care should be taken with the clover than with the grass, as it changes more quickly. It should be cut early in the season, mown when there is no dew on it, cured in the cock, and the leaves can then be taken to the barn instead of being shaken off the stalks and left in the field.

I like to mow as much of my grass as I can from four to six o'clock in the afternoon. It cures much faster the next day than that which is mown the next morning when the dew is on. I like to get all my hay raked in the afternoon before the evening dew begins to fall. I never considered that "making hay while the sun shines" means that we must work as long as we can see.

It is an excellent time while mowing and gathering the hay from the different fields to take note of needed improvements—of pieces that should be broken, top-dressed, ditched, &c. The bushes along the fences, and the stones scattered over the field appear much more prominent now than at any other season of the year. All these things should be noticed, and it is well to jot down such items as we wish to remember, for fear that the rush of work may drive them from our head before the proper time for attending to them may arrive. Even amid the work of this busy season, an eye should be kept on the lookout for weeds, especially on lots recently laid down. Some of the most hurtful weeds may have been sown with the grass seed. With a little extra pains, the weeds can now be easily destroyed. But if raked in the hay, and their seed sown with next year's manure, they may find their way over the entire field. The "stitch in time" hits here if any where.

Much good advice is given about taking proper care of the horses during the heated term of the summer, which it is well for everyone to heed. But many farmers have

more need of advice in regard to taking proper care of themselves. Their reason and best judgment are brought to bear in the care and treatment of their horses, and they make it a matter of special study to determine what are the best kinds of food, the right amount, and the proper time of giving the same. Regarding themselves, they are too apt to be governed by their appetite, or inclination. They frequently work more hours in a day than they would allow their horses to be worked, and are less regular in their habits of taking food and drink. Too much heat-producing food, and too little fruit is generally found on the farmer's table during the hot months of summer. The health is of too great importance to be forgotten, even during the busiest season.—*Our Country Gentleman.*

OIL FOR WAGON WHEELS.

A practical man says: "I have a wagon, of which, six years ago, the fellos shrank so, that the tires became loose. I gave it a good coat of hot oil, and every year since it has had a coat of oil or paint, sometimes both. The tires are tight yet, and they have not been set for eight or nine years. Many farmers think that, as soon as wagon-fellos begin to shrink, they must go at once to a blacksmith shop and get the tire set. Instead of doing that (which is often a damage to the wheels, causing them to dish) if they will get some linseed oil, and heat it boiling hot, and give the fellos all the oil they can take, it will fill them up to their usual size, and tighten to keep them from shrinking, and also to keep out the water. If you do not wish to go to the trouble of mixing paint, you can heat the oil, and tie a rag to a stick, and swab them over as long as they will take oil. A brush is more convenient to use; but a swab will answer if you do not wish to buy a brush. It is quite a saving of time and money to look after the wood-work of farm machinery. Alternate wetting and drying injures and causes the wood soon to decay, and lose its strength, unless kept well painted. It pays to keep a little oil on hand to oil fork-handles, rakes, neck-yokes, whipple-tree, and any of the small tools on the farm that are more or less exposed."

THE PRICE OF SUGAR.

THE St. Louis *Republican* says the low price of sugar that prevails at the present time, and which is so discouraging to Louisiana planters, is not the result of a large crop of native sugar, for Louisiana contributes only about one-eighth to the amount annually consumed in this country; nor to a large crop in Cuba, the island from which the main part of our supply is obtained, for the Cuban plantations are running to waste, and the Cuban crop is growing smaller every year. It is not very clear what the cause of the low price is; the most reasonable explanation; however, is that which attributes it to the increasing supply of beet sugar produced in Germany, France and Austria. The cultivation of beets for sugar purposes is the most profitable specialty in European agriculture, and both Germany and France now raise, not only sufficient sugar for their own use, but some for export. Beet sugar made in Germany and France is now largely consumed in England. This, of course, discourages the use of West India sugar and breaks down the price. The Louisiana planters feel the effect, for it really destroys the protective value of the tariff on imported sugar levied for their benefit. As the cultivation of beet sugar in Europe is not likely to decrease, but will on the other hand steadily grow, it may be taken for granted that sugar will be cheap for some years to come, and the Louisiana planters will have to content to this fact. A larger amount of saccharine can be produced on an acre of ribbon cane in Louisiana than on an acre of beets in France; yet beet sugar is raised at a cheaper cost than cane sugar, and beet cultivation is steadily increasing in Europe, while there is little extension of the area devoted to cane-growing in Louisiana. The explanation of this is that sugar-making in Louisiana is a wasteful process. A large proportion, one-fifth at least, of the saccharine raised on a Louisiana plantation is thrown away in the bagasse, or refuse stalk. If the saccharine could all be extracted from the bagasse, Louisiana sugar could be much more cheaply raised, and sugar-growing in that State could be what it is not now—a profitable business.

