

ditch banks would be a useful addition, helping to get a soil sooner.

Let the hillsides lie thus all winter, taking care that the material is not washed away by the rains. It will then have time to decompose, muck, if muck is used, will get thoroughly weathered, and by the combined action of lime and frost will become fertilized, and the barren place will be made productive. Any rubbish, such as stalks, straw, brush, chips, and the like, put upon such spots, serves to stop the washing, and by shading, decomposition, &c., slowly enriches the place. But the first plan is speedier, and in the end cheaper, for brush and the like, in the middle of a field, is apt to be in the way of the plow in passing, and will necessitate turning.

Woods mould is especially serviceable for mending the hillsides. It arrests the soil that is being washed off, and being a good absorber, retains the fertilizing elements of the atmosphere. A thick layer of this, put on a hillside now, though the latter may be a hard clay, will cause it to become mellow and pulverable, and capable, in a few months, of being plowed nearly as well as the rest of the field. Try the experiment and see how nicely it will work. Three inches depth will not be too much to put on. It will rot and decompose a good deal before spring time. Rich earth from roadsides is very beneficial to deepen the soil on these places. But there should be much coarse material to the prevent washing off of the soil from above.

B. W. J.

Surry County, Va.

Saving Liquid Manure.—Can you suggest some cheap plan of saving the liquid manure from a barnyard? It is better to build a cistern under the manure at the side or some distance from the yard? My barnyard being on an elevation, I can locate cistern in any position. **MONHABIE FARM, Bridgeport, Conn.** [The cheapest way to save liquid manure from stables is by using plenty of absorbents, as fully described on page 400 of our number for June 9, upper half of second column, to which we refer you. The objection to saving the liquid in a tank is there pointed out, and in a climate subject to several months of severe freezing weather, we could not recommend the use of tanks for common farming.]

I need hardly say that I agree with the opinion expressed in the above extract from the Country Gentleman, though it is in direct opposition to the conclusions at which many people have arrived on the same subject.

Sheep.—Mr. F. D. Curtis, of Kirby Homestead N. Y., in a late letter to one of the American agricultural papers, says that "the Downs are especially calculated for small farms, and even large ones where they may be subdivided into small flocks. Fifty sheep in a flock, of the large breeds, is the limit of numbers to have them do well; while a smaller number to be in one drove or herd, is better. The highest degree of success is attained with the large mutton sheep and the Downs with the smallest flocks."

Now, this is a strange statement to make, and a very short tour in the English sheep-breeding counties would show its absurdity. If Mr. Curtis means to say that, when in winter quarters, sheep ought not to be crowded, I agree with him; but as long as they are at liberty in the open air, and have frequent change of locality, the number in a flock is perfectly immaterial. Have not I seen on my own farms 250 ewes with their 320 lambs altogether from March till weaning time. At Chryssal Grange, then farmed by Sam. Jonas, one of the most successful farmers of the day, I saw, in 1853, two thousand sheep at the same time in the same field, feeding off seeds, with mangels of the previous year thrown in, and nothing could be doing better than this large flock. If small flocks were necessary, how on earth could the store-farmers on

the Scottish hills manage theirs of six thousand and eight thousand? They would find, if they tried the experiment, that the wages of shepherds would eat up the whole of their profit. (1) As to the peculiarities of the "large mutton-sheep," I say nothing, as I know nothing about them, but I conceive it to be impossible for our large farmers on the Cotswold Hills, on the Lincolnshire Wolds, or on the extensive pastures of the Midland Counties, to subdivide their flocks into little bands of fifty each. No, what sheep, long-woolled or short-woolled, require is what they do not get here: plenty of range, and frequent shifting of place.

Change of rams.—Mr. Curtis asks, in another place, "Have we always got to go to England for our best sheep?" To which I reply, that when the farmers of the United States begin sheep-farming in earnest as an organic portion of their systematic culture, they will find out that a flock of sheep must be treated in America as it would be treated in England. At present sheep are kept on a farm in the States if wool is high in price, and when it is cheap, the sheep are discarded, and after a turn of the market, others are bought in. Thus, the farmer always sells in a cheap market and buys in a dear one.—I have remarked this failing on the part of the Vermont people three distinct times in the last fifteen years;—one consequence of the constant change of stock is that the sheep are never allowed to remain long enough on the same farm to become, as ours are, attached to the soil; there is no attempt on the part of the farmer to aim at breeding a certain style of animal adapted to his land, and to work up to it, and, on that account any ram that comes handy is employed; as a rule, there are no shepherds in America, and without a shepherd born and brought up in a sheepfold, one who knows, personally, every sheep and lamb, their history and genealogy, in the flock, no success in sheep-breeding can be hoped for. The Americans have succeeded well with their Merinoes: let them bestow the same care on the Downs and other mutton-sheep, and they will soon be able to dispense with "going to England for their best sheep."

The Best Breeds of Sheep.

KEEPING DOWNS AND MERINOES SEPARATE.

EDS. COUNTRY GENTLEMAN—In discussing the subject of sheep husbandry there must necessarily be a wide range. Our wants are so diversified, and the extremes of climate so great, and all the circumstances connected with the rearing and marketing so varied, that there must be a great deal of ground to cover, with many special features to be noticed. While Merinoes are unquestionably the sheep for the million, the Downs are especially calculated for small farms, or even large ones where they may be sub-divided into small flocks. Fifty sheep in a flock, of the large breeds, is the limit in numbers to have them do well; while a smaller number, to be in one drove or herd, is better. The highest degree of success is attained with the large mutton sheep and the Downs, with the smallest flocks. The Merinoes, with an innate tenacity for existence, will crop after each other, regardless of the shortness of the bite or the amount of taint on the grass; but at the same time they do better in smaller flocks and with frequent changes of range. I used to keep all of my sheep in one large field, coarse and fine ewes together, the whole season of pasturing; but last year I became satisfied it was a serious mistake. I knew that the coarse and fine would not do so well together, but I did not suppose the odds were so great against the mutton breeds. It is so. The Merinoes do not mind it, but it is very hurtful to the Down or the coarse-

(1) Of course, the "hirsle" is divided in lots of 600 or 800 sheep.
A. R. J. F.