



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.

ADVERTISING RATES.

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th
1 week	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	\$14	\$15	\$16	\$17	\$18	\$19	\$20	\$21	\$22	\$23	\$24	\$25	\$26	\$27	\$28	\$29	\$30	
2 weeks	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
1 month	5	8	12	15	19	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90	
3 months	10	16	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180	
6 months	18	25	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180	189	198	207	216	225	234	243	252	261	270	
1 year	30	40	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360	375	390	405	420	435	450	

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Agricultural.

The farmers who have raised hard Fife wheat refuse to allow it to be ground except in mills having the new roller process.

JAMES JOB, who has had many years experience in the mills in Gallatin and Madison counties, is chief miller in the Bedford mills.

There is no question but what Montana gardeners would succeed better if they grew their own seeds. Seeds grown in this climate mature earlier than those grown in a warmer latitude.

Several of our friends made a trial at raising rye this year. We would be glad to have them tell us how well they succeeded. State at what date it was sown and when it ripened.

In early days in Montana it was difficult for the farm laborer to get work more than five months out of the year; but now fully one half of our farmers keep their hired help year in and year out.

If you want your grape vines to bear fruit do not manure them. Soil for grapes must not be too rich or the growth will be in wood and leaf, not in fruit. It already too rich, sprinkle some lime about the roots.

We having a splendid season for breaking sod land. Farmers who are opening up new ranches should lose no time in breaking their sod as it will enable them to put in their crops early when spring comes.

The general conclusion is that though the crop of wheat raised in Montana this season is less than last year, the quality is far better, and the amount of good flour that will be made from it will be fully as much as last season.

The beet-root sugar works at Berthier, Canada, have begun operations. It is stated 2,000 barrels of sugar will be produced monthly. During the coming winter a colony of French agriculturists will be brought over to instruct the farmers in the vicinity of the sugar in the culture of the beet.

This fall has afforded our farmers a splendid opportunity to prepare their gardens for early spring seeding. There is, in fact, a number of things such as onions, lettuce, redishes, etc., that might be sown this fall whether the sowing is done or not the ground should by all means be prepared so that the seed may be put in the first warm days in the spring.

From Mark Shelley, proprietor of the Missouri valley mills, who recently made our town a visit, we learn that he has ground some of the hard Fife wheat raised the past season and is well pleased with it. He says it is flinty, grinds well, and makes, he thinks, prettier flour than the wheat raised in Minnesota. In his opinion it is preferable to other varieties raised in this climate, and he fully agrees with us that it should be harvested early before it is dead ripe, to prevent it from shattering.

FARMERS should convert their surplus grain into pork. By so doing they can realize a good price for it and there will be no danger of over stocking the market with the commodity, as the Territory consumes more than four times the lard and bacon our present population could produce.

The object of winter-mulching being to prevent the ground from too frequent thawing, it is evident that any process that guards it against freezing does more harm than good. Of course, it is possible to mulch plants so heavily as to keep the ground from freezing at all, but not without smothering or seriously injuring them, unless they were in a cold frame.

It is natural for vegetation to grow on the fields to protect the soil, as it is for the hair to grow on the head. Those plants whose value we have not yet discovered; are called weeds. If one class of plants monopolize a certain spot, watch how soon it robs the soil of the food peculiar to it, and how another class will spring up. This is nature's plan of rotation, and every principle of rotation and manuring may be traced back to it. In this way we learn the mistakes which farmers make, not only in false systems of rotation, but also in continually applying the same kind of manure on the same plan of treatment. By varying the modes of treatment, manures can be rotated as well as crops; in fact manures could be rotated to such an extent that there would be little necessity in rotating the crops.

The American Garden says: In this latitude it is not advisable to cover strawberry plants much before the last week of this month, and never before the ground is frozen hard. Freshly-cut evergreen branches—the concave side placed downward, make the very best and most conveniently applied covering material, and may be turned to the additional use of serving as pea-brush the following summer, for which the straighter branches are excellently adapted. On farms or country-places, where some out-of-the-way land is available, it would be worth while to plant a number of Norway spruce or other quick-growing evergreen for this purpose alone. In the absence of evergreen branches, straw leaves, straw, or corn-stalks may be used. A covering of two or three inches at the utmost is sufficient. This will probably do for strawberries but it won't do for currants and gooseberries, as the mice will get underneath and peel the shrubs. However they will not hurt strawberry vines.