If sugar-making is to be maintained as a specialty in Louisiana, more economical methods must be used in the cultivation of

the cane and the pressing of the bagasse. It this cannot be effected all the tariffs in the world will not protect it.

ROOT CROPS.

Horses, cattle, sheep and swine all eat roots with relish in winter and early spring, and in connection with dry hay are most nutritious and digestible. In growing such crops, the *Livestock Journal* points out the mistake often made in the ambition to obtain roots of large size and extra quality per acre. We ought rather to strive for those of medium size and best quality; for one bushel of these may contain more nutriment than two or even three bushels of overgrown specimens; and, furthermore, greatly lessen the labor of digging, storing and feeding. We have seen roots so large as to be little better than wooden. Animals would not eat them unless excessively hungry, and when they did so they were more or less indigestible, and afforded little nutriment.

Sugar beets, according to Sir J. B. Lawes, are 50 per cent. more nutritious than mangold-wurtzels, and ought to be cultivated most; but the latter produce the greater quantity per acre, keep better during the winter, and will keep considerable later in the spring, or even summer, in a cold climate. Carrots are superior to these, and most excellent for horses. There is nothing better for dairy cows than parsnips, and the advantage of cultivating them is that they can be left in the ground all winter, to be dug up in the spring.

Roots are very beneficial to horses and sheep in a moderate quantity, and especially in a larger amount to cattle and swine. They soften hay in the stomach and render it almost like grass, and quite as digestible and nutritious.

The Poultry Yard.

THE poultry business offers a better field for a man of limited means, than anything that we can at present think of.

OUR poultry department is proving of great interest to farmers, and the poultry industry is being greatly improved by it.

THE number of fowls in the Territory is annually increasing, and the time is not very far distant when Montana will have an abundance of this kind of flesh.

AS OUR Territory progresses and grain becomes cheaper, eggs and chickens will decline also; but they will always bring a handsome profit over the cost of production.

A WRITER in the *Farm Journal* says she cured scaly legs on her hens by dipping them in a mixture of one pint of lime, one spoonful of sulphur, five spoonfuls of coal-oil, and one pint of water.

If your young chickens or turkeys droop and die mysteriously, look for lice the first thing. A few lice on the head will kill the chickens when they cannot be seen on the body. Blow the down on the head so as to part it, and you will see the lice sticking to the scalp. Scales around the eyes are an indication of lice. Some mild fresh grease like fresh butter or sweet oil is good, and only a little should be used. Hens should be freed from lice while setting.

KEEP the poultry quarters clean and halt the battle against disease is won. Many costly fowl houses fail to keep healthy their inmates, principally because of the absence of thorough ventilation. More eggs for the table and less pork and beefsteak is a good rule for the hot weather. There is not much waste matter about eggs. Instead of fencing in your garden fence in your hens. Every enlightened farmer needs a hen yard, and the best one is an orchard of liberal size. Green food of some kind is absolutely essential. Without this the fowls will not do well. Better not try to raise chickens at all than to neglect them; they cannot be cared for too well, and nothing can or will repay your care any better. It is best to make your mating wisely and knowingly in the beginning; therefore buy a standard and mate your fowls properly. In selecting eggs for setting use only those that are of fair size and well formed. They should be from strong, vigorous hens, and from yards that have few hens with the male. Cold rains are injurious to fowls. A few hours under rain, sleet or snow, will put them back days and sometimes weeks from laying, besides the danger of getting cold or becoming roup.—*Ex.*

ONE EGG FOR TEN PERSONS.

