

Rain and Household.

Farm Hints for January.

At least once a year, says the American cultivator, the farmer should take account of stock and make a list of his animals of his property and of his gains or losses during the year. For some reasons, this month may not be as good a time for the farmer to do this work as it would be March or April. The hay in the barn, the corn in the field and the other vegetables in the cellar are greater in amount, and if they must be accurately weighed or measured, it would be quite a task. But there is more leisure time to do this work than there would be in the spring, and it is not difficult to make an estimate of amount and value of all that is on hand which will be sufficiently accurate for all practical purposes.

There are rules for measuring the contents of any measure, and a list of the weights and depths of them. Multiply length, breadth and depth in feet of the hayrack together, and if it is timothy, divide the result by 300 cubic feet, and it will give very nearly the number of tons. Good early timothy is of greater value than the same weight to a cubic foot as timothy. Late cut, the grain is lighter, and 600 feet will make a ton. Clover is lighter, and it will take 1000 feet of timothy or 1000 feet of late cut clover to the ton. If the straw remains just as it was filled last season, none having been taken off, the top will be as solid, and it will be safe to allow for the top to be as much as 1000 cubic feet of straw, and to make up the calculation entirely, to make up for the lack of solidity. In silage, it is usually calculated that fifty cubic feet make one ton, if it has been well weighted down, or has settled well.

For corn upon the ear, obtain the number of cubic feet in the bin by multiplying by four, then divide by two. This gives the number of bushels of shelled corn. For oats, wheat, and other grain which is sold by "struck measure," multiply the number of bushels by four, and divide by fifty-five. Vegetables, which are sold by heaped measure, may be very nearly measured by multiplying the cubic feet in the bin by seven and dividing by two.

Having figured the amount and value of these crops on hand, the book of making a valuation of the farm stock, machinery and tools is not difficult. There is a great temptation for many farmers to over-estimate the value of their animals. Put them down at such prices as they would probably fetch at auction, not at what you would like to sell them for. The machines and tools, the wagons and harnesses, are not worth as much as you think when new. Every farmer should have a list of the value of the stock of this kind, followed by a statement of unsettled accounts, if there are any, to serve as a means of comparison to estimate the year's profit or loss, which, for the present, is represented by the increased bank account also, but by better animals or implements for doing his work, or by better cultivated fields. Nor should the improvements which have been made upon the farm be left out of the account. Their value should be estimated, and set down, "not necessarily for publication," but for his own information.

This, then, is the first step to a system of farm books and accounts, and a well-kept and accurate book, which will in future days be much valued as a source of information to the farmer himself or to his successors. How many farmers can recollect now the amount of hay or corn they sold last year? The number of the stock kept, or the quantity of butter or wool sold two years ago? Not many, yet many would like to be able to compare the productions of their farm their own.

We, therefore, urge upon each farmer the importance of at once commencing to take an inventory, including even the amount of money in bank-cells and yards, or upon the fields for next year's crops, and the amount of stock in the wood-lots and the wood-heap, and to make a record of the condition of his various fields, that he may be able in future years to see if he has improved the whole, or if he has rubbed one place to another.

FEEDING FARM STOCK. While making these estimates, it is also well to make a little calculation in regard to the amount of fodder which will be required to carry the animals through the winter. Of course the actual amount used will vary some in different individuals and under different conditions. If a liberal feed of grain is given, less hay will be needed; but where only two or three quarts per day is given, the amount of coarse fodder is needed. In addition to better feed and more vigorous, without destroying the appetite for other food. Yet when the animal has the coarsest feed, the fattening process was going on. Cold barns, exposure during the day in cold yards, irregular hours of feeding, and extra work or exercise, will all tend to increase the demand for more fodder.

The usual rule given for furnishing hay to farm stock is 2 1/2 per cent of the weight of the animal each day for Shetland and to 1 1/2 per cent for the heavier stock, three per cent for horses and to 1 1/2 per cent for sheep per day for every hundred pounds of live animal. But these rules are not exact. It will often be found that a small, quick-moving and nervous animal, requires more food than a large,

sloppish animal, which, if it has no work to do, will eat all the food it can get in time to eat again. Full grown animals do not need as much in proportion to their weight as do those which are growing. And there those which are growing, do not need as much of the food, or impure food, as those which are matured, and they are not so much more than they ought, and are neither fattened nor strengthened by it. For such animals a veterinary surgeon should be called, and if they can not be cured, they should be killed as they usually do not pay their keeping.

