

passage leading from the cooking-house. This greatly facilitates the feeding, both of the store hogs and of those fattening. Close to the small door of each pen is an iron trough, made half cylindrical on Crookill's plan. Over the trough is a shutter or flap-door. At feeding time the flap is pushed inwards and kept in position by a bolt. When the food is inserted the flap is pulled down, and fastened by the same bolt which falls into a socket. Thus the animal feeds undisturbed. The flap is made concave within, in order to afford more room to the pig. The troughs are of two sizes: one 3 feet long by 15 inches wide, and 8½ inches deep, for two pigs, when two are kept in one pen; the other 18 inches long, only for a single pig.*

Each fattening hog has its own pen, as the animal fattens faster being alone than when it eats out of a trough with others. Every pen contains just room enough—8 feet by 6—to allow the pig to lie down comfortably, but not to take exercise. It has no yard to move about, and take the air in, as store pigs have. These require exercise and open air as essential conditions of health and improvement, without which they degenerate. The sties of the breeding sows are accordingly larger, being 8½ feet by 8; and each has a small yard attached to it. The winter store pigs alone are kept together. The inside of the pens is lined with boards over the studs, and the space between the two boardings filled in with tan bark. This has proved sufficient to keep up the necessary warmth in the severest weather. The pigs have never suffered from cold. All the dung and the urine are conducted to the north-east corner of the basement of the building by means of a small gutter at the back of the pens throughout the whole length of both wings, having a sufficient slope for the purpose. A little shovelling carries the dung to the opening into the basement; the liquid part runs down of itself. The floor of the pens slopes back to carry this off to the gutter. As each wing is of considerable length, requiring the gutter to be of considerable depth at the lower end, it would have been better to make three openings instead of one. By this means a very few inches below the flooring would have sufficed. Whenever the gutter is

shallow the hogs go to it, to deplete themselves, leaving the rest of the pen clean. One essential is still deficient in the cess-pool or reservoir of all this manure; it is an impervious flooring capable of resisting the filtration of the urine which is now mostly absorbed by the light soil of the ground floor and which might be turned to good account.

The following is a statement of the cattle on the farm:—

<i>Horses</i> —one of which is frequently employed in the service of the College....	5
Brood Mare.....	1
Fillies from 21 to 33 months old.....	3
Colts, 9 months.....	2
<i>Horned Cattle</i> —Milch Cows, 1 Ayrshire, 2 Canadian, and 7 cross-breed, of various kinds, all good.....	10
Bulls, 1 Ayrshire 43 months old, and 1 do. mixed breed, 24 months.....	2
Draught Oxen of the large American breed.....	2
Heifers—bringing up—from 12 to 35 months.....	4
Steer pure Ayrshire—8½ months.....	1
<i>Swine</i> —3 breeding Sows, under two years, 2 Suffolk & 1 Chinese.	} Three heads considered equal to one of large cattle.
2 Boars, one of a good mixed English breed, and 1 cross-breed Chinese, not very good.....	
1 Windsor Chinese Sow, 10 months...	
27 Hogs kept through the winter, most of them intended for fattening next autumn.....	
33	41

In all 41 head of large cattle, or one head to each 3 arpents, and 33 perches of ploughed or meadow land.

The horses are all the produce of the farm, except a brood mare, half English and half Canadian, producing very fine colts, and two draught horses which carried off the prize at the exhibition at Quebec last autumn.

The herd of horned cattle includes two of pure Ayrshire breed, a cow and a bull.—The cow was bought last summer from Colonel Rhodes. She is 12 years old, and was raised in Mr. Wm. Russell's stalls, in Renfrewshire, Scotland, whence she was imported in 1853 by the late Mr. D. Gilmore, of Quebec. Some weeks after her arrival there she calved, the sire of which was a bull of the same breed, belonging to Mr. West of St. Foye. The calf is at present in good condition.

* Messrs. Marcotte & Co., of Quebec, make these at 18s per cwt. The 3 foot trough weigh 100½ lbs. Old iron is taken by them at the rate of 4s. per cwt.