HOWever strange this may seem, it is nevertheless true. A gentleman, named Dwight Whiting, residing in the neighborhood of Anaheim, California, as we learn from the *Gazette* of that place, in entertaining a dinner party of ten persons, some time ago, after counting the number of his guests, and finding them to be ten in number, said, "I guess one egg will be enough for the party," and disappeared from the house. Presently he came back with the egg, and the surprise of the guests was dissipated when they saw it was an ostrich's egg he meant. Well, the egg was put on to boil, and after cooking vigorously for one hour, though two hours the host said would improve it, it was brought upon the table. The shell was broken, and the three pound yolk was laid upon a plate, and object of great interest from its size and novelty. Beyond this there was nothing peculiar about it; the white portion of it had the bluish tinge of the duck egg, and the yolk was the usual color. It also tasted like the duck, with no flavor peculiar to itself. But its size may be imagined when it is stated that it takes twenty-eight hen's eggs to equal it in weight, and the single egg was enough for the entire company and to spare; besides it was the unanimous opinion that it was good. It is not probable, however, that ostrich eggs will become very popular, except where the family is large enough to devour one at a meal, as in the case of a hen's egg, the yolk will lose its flavor by saving for a second or third meal.

The Household.

Excelsior Yeast.—Pare and boil enough potatoes to make a pint when mashed. While yet very warm, mix thoroughly with it two tablespoonfuls sugar and a teaspoonful salt. Then save the starter for next time.

Dixie Biscuits.—Three pints of flour, two eggs, two tablespoonfuls of lard, one small cup of yeast, one cup of milk; mix at 11 o'clock, roll out at 4 o'clock, and cut with two sizes of cutters, putting the smaller one on top; let rise until supper. Bake twenty minutes.

Canning Berries.—Put the berries and the amount of sugar used over them in the cans, set them in cold water, and let it boil only sufficiently for the sugar to be melted and the juice to look clear. Fill them to the top from other cans, and be sure they are air tight. Then put them away in a cool, dark place.

Sweetbreads with Oranges.—Choose the largest and finest sweetbread you can get, gash it lightly in two or three places, then baste it well with butter; when this is done, squeeze a Florida orange carefully over it that some of the juice may get into the gashes, sprinkle with pepper and salt, tie it to a spit, and let it be carefully and thoroughly roasted; when the sweetbread is nearly done, prepare a little rich gravy, take up the sweetbread, squeeze another orange over it, and pour some of the gravy over it hot; serve on a flat dish, garnished with thin slices of oranges from which the seeds have been extracted.

Rhubarb as an Adjuvant.—When making a strawberry or raspberry tart, if you have not enough of the fruit, take rhubarb and clean and stew it. When cold, to a quart of rhubarb add a pint of berries, and you will be surprised to see how the flavor of the rhubarb is concealed by the fruit. It is one of the peculiarities of rhubarb that it imbibes all flavors. In making home-made wines, it will be found invaluable. You can prepare a preserved ginger from it, flavoring it with orange, lemon or almond. Boil rhubarb and currants together (either red or black) and strain, and you have currant jelly. Flavor the simple juice of rhubarb with lemon peel and stick cinnamon, and you have fine quince jelly. Then again, boil the simple juice with brown sugar, only adding a small quantity of molasses, letting it get quite dark and thick, and you have the very best coloring for gravies and soups. Boil some juice with an equal quantity of white sugar and some red currants, and strain it. Then boil again, drop in singly some ripe and large strawberries, and you will have a delicious addition to your winter fruits. The possibilities of rhubarb are quite wonderful. There is only one important thing to be remembered: for mixing it with other fruits you must first extract the juice boiling it without sugar, and then strain, add the desired quantity of sugar, and go on with your process.