

the pigs are two or three weeks old, a low trough should be placed where they may be given a little warm milk apart from the sow, and a little ground oats, with the hulls sifted out, may be gradually added. For best results, the pigs should not be weaned before they are eight weeks old, though, if they are eating well, and it is desired to breed the sow again for an early autumn litter, they may be weaned at six weeks of age. It is desirable that fall litters come not later than September, in order that they may have plenty of exercise out of doors, and gain strength of bone and vigor of constitution to endure the necessary confinement in the finishing period in the winter months. With present and prospective prices, it will pay to give attention to the adoption of methods of treatment which keep the pigs going on from start to finish.

Invest in a Few Ewes.

Editor "The Farmer's Advocate":

Farmers who have invested in a few well-bred ewes the last few years, are now reaping a rich harvest, while their neighbors, who have not had the foresight to invest in this class of stock, are out of it altogether. What pays better than a few ewes on rough land, or a run on the roadside a few weeks in summer, till you can get them on the hay stubble, to clean out the fence-corners and eat the small weeds there, which, if left, would ripen seeds that would blow all over the farm, to cause further trouble and many extra hours in cleaning the land, to say nothing of the amount of moisture taken from the soil, to the detriment of other crops? In other words, turn your weeds into mutton, which, at the present time, at 7 cents per pound, is paying better than hogs at 8½ cents, time and feed counted in. What enriches the land better than pasturing off with sheep? What has sheep-pasturing done for the eastern counties of England? It has made thousands of acres rich and fertile, which were waste. Many farmers say that sheep are hard on pasture. I have never seen pasture killed by sheep. We have tried pasturing-off a field so poor that it would not grow oats; this year we had 17 bushels rye per acre. We intend to put this field in rape this spring, and feed off with sheep. We know by experience that nothing does land so much good as sheep manure, and little labor is involved.

We had one of the finest crops of corn this last fall I ever saw, following two years' pasturing with sheep. What is more convincing than facts? Besides the value of pasturing, we have other returns which are quick and sure, viz., lambs and wool. Wool has been down in price. Why? Because our farmers are on the wrong track. What we want is to cater to the trade. Produce more short wool, so that Canadian manufacturers can use it, instead of our exporting it to the States. We also want a duty on wool and clothing, to help home industries. We also require more improved machinery in the woollen mill. Get out of the old rut in which anything will do, and be more up-to-date. Use improved methods, then we shall compete with other countries, and farmers would reap the benefit. No country is so well adapted to sheep-farming as Canada, with its beautiful dale and den, and living springs. But we must be up-to-date, improve our flocks, and the rewards will be sure.

Peel Co., Ont.

OLD COUNTRY JOE.

Cutting Straw at Threshing.

Editor "The Farmer's Advocate":

Having been a constant reader of "The Farmer's Advocate" for eight or nine years, I must say we are all highly pleased with it, and would not be without it now on any account. Of the many articles published in your columns about the better ways of working, I have not noticed any on the above subject. The old-fashioned method of cutting straw was generally to get on a gang of perhaps half a dozen men or more during winter, with horse-power and cutting-box, and, of course, this meant considerable expense, and also a great deal of labor handling the straw all over again. This last season we have adopted a much-improved plan. A number of farmers formed a company and purchased a threshing outfit of their own. They then purchased an ensilage cutter and blower, and placed it behind the separator, so that the straw drops into it, and is cut and blown to any place required in the barn, the cutter being driven by a belt from the cylinder shaft, the whole thing driven by a 14-horse-power engine. We find this works entirely satisfactorily, and requires fewer hands at threshing time, as the straw, being well cut, requires little or no tramping. It is then all ready to be mixed with silage, pulped roots, or whatever may be convenient, and the stock relish it much better. SUBSCRIBER.

Grey Co., Ont.