With these rules in mind, it is not difficult to decide whether it will be prudent to purchase more stock to consume the hay, or to sell a part of them to stock which will be likely to give a better return. Instead of selling animals or buying hay, to buy and feed more grain, or to use straw and corn fodder or roots instead. Various experiments and analyses have been made to get the most profitable feeds as compared with good hay. Although results vary, an average is nearly that one bushel of corn, sixty pounds of oatmeal or flaxseed meal, forty-five pounds of peas or bean meal, 200 pounds of potatoes, 200 pounds of rutabagas, 300 pounds of carrots, or 350 pounds of red beets, 225 pounds of oat straw, 350 pounds of rye straw or 125 pounds of corn fodder, are either of them worth as much as a hundred pounds of good hay. A knowledge of these values will be of value to farmers, not only in buying food, but in using such as they have on hand, and it is often desirable to change from one kind of food to another, as well as to their owners, and often three times for a time on a change than its food value would warrant.

CHANGE OF RATIONS. The corn fodder and straw may be used during the coldest weather, by feeding a larger amount than would be needed in the summer. The ration in proportion, so as to give about the same value; and a study of the above values will assist in proportioning the food. Or the change may be only made in the winter, by giving the hay, and for the other half substitute straw, with grain and roots, which would make one quart or two pounds of grain, and eight pounds of potatoes or ten pounds of rutabagas needed to supply the loss.

Of course, in making these changes, some regard must be had to the demand of the animal. The above computations are intended for idle animals, and for those which are simply growing. They will often do quite as well upon less cheap fodder with the grain and roots. Working animals and cows which are giving milk will do better upon a smaller amount of grain, and a larger amount of grain. Farmers will also do well to compare the value of pea and bean meal with that of flaxseed meal, three pounds of the former having as much value as the latter. Flaxseed meal has nearly the same value as linseed. Our farmers are using that quite freely lately, but they neglect the pea meal, which is more valuable and cost often be bought at a lower price. In this they may take a lesson from our Canadian neighbors, who convert their surplus peas into meal, and use it largely for their growing stock, and also for fattening purposes.

In changing the variety of foods the several forms of each animal, not only to notice how they relish the change and how well they eat the amount placed before them, as some are a little dainty about trying new feeds, but also to notice the effect upon the health and condition. The hair is an most unfailling indication of the health, as the difference between the smooth, glossy coat of the thriving animal and the harsh, starting coat of the sick beast may be both seen and felt. Watch also the excretions, to see that both bowels and kidneys are doing their work in their accustomed manner, and that neither are suffering over-worked. It is easiest and cheapest to keep them all healthy than to doctor sick ones.

STOCK FISH. The fat swine having been slaughtered, the stags, pigs, and especially those kept for breeding, need different treatment, but not so different. Keep them growing. Give them warm and dry beds, not on the mature heap. Each day scatter a little corn in the manure to induce them to root it over, so it improves the manure, and the exercise is beneficial to the swine. They like warm feed, and they will do better on it than if it is given them cold. Wheat bran is better than corn meal for them. They also like an occasional feed of some early-sown hay, or clover hay, but few new lawns are sometimes eaten greedily, but some swine do not seem to like them. A handful of the ground beef scraps which can be bought at almost all grain stores, or obtained from the butcher, is an excellent for them, and their regular use is said to prevent the sow from eating her pigs, as they sometimes do.

If it will be fed which has soured at all, it is well to give occasionally a few lumps of charcoal. If they do not get the waste from the house table, it will be well to put a little salt into their food each day. All animals seem to need salt, and it is well to keep a supply on hand for the smaller, weaker ones, that their hoggish companions do not rob them of their share of the food. If necessary, give each one a separate trough with salt, or observe not to give the pig to some poor neighbor who has

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