

the south so as to admit air to the cattle in the yards, and allow sufficient sunshine to them in winter. The yard might be divided, to separate the aged cattle from the young—and it is also necessary to have a yard for sheep, connected with a sheep-house, divided so as to separate the young and old sheep, and the ewes with young at the lambing season. The barns should be placed in the centre on the north side of the square, so as to be in the most convenient position to furnish straw to the cattle-houses and stables. There should also be a granary for the purpose of holding corn, and seeds of all kinds. This building should stand alone, on the south side of the square, detached from all other buildings and raised from the ground to protect it from vermin. It should be furnished with bins for the different sorts of grain, and be kept dry, clean, and well ventilated. In the several divisions of the yard, there should be placed moveable racks, for holding straw, or other provender for the cattle and sheep. There should be troughs for containing water, and in sheep yards, small troughs for feeding with roots or grain. The cattle-houses should be laid out with attention to ventilation and cleanliness. They should have open channels behind the animals to carry off the urine to properly constructed cisterns, unless there are vaults below the stable to receive both the dung and urine, which is the best plan, where it is possible—and ground favourable. The most perfect cattle house is, where each animal has a separate stall, the stalls being divided by low partitions formed of planks, of just sufficient size to keep the animals from interfering with each other. To those partitions are fixed vertical rods or bars of iron, moving upon each of which is a ring, to which is attached the chain which passes round the neck of the animal; and, further, these stalls are divided by low partitions from a centre pathway along which the food is conveyed to the cattle on each side of it.

We shall continue this in our next number.

#### FARM-YARD.

The judicious construction of the Farm-yard is of great consequence to the making manure and preserving it from waste. In Canada, where so large a quantity of snow falls, and is blown into, and collected in the farm-yard, it is extremely difficult to preserve the manure from waste. It should, therefore, if possible, be kept under cover, or taken to the fields immediately on being uncovered. We do not see how the urine of cattle and horses can be preserved here in winter unless in cisterns under the stables, where the urine might be conveyed before it would be frozen. Where there is abundance of litter, by keeping cattle and horses constantly well littered, the straw would imbibe and retain most of the urine. In the summer, and when compost heaps are not frozen, the urine and liquid manure might be constantly thrown into and upon the compost heap, would soak into it, and not be lost—but when the compost heap is frozen in winter

this cannot be done. Cisterns would very soon repay the expense of their construction. A very large proportion of the best of our manure is lost in Canada, in consequence of ill constructed cattle-houses, stables, and farm-yards. Any farm that has moss-land attached to it, might produce a large quantity of manure, by carting into the farm-yard in summer some of this moss-soil, and allowing the cattle to work it with their feet, and by mixing soil of a different quality with it—and also by adding to it salt lime, and gypsum, and finally putting it up in a heap in the fall, and when sufficiently fermented, spreading it upon grass-land, as a top-dressing, or previously to sowing. Lime is said to be very necessary on any lands where iron ore abounds. Moss will answer well for working in light and sandy soils, and will greatly improve them, as will sand, out of the hill side, improve moss-lands. Dressing or mixing soils, with earths of different quality, will almost invariably produce improvement. This mode of improvement is generally in the power of farmers, and we do not believe there is a better mode, though it is one that is very seldom resorted to in Canada.

#### SHEEP.

In the neighbouring States of the Union, the sheep are generally of the Merino breed, and for mutton they are all but useless. The wool must be the principal object of keeping such sheep. We would be sorry to see this breed of sheep introduced to any extent into Canada. We think the New Leicester, and South Down would be much preferable, because they will yield both wool and mutton of good quality. We may have as good mutton and wool here as in the British Isles, and the Leicester and South Down sheep would be a much greater ornament to our pastures, as well as to our tables, than the wretched Merino sheep. The latter may be easy to keep, as the object is only wool, but we do not think they can be profitable. The unimproved Canadian Sheep are not a good stock, but by crossing with the South Down, or Leicester, they might be much improved, and become profitable stock. Properly constructed sheep-houses, and yards are essential to make sheep a good and profitable stock for the farmer. Unless the lambs are preserved, which they cannot be without good food and shelter, sheep cannot be a profitable stock. We shall refer to this subject again.

At an agricultural meeting lately held in the United States, the application of manures was discussed, and as this subject is of great consequence to farmers, we shall give such portions of the discussion, as we think will be useful.

The Hon. Mr. Allen commenced the discussion by observing:—

Next in importance to seeking extended knowledge of the countless substances which may be applied as manure, is that knowledge which qualifies us to make the most judicious and useful application of the various articles we spread over our fields.

There are many and contradictory opinions concerning