

restore it when fallen off. We cannot too strongly recommend the housing of milch cows and foals at night towards the end of this month.

THE FLOCK.—Sheep should be dipped again about the middle of September. Mr. Gray, of St. Lawrence Main street, will supply the materials, which can be safely and economically used with hot or cold water. (1) No one who has not tried dipping can form any idea of the comfort it affords to the sheep. Where vetches have been followed by rape, the flock will be ready for them by the end of the month, as a white frost on clover-leas will often set the whole lot of them scouring. They will need some dry food when on the rape: clover-hay chaffed and *gabourage*—oats and pease mixed—will be found about the best of the home grown materials.

A fashion of shearing the lambs before the winter, has taken hold of some American farmers. We have never tried the plan, but, on first principles, decidedly object to it. If lambs are allowed, as they ought to be, plenty of exercise in the open air during the winter, their woollen jackets will not be found to be overpoweringly warm for them.

SWINE.—The young pigs of the spring should now be pushed along Barley- or corn meal with a moderate allowance of pease, and any skim-milk or whey that is at hand will make the best pork. The price of barrelled-pork at Chicago has fallen from \$17 50 to \$12 50, and that of course will influence greatly the price here. The former was an unnaturally high price, considering the value of grain, and the present price is unnaturally low. So much for gambling on the Chicago market: it never did any one any good yet, and never will. A great chance is open to any one who will send *dairy-fed* pork to the West-end Montreal butchers: the pigs must be well-bred, and not exceed 80 lbs. in weight.

Great care should be taken of litters of pigs dropped this month if frost sets in early. A pig of 2 months old that gets chilled never recovers from the attack.

FALL-WHEAT.—If any one has a piece of land cleared of early potatoes, sweet-corn, or other market-crops, he might try a sowing of fall-wheat on it, provided it is so situated that the water of the thawed snow does not lodge there.

After carting off potato-haulm, corn-stalks, &c., a good grubbing should be given, 6 pecks an acre sown broadcast, and the seed covered in with a narrow furrow, not more than 4 inches and not less than 3 inches deep. The open furrow will need no attention of course, as the land is not intended to be harrowed or touched in any way after the seed is ploughed in, but the water-furrows must be carefully drawn, and not restricted in number. Harrowing and subsequent rolling in the spring will be all that is needed. Of course, cattle must be kept off the piece. We think this fall-sowing should be completed by the 8th of September. The Campbells, of Saint Hilaire, grew it every year, and Mr. James Drummond, of Montreal, does so still.

(1) Butts' is as good as any.—Ed.

THE OKA FARM.

This institution seems to be flourishing. When we recollect what a mass of bush and stones it was ten years or so ago, we can feel that credit is due—great credit, too—to the industrious friars that have converted so much of it into useful, arable and meadow land. The following description, extracted from the "Montreal Star," is evidently a translation from the French, and of doubtful accuracy: "cabbages of Siam" we have altered to *siceds*, and made one or two other changes.

"Dom Antoine, the Abbott of the Monastery of La Trappe, at Oka, furnishes some interesting facts regarding the large farm owned and worked by the members of the Order. Its area is 1000 acres, of which 258 acres are wooded, 464 acres being opened up, 248 acres in cultivation, and 35 acres in orchards and gardens. What is now producing, was a forest ten years ago. The stones removed from the land have been used to erect a three story monastery with basement, stables and a fence round the cultivated parts. The walls vary from five to seven feet in width, and from four to eight feet in height. The farm is thus sown: Twenty acres in wheat, 13 acres in oats, 20 acres in barley, 4 acres in buckwheat, 5½ cabbages for cows, 10 corn for ensilage, 10 potatoes, 1 carrots, 2 turnips, 3 swedes, 1 beets, 5 beans, 7 timothy and 22 various Hay fields will be opened up later on. From 100 to 150 head of cattle, producing 20,000 pounds of butter, 30 to 40 horses and 200 hogs are now on the farm. Some 1250 tons of manure is secured, making some 30 tons of manure per acre of manured land. The manure is always mixed with phosphate, and nitrate is also employed. The crop of wheat is about 20 bushels per acre and the oats vary from 35 to 40 crops. The crop is better than any on the farms around. Each cow gives some 200 lbs. of butter per year. The creamery each year sends out from 40,000 to 45,000 lbs. of butter, some of which is made from milk supplied by the neighbors. The orchards are thus made up: 1000 apple trees, 1200 small fruit trees, 2000 vines, a quarter of an acre of strawberries and the same area in asparagus. The growing trees are: 10,000 apple trees of three years; 25,000 of two years; 60,000 of one year, and 45,000 of this year. Several young men are to be taught practical farming.

The Flock.

SHEEP MORE PROFITABLE THAN COWS.

EDS. COUNTRY GENTLEMAN.—The discrepant statement of John G. Ickis, p. 32, F. Powell and G. F. C. p. 92, on comparative profits of cows and sheep, are so mixed, indefinite and confusing, that no one can arrive at any definite conclusion by studying and comparing them. I think a plain simple statement can be made that will elucidate the problem so perspicuously that the aid of "advanced farm book-keeping" will not be required in its solution.