PRESERVING FRUIT.

One of the chief causes of decay, when apples or other fruit is stored, is close contact. Should an imperfect apple become diseased, the disease of a contagious form, and spread from one apple to the other until all are destroyed. This is more particularly noticed with peaches and plums, and it reminds us that more care should be exercised in preserving fruits over winter. Lemons and oranges come to us from foreign countries wrapped in paper, and packed only in small lots. It has been demonstrated that apples, when placed on a shelf, each being separated from the other, keep well, and why cannot a lesson be taken from the foreign methods, which enable fruits grown in warm climates to be safely transported to long distances. When fruit is wrapped it is partly protected from cold and the difficulty from freezing is not so great, but a cool place should therefore be selected for storage. No doubt many may object to the proposition of using so much care with fruit, but if the good quality and soundness results in an increased price no objection should be made.

A HOUSE OF FLOWERS.

Roses and lilies were wreathing the interior of an ideal London residence. In the entrance hall of this fine house, says a correspondent of the London Globe, the fireplace was hidden in pink geraniums and grasses. The two fire-places in the dining hall were respectively dressed, the one with sunflowers and blue-ball thistle, on the chimney piece, mixed with variegated ferns and foliage and pink roses at the base, the other with scarlet gladioluses and white hydrangeas; against the deep terra cotta of the walls they showed up splendidly. As one ascended the stairs, three huge balls of roses, each about three feet in diameter, were hung by long pink ribbons, twined with a creeping plant from the balustrade at intervals; the lowest the darkest, the next a medium, and the top the lightest shade of pink. The large drawing room had two alcoves.

Opposite its entrance was a large mirror framed with palms that rose out of a bank of pink lilies, pink heaths and roses, interspersed with lovely leaves.

But the other alcove, the wonder of the whole affair, was literally a bower of roses. Wire netting, covered close with these sweet blossoms and leaves, lined the interior, with the exception of a mirror. It was quite fairy-like. The chimney-piece and fire-place were arranged wholly with pink gloxinias and variegated foliage; a delicate cocoa palm at each end serving as a frame.

The back drawing room mantel-shelf was similarly arranged with pink carnations, and that of the boudoir beyond was embowered in magnificent lilies, oleanders, pink geraniums, and the lower part in glorious roses with most exquisite greenery. The curtains throughout the rooms were all looped back by bands of roses; in fact, it was a perfect "nocturne in pink," and culminated in the beautiful dress of the hostess, who wore a rich brocaded white satin, trimmed with roses and priceless lace, set off by a superb set of large, pear-shaped Russian emeralds hung from *rivieres* of diamonds.

GROWING BULBS IN WATER.

In cities, the procuring of soil and pots for plant culture presents frequently a great obstacle to those who would gladly have their rooms bright and fragrant with flowers during the dreary winter days. If it could be easily accomplished. Whilst, when soil and pots are convenient, we do not advise the growing of bulbs in water, to persons not so situated this mode recommends itself by its simplicity, ease, and pretty effect. The accompanying illustrations show some of the many neat and pleasing forms of glasses used for this purpose.

After the glasses have been filled with rain or soft brook water up to the neck, the bulbs are placed on the top, so that their base just touches the water. They are then put in a dark and moderately warm place—a closet or cellar—for three or four weeks, or until the glasses are partly filled with roots, when they should be removed to the light, and gradually to full sunshine, where they will soon make rapid growth and develop their fragrant flowers.

THE GERM THEORY.

