

December, 1774, resolved to encourage the breeding of sheep and to promote the woollen manufacture. The Provincial Congress of Massachusetts, the same month, recommended the people to improve their breed of sheep and the greatest possible increase of the same, the use of their own woollen manufactures and a very careful sorting of their wool, so that it might be manufactured as much as possible into the best goods.

"A Committee of the Convention of Virginia reported on the 27th of March, 1775, a series of resolutions in favor of domestic manufactures, and urged that after the first of May next no person should use in families, unless in case of necessity, and in no case sell to butchers, or kill for market any sheep under five years old. The beneficial effects of these restrictive measures were felt during the Revolutionary War, which shortly followed, in the abundance of wool produced suitable for clothing."—*Mr. E. Young, in "America."*

CATERERS FOR CATTLE.

There can be little doubt that during the coming season the new method of preserving herbage for future use will be largely experimented with. How far ensilage will deserve the eulogy lavished on it—and the hopes which it is said to justify—remains to be seen. As an auxiliary process, it may be capable of rendering occasional service to the grazier; and it seems likely that these services will be most conspicuous earlier and later in the year than the usual time for curing hay by direct sunshine; but nothing is at all likely to supersede the world-old methods of making hay and carrying corn in harvest; nor is well saved hay ever likely (as an article of food on a farm for all kinds of stock) to be put behind forage cured in any other fashion—on or off a stack in a pit or out of one. No food can be kept so long uninjured by keeping as a sound haystack.

Now the old method of making hay, upon what is called "the rule of thumb," is very generally understood. Upon almost every occupation, large or small, there is some one sufficiently familiar with the appearance and "feel" of grass fit to cut, and to carry, to make it at least an even chance that, in an average season, average hay will be made. To make *first-rate* hay does require an exercise of thought and acquired knowledge; but fair hay is made, almost everywhere, in a fair midsummer, without special training; that is to say, the universal practice of haymaking is no evidence at all as to a population having mastered principles.

But ensilage cannot either at present be expected to be made by mere "rule of thumb" i.e., there is no hoarded com-

mon stock of knowledge laid up from centuries of experience to fall back on, nor is it ever likely to be so made. Ensilage is not only the saving from destruction of what would otherwise be wasted for want of sunshine, but also it is the result of converting, by judiciously controlled fermentation, coarse provender into appetising, wholesome, and productive food. The makers of hay, on the stack, by Neilson's or similar processes—or the carers of grass or corn stalks in a pit—are really good cooks. They, by artistic skill, convert inferior parts of the stores on a farm into cattle diet equal to the best. Both employ processes for which a knowledge of principles and a readiness to seize the right minute to apply them, are essentially necessary.

The thanks of the agricultural community will certainly be due to those who are recording experiments with ensilage. The analyses made and published are no doubt of great importance, but even greater is the interest attached to the return made in flesh, milk, and health of the cattle, &c., who have consumed the food. It is by them that the decisive verdict will have to be pronounced. But whether it be the chemist in his laboratory, or the animals in their stall, the lessons which each is capable of conveying will fall barren unless there be the intelligence to collect exact particulars and to report what is ascertained. No one doubts that the training of the chemist will secure that he will duly records his facts. Is it equally certain that the owner or attendant of cattle will? Most people have been connected with schools at one or other periods of their lives, and know the stir and stimulus to the teachers, and the extra attention of the scholars, which an approaching visit of the inspector involves. Ensilage comes to England as an Inspector of Farm Education even more than as a cattle-cook.—*Agricultural Gazette.*

HISTORY OF THE PICTOU CATTLE DISEASE.

No. VI.

Preliminary Report on the Disease of Cattle at Pictou, Nova Scotia, and adjoining Districts, addressed to Hon. J. H. Pope, Minister of Agriculture, by D. McEachran, F. R. C. V. S., Inspector of Stock.

[Continued from April Number.]

K.—Farm of William Sobey, West River Road.

Water sample No. 8, from well at back of dwelling-house, where cattle are watered in winter time. The well is within a few yards of the kitchen door, covered up and fitted with a pump.

Water somewhat turbid, portions of insects and vegetable debris; good lustre, almost colourless; no odour.

Total solids, 34 grains per gallon.

Fixed do 24 do

Residue, very light coloured; became of a slight grayish tint, changed but little, in fact. (Weighed with difficulty; gaining fast.)

Chlorine, 9.1 grains per gallon.

Ammonia, free or saline:

Grains, .0322 per gallon.

M.G., .46 per litre.

Ammonia, albuminoid or organic:

Grains, .0365 per gallon.

M.G., .195 per litre.

Metals—Iron, faint trace.

Hardness = 10.3 deg.

Nitrates, present, marked.

The large amount of total solids, of free or saline ammonia, the well marked presence of nitrates, and the large amount of chlorine, all point to probable sewage contamination. The albuminoid ammonia is also nearly 2 per million. The proximity of the dwelling-house and stables is favourable for the passage of impure drainage into the well.

Microscope.

Portions of insects; Infusoria; Rhizopods; Rotifera; Fungus filaments.

Water sample No. 9, from pools in small sphagnum swamp in Mr. William Sobey's pasture; the ordinary watering place of cattle in the summer time.

Water very turbid; light brownish yellow.

Stable (?) odour; cyclops.

Total solids, 5.5 grains per gallon.

Fixed do 5 do

Chlorine .3 do

Ammonia, free or saline:

Grains, .0707 per gallon.

M.G., 1.01 per litre.

Ammonia, albuminoid or organic:

Grains, .0784 per gallon.

M.G., 1.12 per litre.

Metals—Iron, slight trace.

Hardness = 1.4 deg.

Nitrates, nil.

Microscope.

Desmidiæ; Entomostraca; Diatoms, Infusoria; Bacteria; Rhizopoda; Vegetable debris, Portions of insects; Conferva.

L.—Farm of John Arbuckle, West River Road, in Pictou town:

Water sample No. 10, from well used in winter and spring for cattle, not in summer, when the cows get water at roadside, "or anywhere."

Water slightly turbid, almost colourless, moderate lustre; odour old, woody (?) or fecal (?) or both.

Total solids, 6.5 grains per gallon.

Fixed do 4.5 do do

Residue became brownish black, wavy, patchy.

Chlorine, 1 grain per gallon.