It is generally agreed that it costs about the same to maintain any certain number of pounds of carcass of any species of herbivorous animals as another. Nine hundred pounds is about the average weight of cows, and 90 pounds the average weight of grade Merino sheep, hence what will

sustain one cow will sustain ten sheep. Mr. Powell says that it does not cost him over \$25 a year to feed a cow. That is less than 50 cents a week. It looks very small; but it must be remembered that Mr. P. resides in South Carolina, where most of the land is "as cheap as beef at a cent a pound," and where animals graze most of the year. On farms in the North a cow's yearly keep costs nearer \$59 than \$25. But I will grant his low price for keep, for it would have to be equally low for sheep.

Mr. Powell also says he gets from \$50 to \$60 a year per cow for butter alone. This is a much larger average than prevails elsewhere, but I will grant the highest figure; still, he would have evinced the practice of better book-keeping if he had told in exact figures what his butter really did come to. "The figures" are required in good farming at the present time. Mr. P. did not state the value of his cows. Those making \$60 worth of butter are certainly worth \$40, and this sum will exactly purchase ten sheep such as I have described; so this makes the investment even, as is also the maintenance. There remains the receipts from products to be compared.

The two nearest flockmasters to me, who understand and practise farm book-keeping, have flocks such as described. No extra care was bestowed. The animals were kept as farmers usually keep sheep. The average receipts per head of one, for wool and lambs, was \$6.68, and of the other, \$6.74. Adding these and dividing by 2, we get the average of \$6.71. Multiply this by 10—the number of sheep—and the result is \$67.10, or \$7.10 more than the income from the cow, and on the same investment and same expense for feed. The skim-milk of the cow is worth something, but the extra \$7.10 more than makes up for that.

As these writers all seem to figure on the basis of 50 cows, I will extend my calculation to that point. The product of the cows is \$3,000, and of the 500 sheep \$3,355 50—a difference of \$355.50 in favor of the sheep. It is fair to assume that this balance equals the value of the skim-milk. Investment in cows and sheep and their maintenance being equal, these two factors can be eliminated from the problem at once. It is in the requisite labor where sheep excel most. One shepherd can care for them alone two-thirds of the year, and work at other employment (1) enough to pay an assistant for the other third. If the cows are milked 300 days of the year, it equals milking one cow 10,000 times. How much is that worth? There must be at least four milkers for that number of cows. (2) Then what is it worth to do the skimming, churning, and cleansing of the milk vessels and utensils every day? And what is it worth to convey the butter to market or the railroad station from once to thrice a week? All these involve an immense amount of labor during the year, besides investments in dairy utensils and dairy house, and wear and tear of team, harness and vehicle.

Against all this there is expense of washing and shearing the sheep. The wool can be taken to market in two or three wagonloads and the lambs walk there. If lambs are kept five or six months, something should be charged for their pasturage, but they get the most of their sustenance from their dams and consume very little

(1) A real shepherd would not fancy doing other work.—Ed.

(2) Our tenants in Gloucestershire allow ten to twelve cows to each milker.—Ed.

grass. But with sheep one can do far better if he will grow hothouse lambs. These are grown in winter and sold when under two months of age. Nineteen of such, killed and wrapped up, lay on our railroad station platform, Jan. 30, last, that sold for \$10 a head. These cost no more to grow than six-months' lambs grown in the old way.

Sheep have another value superior to cows, and that is their better manure, however unaccountable it may be. I have been almost faithless on this point, because I could not see why there should be a difference when the two species of animals eat practically the same things; but I have to believe my eyes when I see so many fields and whole farms increase in fertility by sheep husbandry, and scarcely any by ordinary dairying; and then having the reason for it made plain by a recent English analysis of the two manures, I must believe it to be true. The analysis is of a ton of clear dung and a ton of the liquid excretion of cattle and of sheep similarly fed. The most valuable ingredients are given in pounds: Dung of cattle—nitrogen, 5.8; phosphoric acid, 3.4; potash, 2; liquid manure—nitrogen, 11.6 (phosphoric acid not given); potash, 9.8. Sheep dung—nitrogen, 11; phosphoric acid 6.2; potash, 3; liquid—nitrogen, 39; potash, 45.2. From this it will be seen that together the solid and liquid dropping of sheep contain over three times as much of these valuable fertilisers as the droppings of cattle. As ten sheep eat as much as a cow, they ought to void as much. It now remains for some of the experiment stations to ascertain and report how this "milk gets into the cocoanut."

GALEN WILSON.

Tompkins County, N. Y.

NOTES ON SHEEP FEEDING AND BREEDING.

Editor of the FARMER'S ADVOCATE:

Your valuable journal recently contained a letter on sheep breeding by "Practical," of Virdon, Man. He says he thinks the *Advocate* should be in the hands of every farmer; in that I quite agree with him, but with some of his remarks I do not concur. In the first place he says half-threshed pea straw is the best feed for sheep. I consider there would be a great waste of peas in the straw, and do not think it necessary to afford as much grain as that. For instance, ten acres of good pea straw (hand threshed), with a few roots and a very small quantity of grain, should feed twenty sheep for five months, and yield two hundred and fifty bushels of peas. This half-threshed, with the ground grain he speaks of, would be too expensive feeding for profit. In another place he says he selected the largest ewe lambs for breeding. In that he was right as far as he went, but he should take shape into consideration, for a large sheep if not well formed will not take the eye of the judges, and should not be bred from. Now, with regard to the twin lambs, the condition of the ewes when served will have more to do with the twins than either the ram or the ewes being twins. (1) He says he expects to get three or four lambs from each ewe every year. I think after he has had the three or four lambs with each ewe a few times he will be satisfied with two—at least I am—or even one, rather than three or four.

R. HONEX, Warkworth, Ont.

(1) Quite right.—Ed.