The germ theory of disease is now accepted on all hands as the explanation to the cause of each and every disease. If an epidemic break out in a certain locality, it is due to bacilli of a certain kind; if in another locality and under totally different conditions it is at once ascribed to bacilli of another variety. Each disease has had its own microbe, the latest novelty in this connection being the discovery of the cholera microbe by the German savan and scientist, Dr. Koch. Immediately preceding him was the celebrated and indefatigable Dr. Pasteur whose wonderful experiments have been so much lauded, and perhaps most deservedly. Now, while not for a moment wishing to deny the fame of these men, is it not pertinent to inquire whether it be not true that too much trust is placed in studies of a purely technical character, and which are as yet but experimental? To cap the climax, I read the announcement that the celebrated English physiologist, Dr. Carpenter, whose brother I was well acquainted with in Montreal, and than whom a more charitable man never existed, has proposed a substantially new version of the germ theory. He contends that the same germs, microbes or bacilli produce different diseases in different constitutions, a theory confirmed by observations showing that the bacteria of malarial and typhoid fever are the same. What with bacteria and bacilli and microbes, we agriculturists must be in a quandary as to how to explain or comprehend this great germ theory. We must console ourselves that if scientists know much more than we do ourselves, they have not as yet succeeded in making their knowledge of practical use to the extent they would have us believe. I believe fully that we can never arrive, in this century at least, at a conclusive explanation of and remedy for any of the great epidemics among cattle. If all these scientists have discovered so much, how is it that the agricultural public know so little about their discoveries? What can they tell us about hog cholera after twenty years of study? Scientific research is ever useful, beneficial and necessary, but I wish to make the point that experiments are not facts, and when what is fact today is disproved tomorrow, by perhaps the same great professor, farmer had better trust to a more practical experience as a guide.—New England Farmer.

THE BEST VEGETABLES.

The Agricultural Experimental station, of Geneva, N. P., has become quite an institution. It issues its bulletins of information frequently, which, contain many valuable hints, alike to the farmer and gardener. Bulletin No. LXXXVI is devoted to vegetables, and in answer to the most frequent questions of visitors to the garden of the station, "Which is the best variety?" the following answers are given, as to the general farm garden:

Lettuce: The variety which becomes early fit for use, is slow in running to seed, which retains its tenderness and sweetness well, and forms a large and compact head, is the large-White Stone Summer.

Peas: Daniel O'Rourke, the American Wonder, the Champion of England, and the very late McLean's Premium.

Beets: The Egyptian for both early and late.

Carrots: French Foreing for early and Long Orange for late or winter use.

Parsnips: The Turnip-Roots for autumn use, and the Hollow Crown for spring use.

Turnips: The purple Top, Straw-Leaf, and Jersey Navet, for autumn and early winter; for late winter and spring White or Bloomsdale ruta baga.

Onions: Among the earliest varieties, Well's Extra Early, and Extra Early Red. A very mild variety, the Portugal White. Cabbage: For earliest, early Wakefield, Nonpareil, and Early Oxheart, Winnigstadt for intermediate and Premium Flat Dutch for late or winter use.

Cauliflower: Erfurt Early dwarf, for earliest, and the Imperial Large White French and Le Normand's Short Stemmed for late.

Tomatoes: The Alpha has proved the earliest. Livingston's favorite, and the May-flower.

Celery: Boston Market is the best yet tested.

Squash: The Perfect Gem and Canada Crookneck.

Cucumbers: Tolby's Hybrid, Early Russian and Early Chester; and the White Spine for late use.

Melons: The Christiana among musk melons; of watermelons Vick's Early.

Radishes: Early Long Scarlet and Early Scarlet Turnip for early, and Dayton and Golden Globe for late.

The foregoing are best adapted to the above latitude and may answer as well as others for different points. By testing them as far as may be convenient their quality and adaptability will soon be ascertained.

The Poultry Yard.

THE EGG QUESTION.

My experience with white and brown Leghorns has led me to believe that the Whites lay decidedly the larger egg of the two. The White-Faced Black Spanish that I have bred lay a large, handsomely shaped and colored egg. Although a white egg, it is a brownish white and is readily distinguished from the chalky white of the White Leghorn. From my wider experience with the Plymouth Rocks and Light Brahmas I have learned that different strains and families of the same variety lay eggs of different size. A dozen Light Brahma pullets of a noted strain, which I once bought, laid a small, pink egg. Even when two years old their eggs were less than those of my own pullets when they first began business.