[Note.—The idea is a good one in several respects, but not new. It has been described several times in "The Farmer's Advocate." Some grain separators have the cutter built in behind as part of the machine. Cutting the straw be-

fore it goes into the cylinder has also been tried, though soon discarded as unsatisfactory. Cutting the straw economizes labor and storage space. Some claim that the chaffed straw goes too fast, and is not so good an absorbent as the uncut. An experiment conducted at one of the Stations in the Eastern States seemed to confirm this view. Our own impression, concurred in by many stockmen, has always been that cut straw was a better absorbent, and went further in bedding. Probably there is not so much difference, after all, when one is accustomed to either, and uses both with equal care. Straw cut to lengths varying from one to six inches is nicer to handle in the manure, though one stockman of our acquaintance complains that cut-straw manure does not bear up his cattle so well in the barnyard, or keep them so clean, as when the straw is not cut.—Editor.]

THE FARM.

Value of Lightning-rods.

In attempting to give readers of "The Farmer's Advocate" some information as to the value of lightning-rods, it is not my intention to enter into the scientific side of the question whatever, but simply to present a few facts that may be gleaned from reports in our possession.

Since 1901, the Department of Physics at the Ontario Agricultural College has been collecting data with regard to damage done to buildings by lightning. Altogether, we have reports of 562 buildings being struck, of which 288, or a little over half, were burned. Of those struck, 15 were fitted with lightning-rods, and 5 of these were burned, but of these 5, three had rods out of repair; therefore, we may consider that in reality only 12 buildings that were really rodged were struck, and of these only two were burned. Thus, according to our statistics, as collected, only one-sixth of the buildings that have rods in good repair, and are struck, are burned. This is a much lower rate than the proportion previously given, where we saw that those burned amounted to more than half of all the buildings struck.

If we consider barns alone, comparison is even more favorable to those that are rodged. We have reports of 206 barns; of these, 150 were burned; that is, practically three-fourths of all the barns struck by lightning are burned. Eight of these barns were rodged, of which two were burned; that is, of the rodged barns struck, only one out of four is burned, whereas of all barns struck, three out of four are burned; that is, if a barn is not provided with lightning-rods, it is three times as likely to be burned, if struck, as one that is, not making any allowance whatever for the rods which are out of repair. Of the 8 rodged barns struck, one that was burned, and one that was not burned, had the rods out of repair. Thus, we may consider that, in reality, only six rodged barns were struck, and of these, only one was burned; hence, of the rodged barns, with rods in good repair, only one is burned in every six that are struck. To us, these facts have one unmistakable meaning, viz., that rods, properly installed, are a protection to buildings that are struck by lightning.

WM. H. DAY,
Prof. of Physics.

How to Roof a Silo.

Editor "The Farmer's Advocate":

As I see a "Feeder" asks for instructions as to how to roof a silo, I thought I would give our experience. Our silo is of cement, 14 x 37½. We had bolts built in, with which to fasten the plate, which was made of two thicknesses of 1½ x 8 cypress, cut in short lengths, with joints broken, and the corners on outside trimmed off. The rafters were 2 x 4, 12 feet long, nailed at the top to a ventilator, made octagon, of 2 x 10; beveled at the proper angle, and securely nailed together; these were dressed on the outside, and 3 ft. 6 in. high. Then the rafters had cross-pieces nailed between, near the plate, and the sheathing was made of 12-ft. pine boards, ripped from one corner to another, with the wide ends at the eaves, and the points at the top. The shingles were then laid. Of course, they have to be trimmed a little at the top end, more particularly as the roof nears the top. We had two small gothies, one on the west side, containing a hinged window, in which the blower-pipe is inserted when filling; the other on the east side, over the chute where the silage is thrown out. This also has a window. Then, two 12-inch elm planks were put across the center of silo, on which to walk from the chute to the other gothic. The ventilator has wire netting on top to keep the sparrows out, and has a galvanized-iron top, about 12 inches from ventilator, to shed the rain. We like the roof very well, and think that it is all right. Some of our neighbors dispensed with the shingles, and put on, instead, a prepared roofing.

Oxford Co., Ont.

D. L.

Farmyard Manure.

