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Selling Milk.

Few farmers seem to realize the fact that constantly feeding milch cows on a farm will impoverish the soil. Almost any intelligent man will admit at once that if he raises twenty-five bushels of wheat to the acre, he must return some fertilizer to the soil which will replace the elements which the wheat has removed. If we make a chemical examination of the ash of the grain of wheat, we find it to be composed of the following ingredients in the following proportions:

	In 100 parts.
Potash.....	31.1
Soda.....	3.5
Magnesia.....	12
Lime.....	3.1
Phosphoric acid.....	46.2
Sulphuric acid.....	2.4
Silica.....	1.7
	100

Wheat contains about 2.7 per cent. of ash of the above composition. The 25 bushels will yield 1,500 pounds, and will contain 31.05 pounds of ash.

According to a recent report of the Connecticut Board of Agriculture, the average amount of milk yielded per cow by a number of dairies was 2,500 quarts. This is equal to 5,315.5 pounds, at 2 1-8 pounds to the quart. Now, good milk yields on an average 65 per cent. of ash; or the 2,500 quarts will give 34.53 pounds of ash, of the following composition:

	In 100 parts.
Potassic chloride.....	14.18
Sodic chloride.....	4.74
Soda.....	6.95
Potash.....	23.46
Phosphoric acid.....	27.40
Lime.....	17.34
Magnesia.....	2.20
Sulphuric acid.....	trace
Silica.....	trace

Thus we see that the ash from the 2,500 quarts of milk is about the same in amount as from the acre of wheat, and that it does not differ greatly in composition.

Nitrogen is another element that the wheat and cow both remove from the land. Wheat contains 12 per cent. of albumenoids, which will yield 2 per cent. of nitrogen. The 25 bushels will therefore remove 30 pounds of nitrogen. Milk contains on an average 4 per cent. of nitrogenized bodies, which will yield 6.14 per cent. of nitrogen; or the 2,500 quarts will give 32.42 pounds of nitrogen. It is not quite so easy to make the comparison of the amount of carbon removed; nor does it make so much difference, as the carbon is derived mainly from the atmosphere, in the one case by the wheat plant directly, in the other by the grass which is eaten by the cow.

From the above it is easy to see why old pastures run down; and the remedy is just the same as should be used if wheat had exhausted the soil—that is, the ground must be manured. And the composition of the ash of the milk shows why potash, salts and superphosphates produce such remarkable effects on old, worn-out pastures. These furnish exactly the elements that have become exhausted. Farmers who buy grain largely for feeding, and apply the manure produced to the land, are thus almost unconsciously returning to the land that which they have removed in the form of milk.—*Journal of Chemistry.*

Fine Stock a Safe Investment.

John Scott, in the *Swine and Poultry Journal* for September, impresses a lesson which we have always sought to teach by an illustration which may make it clearer to many than it ever has been before, and especially as he vouches for the occurrence as an actual fact.

My neighbor bought a trio of fine pigs, paying therefor the reasonable sum of \$120. The male was valued at \$60, and the females at \$30 each. This was a wise apportionment of values, as the male would impress his value on all the produce, there are those who think, however, that \$60 is too great a price for one pig. In this case he did not die or prove barren, but he begat his likeness not only on the females of his own blood, but largely on others to which he was bred. In the short space of two years my neighbor had sold, at prices much less than he paid, pure bred pigs to the amount of \$600; had on hand a stock of young

things worth \$300; still had the original stock, and had paid for all his feed and labor by the use of his male on his other stock. To say nothing of his enjoyment in the possession of the best, of the increased respect of his neighbors, of his own culture growing out of the thought he gave to his pursuit, he had a clear return of \$1,000 on an investment of \$120, and all in two short years. Allowing one-half for contingencies, and who has done as well as this with low-priced stock?

If a boar will get one hundred pigs in a year, and each of the pigs are worth \$5 more than are those from a common sire, what is he really worth? If we use him but three years at this rate he will earn us \$600. Is it not plain that such an animal has a real value far beyond the terrible hundred dollars for which he sells? Is it safe, then, to wait for the price to come down before we buy? The expectation or fear that the prices will tumble, is based on the assumption that the world will move backwards. The idea is as vain as it is uncomplimentary, as fallacious as it is undesirable.—*Live Stock Journal.*

Butter and Cheese vs. Corn.

One of our eastern exchanges gives the following pertinent advice to western corn growers, and the concluding sentences are certainly very suggestive ones:

With richer grazing lands, the farmer of the west possesses an advantage over the east which more than compensates for the increased cost of transportation of cheese to the seaboard for the export trade. Through the multiplication of these refined and condensed products, the west will, in time, be able to overcome the onerous task of transportation. It bears heavily upon grain, cattle, hogs and sheep. A large percentage of the value of these products is consumed in transportation for all long distances. The true economy, then, would seem to be to turn these substances into less weighty and valuable products, to refine them, using the grosser parts at home, and shipping abroad the more valuable parts. A bushel of corn weighs 56 pounds. Say it is worth 70 cents in New York, or 1 1/4 cents per pound, and that it costs 40 cents to get it here, or about 2/3 of a cent per pound. It thus costs 4-7 of the total value of the corn to market it. On the other hand, if a pound of cheese is worth 15 cents in New York, say it will cost 1 cent for transportation, or 1-15 of its value. In the one case, the farmer must pay 4-7 of the value of his crop to reach a market; in the other, he pays only 1-15 to reach the same market.