My experience with Plymouth Rocks seems to show that the standard Plymouth Rock hen, that is, the hen with a neat, trim shape, and clear, distinctly barred plumage, does not lay a large egg. It is the large, coarse-boned hen with sooty, or rusty plumage, that lays the large, brown egg that Mr. Rudd so delights in. The other hen lays a medium sized egg, and one that is rarely darker than a very light shade of brown. I say my experience seems to point in that way, but I confess my views were considerably shaken this spring by the following circumstance: A farmer who breeds Plymouth Rocks for me brought me eggs at different times to place in my incubator. These eggs were larger, browner, and very distinct in appearance from my own. And yet he had substantially the same stock that I had. Now what made the difference? Who can tell? My explanation, and the only one I can think of, is that the feed was different. My fowls had grass runs and all they needed to eat. His hens had free range and access to the pig-pen, barn-yard and stables, and plenty of corn.

And yet this does not seem satisfactory,

for a flock of my Brahmas kept on the free range plan on a farm, laid eggs inferior in size to those I had at home, which were kept in more limited runs.

One thing is clear to me, and that is that there are some things about this egg business, especially in regard to the size of the eggs under different circumstances of feeding and breeding, that we do not yet fully understand. Here is a chance for investigation.

So far as the marketable value of eggs is concerned the Light Brahma takes the lead in the Philadelphia market. That is to say, a large, brown egg, such as Brahmas lay, will bring the highest price. An "egg is not an egg" any more with discriminating buyers, and they will pay three or four cents more per dozen for eggs that average seven to the pound than they will for eggs that run eight to the pound. For my part I never could sell Leghorn eggs in this section for the full market price. In some places it is not so, and then they will pay to keep Leghorns. H. C. Webster, of Delaware county, Pa., who keep 1,000 laying hens, has scarcely anything in his yards but Leghorns and their crosses. He informs me that in his market, which is Chester, he can get the highest price for his eggs, and no objection is made to their color or size.—B. R. Black, in Poultry World.

TIME.

The time needed to properly care for a yard of fine fowls is frequently held up as a very important element in the calculation of the actual cost of poultry keeping, but scarcely merits the serious consideration which has often been given it. It is hardly an exaggeration to say that the time actually needed to perform the necessary duties for the comfort of a flock of twenty fowls properly housed and in a yard constructed with ordinary regard to the requirements of health does not exceed ten minutes daily. Of course nearly every poultry breeder will expend much more than this time over his stock, but this simply because he likes the job, and goes through it, deliberately. Should he push the thing straight through without any pauses to admire the points of special favorites, on days when the floor of the house needs no scraping and only feeding and watering are attended to, five minutes need hardly be exceeded.

It is easy to see that if time so used were counted at market rates for such labor, the expense is very slight and out of all proportion to the mystic sum of "the time used," which is held up as a bugbear and an important factor in the talk of those who wish to make a specious showing on the adverse side of the long since settled question, "Does poultry keeping pay?"

It would hardly seem worth while to adduce further proof that time used in caring for fowl stock is of no practical moment; but if anything more need be said it is simply that time so spent by the fancier is used simply for amusement, and can not be counted in summing up the debit and credit sides of a business question.

The whole thing simmers down to the point that poultry breeding pays the fancier; but not the man who has no real interest in fowls. When we say it pays, we mean it pays in dollars and cents; and the experience of the past shows the truth of our remark. Do you like poultry thoroughly? Then go into the business without fear of time or anything else, and it will pay you. But if you have no true love for the vocation you had better let it alone.—Poultry World.

The Household.

Orange Cake.—Two cups of sugar, a scant half-cup of butter, the yolks of five eggs and the whites of three, one cup of cold water, the juice and half the grated peel of a large orange, three full cups of sifted flour, and two teaspoonfuls of baking powder. Cream the butter and sugar, and the eggs beaten separately, then the water, juice and peel of an orange, and the flour with the baking powder stirred into it. Bake in jelly-cake tins.

Cottage Pudding.—One cup of sugar, one-half cup of butter, one egg, one cup of sweet milk, three cups of prepared flour, or three cups of flour and two teaspoonfuls of baking powder. Eat hot with the following sauce: three cups of boiling water, one cup of sugar, three tablespoonfuls of corn starch dissolved in a little water, butter the size of an egg, juice, and grated rind of one lemon. The sauce should cook until clear.