Editor "The Farmer's Advocate":

I notice you have been for some time trying to find out the true value of a ton of manure, and you have had several answers, mostly from scientific men, but I think, when you take into account the different ingredients which the manure is composed of, the answer is a hard one to give. It brings to my mind a story I heard of a man who had an article he wanted to weigh, and he had no scales, so he placed a plank across a fence, and piled stone on one end, and the article on the other end, and made them balance, and then he guessed the weight of the stones. The writer of the last article I saw came to the conclusion it was worth two dollars per ton. Now, an analysis may be all right with regard to some articles, but in others it is not much use. I have conceived a plan whereby any person could test it. Take two acres of land which is hungry for manure, divide them in two halves, and give one a liberal coat of manure, and on other half place no manure, and then put the whole in crop, say roots. Keep track of how many tons of manure, and of the difference of crop, and you would know how much the manure was worth. I think this would be a nice little job for some of the experimental farms to try, but, Mr. Editor, my opinion is any farmer could do more good by making a study of how to grow the crops that will bring him in the most succulent food for his stock, and the manure will take care of itself. Of course, I do not mean that you will handle the manure in a careless manner. In the first place, I would give you my opinion of what kind of rotation to follow. You will understand this is largely a dairy country. I notice a great many writers in "The Farmer's Advocate" favor a short rotation, probably three years, and they very often give the first year in grass. Now, I think that is beginning at the wrong end. How are you going to get a catch of grass until you prepare the land? If I was going to put a farm right, I would take the poorest and dirtiest field, and put it in roots and corn, or, I should say, mangels and corn, as our milk goes to the cheese factory, so we have no use for turnips. But I notice some farmers are growing some kinds of sugar beets and sugar mangels which are better feed than mangels, and are just as good as turnips. Now, let any farmer on a hundred acres put in, say, ten acres of roots and corn, and properly work and manure it, and he will grow more good feed than he can grow of any other kind of feed; and then plow his field very light in the fall, and he has got a field to seed down to clover or grass of any kind he likes, and, if he handles it right, he should get a good catch of grass, and he should also have a good crop of grain.

I would like to say a few words about how I would handle the manure. I do not believe much in drawing manure in winter. If you want to grow mangels, the ground should be manured in the fall. My experience is that if you manure a root field in winter, it makes the ground wet and soggy, and you never get the same tilth. Of course, it is necessary to draw sometimes in winter to keep ahead with the work, but I would rather not spread on the ground in winter. To get right manure, you must get from different kinds of stock. I had my barns arranged so I could draw out my manure with a horse; then I would spread on the manure pile, say, horse manure, then cow manure, the manure from the hogpen pile in the barnyard, and let the cattle run on it. It will get a nice little heat, which will not do it the least harm. I might say I always depend mostly on the richer feeds, and use my straw for bedding, and we have our straw cut when threshed, which makes the manure easy to load, and also easy to spread. I have noticed a great many claim that sheep manure is the richest, but my experience is it is about the poorest of the lot; and another opinion I read frequently is that manure from fattening cattle is the best, but my opinion is that the strength lies entirely with what kind of feed you are feeding.

Perth Co., Ont. A RETIRED FARMER.
[Note.—Feed certainly has much to do with the quality of the manure produced, but not everything. Feed being equal, or nearly so, the manure from a fattening cattle will be worth more per ton than that from growing or milking stock. As to ascertaining the value of manure, it is not so simple that it can be solved by a one-year experiment. Probably not over one-third of the benefit from the manure would show in the first year's crop.—Editor.]

Wide Adaptability of Concrete.

A correspondent tells of the many purposes for which he finds cement-concrete useful. Not only has he stable and barnyard floors of concrete, but his dairy is built of it; the upper part of his stone-walled well is cemented around, and the curbing above is of the same material; a hogpen, walls and floor, is to be largely concrete, and, says he, "When they bury me, I want the rough box or shell made of the same stuff."

It
to col
To be
uct, o
own t
probab
time t
other

The
consult
and a
require

In th
our hou
excellen
points o
which, p
er better
No. 1
compact
easily h
comforta
what sin
(2nd floo
a bathroo
X, who
up-to-da
divide h
when the
dumb-wa
the femi
these are
where

FR

7.91
16
1

Coming
suit excell
than that
furnace an
to have th
first floor
The handi
attic, are