Sheep Pay Best.

In "Some Sheep Talk," in the *National Live Stock Journal* an experienced stock keeper says:—

I have been feeding some three hundred head of cattle, and I am satisfied that, even with the most favorable conditions for selling when the time comes, I shall make a great deal more money, dollar for dollar, on the money I have invested in sheep, than I shall make on the capital invested in cattle. I have about six hundred sheep, running without any particular attention or care, and have sold one thousand four hundred dollars' worth of wool of this year's clip, and have two hundred and fifty lambs besides. I do not think it possible to have done so well on any equal amount of capital invested in cattle. One great advantage sheep have over other stock is, that they never die of contagious diseases which they contract. They get the scab or foot-rot, or something else, and if unchecked it gets them in bad condition, and would ultimately, perhaps, kill them. But the very worst contagious diseases to which sheep are subject give the owner ample time to treat the affected animals, and the diseases are generally of a character which yield readily to treatment.

PEAS FOR CATTLE.—A. W. Stokes, Hernando, Miss., says:—I have for years kept fatter cows and had more milk and butter, and for less money, than anybody I know of. First, I sow peas broadcast, three pecks to a bushel per acre, in the month of May, harrowing them in after breaking the ground well; then, in September, I pull them up just when a few begin to dry, and make hay out of the vines and peas. I get from 4,000 to 5,000 pounds per acre of hay that is eaten by cattle and horses as eagerly as if it were the best clover. Pulling up is far preferable to mowing, as cattle seem to love the root better than the tops, and it is said to be more nutritious. No manuring is necessary, and one acre in sowed peas is worth six of fodder.

Preparing Wool for Market.

Perhaps a few suggestions upon the above subject may be of interest to the readers of the *Farmer*. It is, no doubt, the purpose of all wool growers to put up their wool in that way which will bring them the most money for each fleece. From observation, and some experience in handling, we find there is no uniform method practiced in doing up fleece wool; each grower has his own particular notion—some doing up tightly with a large amount of string, some with only a moderate quantity, and others doing up their fleeces loosely, with only string sufficient to hold the fleece together.

It is a difficult matter for a wool-buyer to determine accurately the value of different lots of wool in the same neighborhood; and still more difficult to buy them of the growers according to their actual value. Generally, each grower—even though his wool is a hard lot, and put up in a slovenly manner—thinks, or pretends to think, that his wool is as good if not better than any in town, and wants the highest market price for it. And he generally gets it; for, if the first buyer that comes round makes any difference in the price and avoids the heavy lots, the next one often buys the heavy wool at full prices.

From an experience of 30 years in selling wool, we find that fleeces done up loosely, and made to appear large, uniformly sell the best. Take three fleeces that are as nearly alike as possible, weighing, say 8 pounds each; the first we will put in a wool-press and tie up tightly; the second, tie up loosely, making it bulky; the third we will split in the middle, tie it loosely, and make what appears to be two fleeces, weighing 4 pounds each. The purchaser, I care not whether he be the common country buyer, the wool-storer or the manufacturer himself, will make three prices for these three fleeces of wool—varying at least five cents per pound between the first and third fleece. If wool-growers can derive any advantage by dividing their large fleeces, is it not their right to avail themselves of that privilege? It may be said that it would be deception, that it would not be honest. In answer we will say it would be wrong to divide fleeces and represent them to be whole; but if we inform the buyer of the fact there can be no wrong attached to the wool-grower.

The fact is, that when a large fleece is pressed into a small compass and tied up tight it appears to be heavier than it should; the wool-buyer is deceived, and the grower does not receive a fair price for such fleeces. We would not be understood to assume that the wool-grower who has heavy fleeces—made up of oil and filth—does not get a fair price for his wool; nor do we recommend splitting such, for we believe this class of wool often sells for more, rather than less than its value; but it is from sheep that have been bred with a view to grow a large amount of cleansed wool, and only a moderate quantity of oil, that we propose to advocate the dividing of fleeces.

To make wool show to the best advantage, it is necessary that the shearer should understand his business—keeping the fleece from being torn or kicked to pieces.—*Wool Grower, in Ohio Farmer.*

Probable Cause of Hog Cholera.

As a rule, it is the interest of farmers to raise a breed of pigs that will mature rapidly. Breeds have been hurried up till a pig of eight to ten months old will weigh between two hundred and three hundred pounds. This, of course, has its advantages, but there are many serious evils to counterbalance them, and these are a prime cause of the present trouble.

Hogs now lack bone to a remarkable degree! They are also lacking in hardness of constitution, which is apt to make them victims to numerous obscure diseases about which little is known, but which are now classed under one common head—that of hog cholera.

One prime cause of these diseases and delicacy of constitution is the extreme early age at which pigs are allowed to couple and breed. If unrestrained they will gratify this instinct at six weeks of age, or even less. Nearly all our choice breeds are the offspring of parents, in almost every case on both sides, less than one year old. They come from pigs, not hogs; and this process has gone on till no more hogs will be left in the West, if this is not already the case.

Hon. D. Christie and Stephen White were lately in Wellington, selecting stock for the Centennial.