

buy sheep because they can winter more than they can summer." Here is a subject for some of our sheep men to write about, and we should welcome a statement of any well-considered views on the subject."

The truth is, sheep do not benefit pastures; on the contrary, they injure them by keeping the more delicate herbage nipped off continually and thereby dwarfing its growth. The sheep's feet are golden, in England, in this way: they feed all day on the downs, and at night they are brought to fold on the green crops of tares, rape, &c., where they leave the manure from the food they have found during the day. The herbage of the downs is very short and close—I never saw enough to hide one's shoe.

Even during my time, on the chalk-hills, sheep were really considered as dung carriers. I have seen, over and over again, six-tooth—three-year-old—down-wethers going to fold, night after night, on the bare fallows, as a preparation for wheat, having had nothing all day but what they could pick up on the hills. They passed the whole night in the fold, and were let out in the morning when the dew was off. As six-tooths they were sold to the wealthy landlords, who used to boast that they always had four-year-old down-wether mutton on their table. And it was mutton, too.

Decomposition.—The Southern Cultivator recommends the use of "acid-phosphate" to hasten the decomposition of pig-cow- and horse-manure. It will have the very opposite effect. A correspondent of that paper "has two acres of turnips that he intends ploughing under next spring and planting in early beans." And this in North-Carolina, where cattle-food cannot, one would think be too plentiful. Another wants to know all about vetches for cattle pasture in winter, and is told that there are two sorts, the winter vetch and the summer vetch, "the former of which the English sow with their turnips!"

Two litters a year.—Mr John Gilmore, Iowa, said, at a late farmers' meeting in that state, that "two litters of pigs a year from a sow were not profitable. Even if a man is successful in raising a litter of fall pigs, they do not grow as well (as the spring pigs I presume), and the pigs of the following spring are not worth as much by the value of the fall pigs as if the sow had had but one litter of pigs." Rather involved, this statement, but the meaning is discoverable with a little pains. No one, I should think, would in a cold climate like Iowa's keep fall-pigs over the winter. Littered in in September, they should be all marketed by Xmas, half as sucking pigs and the rest as porkers of from 50 lbs. to 60 lbs. each. The sow, if properly cared for while nursing and afterwards, will have plenty of time to recover her strength and condition before her next conception. A sow goes with young 16 weeks, to an hour almost, and as her life is but a short one, very few having a third litter, she should be induced to make the best possible use of it.

OUR ENGRAVINGS:

- Fodder-corn.—See p. 54.
- Wireworms and Click-beetles.—See p. 54.
- La Ferté.—Percheron stallion.—See p. 57.

Superphosphate.—M. Bergeron, of St. Martin, county of Laval, writes to inquire about superphosphate; how to use it, and hopes it will not exhaust the land! He proposes to buy two tons, and his neighbours are, many of them, willing to do the same. M. Bergeron says that nothing has appeared in the French Journal of Agriculture concerning this manure; but this is a mistake on his part, as mention has been made over

and over again of this as well as of divers other fertilisers. Unfortunately, M. Bergeron does not say on what crops he intends to apply the manure; but let us take the ordinary crops grown on the average farm of the province and see how we should proceed.

If for roots, I recommend that half the usual dressing of dung be spread in the drills, and, in the but too probable absence of a manure distributor, the superphosphate sown broadcast, before splitting, at the rate of 2½ cwts. to the *arpent*—about 3 cwts. to the acre.

For corn, I do not think superphosphate is of much use, unless coupled with some highly nitrogenous manure, of which I should employ, say, 1½ cwt. of sulphate of ammonia or 1½ cwt. of nitrate of soda, with 3 cwts. of superphosphate, to the acre, in addition to half a dressing of dung as before.

For grain, the land being in fair condition, I propose using 1½ cwt. of sulphate of ammonia and 2 cwts. of superphosphate.

By superphosphate, I intend the plain mineral manure, made from our *apatite* dissolved in sulphuric acid. This can be obtained from either Messrs. Brodie and Harvie, Bleury street, Montreal, or Messrs. Lömer and Co., Custom-house Square, Montreal. The latter firm imported, last autumn, from my correspondents, Messrs. Downes and Co., Liverpool, a cargo of superphosphate which I hope they will be prepared to sell at a reasonable price. I write to them to-day to find out their terms. Messrs. Brodie and Harvie charge \$26.00 a ton.

Sulphate of ammonia, containing 20½ per cent. of nitrogen, (1) is to be had of Mr. T. E. Vasey, box 1727, P. O. Montreal, or at his ammonia-works, Hochelaga. The price varies, according to quantity, from \$3.20 to \$3.50 per 100 lbs.

In order to reap the greatest possible benefit from these manures, they should be reduced to the finest powder and mixed with twice their bulk of fine mould or wood-ashes, but care must be taken, if the latter is used with the sulphate of ammonia, to spread the mixture on the land at once and cover it with the harrows, &c., as otherwise the ammonia would soon vanish.

Crows.—Crows do winter on the Island of Montreal! We have had them in the bush, on the crest of the hill behind the new station at Laohine, all the winter.

Sulphuric acid.—I am given to understand that the 20% duty on sulphuric acid to be used for making superphosphate of lime is to disappear from the tariff. (2) This will be of immense benefit to all farmers. Two hundred and fifty pounds of raw bones and one hundred and twenty-five pounds of brown sulphuric acid, mixed with ten bushels of hard-wood ashes and two hundred pounds of land-plaster, will be amply sufficient to produce a crop of swedes or turnips. The cost of the above mixture per acre should not exceed:

250 lbs. of bones, at \$1.10	\$2.75
125 lbs. sulphuric acid at \$2.00.....	2.50
200 lbs. plaster at 30c	0.60
10 bushels ashes at 20c.....	2.00
	7.85

For the following grain-crop, top-dress with 125 lbs. of sulphate of ammonia at \$3.25 = \$4 05; total = \$11 95. Nothing will be required for the first crop of hay or pasture after the grain; so we have as an average cost for manure of the three crops of roots, grain, and grass, \$4.00!

(1) 25 % of ammonia.

(2) Alas! the information was false.