

the Cheviot ewe, known as the Half-bred. This is one of the most valuable specimens of the sheep kind in Scotland. At Hawick, this year, Mr. John Elliot, of Hindhope, sold 30 two-year-old rams at £14 11s. 4d. each, his highest price being £47. Mr. George Douglas, Upper Hindhope, sold 23 at £11 17s. 4d.; and Mr. Thomas Elliot, Attonburn, sold 20 at £11 16s. apiece. Mr. James A. Johnstone, Archbank, Moffat, sold 19 at £10 10s. 6d. each; and Mr. John Robson, Newton, Bellingham, sold 30 at £9 3s. Mr. Simson, Boughtrigg, Jedburgh, sold 18 at £9 8s. 7d. each. It is an important difference between the system of selling Cheviots and Blackfaces that the rams of the former breed are usually sold as two-year-olds, while rams of the latter breed are sold when one year old. The reason for this distinction is unknown to us, but a quotation of averages in the one breed refers generally to the younger, and in the other to the older, rams.

Record Daddie Sales.

—So much has been written about sheep that we have left little room for some notes about cattle. Here, also, we have been making records. The Aberdeen-Angus series of sales in Scotland is about over, and at Minmore, Sir George Macpherson Grant, Bart., paid £315 for the two-year-old bull, Bion 11454. This beautiful monarch of his race was bred in Glenlivet, by Mr. George Smith Grant, of Anchorachan, and after winning numerous first prizes for Col. Smith, of Minmore, who bought him as a calf at £180, he now passes to head the Ballindalloch herd, where he will have every opportunity to distinguish himself. Splendid prices were realized at Minmore for all the cattle. Twenty-two cows drew £31 2s. 4d. apiece; 11 two-year-old heifers made £40 7s. 6d.; 7 yearling heifers made £31 1s.; 8 heifer calves, £29 1d.; and two bulls, £108. The average price of 50 animals was £38 5s. 8d. This sale was held on Tuesday, 15th inst., and on the following day, at

Mains of Aberlour, Mr. Fraser sold 44 animals at £19 18s.; 22 cows making £23 19s. 2d.; 5 two-year-old heifers, £24 7s. 2d.; 7 yearling heifers, £16 4s.; and 10 heifer calves, £11 6s. 9d. This was also a good sale, and these were very satisfactory averages. At Williamston, in Aberdeenshire, a notable herd was dispersed on Thursday, and 79 animals of the black polled race drew £26 10l. apiece. Buyers from Buenos Ayres helped this sale. Two bulls drew £54 1s. 6d.; 13 bull calves, £15 7s.; 15 heifer calves, £18 8s. 2d.; 11 yearling heifers, £28 4d.; 9 two-year-old heifers, £30 13s. 4d.; and 29 cows, £27 17s. 7d. The Aberdeenshire series of Shorthorn sales begins next month, and a comparison of results is inevitable. In the interval, perhaps something may be written about horses. "SCOTLAND YET."

FARM.

Mr. W. C. Edwards' New Dairy Barns.

While attending the Ottawa fair we received an invitation from Mr. W. C. Edwards, M. P., to visit his famous stock farms at Rockland and North Nation Mills. We gladly responded, upon Saturday, September 26th, taking the whole day for the expedition. Rockland is situated some 25 miles east of Ottawa, and was reached, by the steamer Empress, quite early in the forenoon. Upon arriving there we were met by Mr. Edwards' nephew, Mr. N. F. Wilson, B. S. A., whose portrait was illustrated, along with other '96 graduates of the O. A. C., in our July 15th issue. Our first privilege was to be driven to the Rockland saw mills, where some 800 men are employed manipulating machinery in the conversion of several thousand logs per day into lumber. We understand this mill has the reputation of being one of the best, if not the best, appointed in the Ottawa Valley. Next we proceeded to the Rockland Stock Farm, famous for its large herd of excellent Shorthorns and Shropshire sheep. The breeding herd and flock were found almost knee deep in luxuriant clover, for which the Ottawa Valley is famous, while a large number of young cattle, including a portion of the young herd which had just returned from the shows, occupied roomy boxes in the very large and well-equipped stables. A noteworthy feature of this farm is the large stone sheds, in each of which some 60 to 70 dehorned steers are fattened while running loose during the winter season. The walls are some twelve feet high, and the sheds are never cleaned

out during winter, so that before spring the animals are much nearer the ceiling than when housed in autumn. The feeding troughs which line around the walls are suspended by means of ropes running through pulleys, so that they can be easily elevated as the manure and, consequently, the animals rise. The bedding is stored in the loft above and given to the steers as needed. Each building has a water trough at one end, the flow being regulated by means of floats. All the feed which the animals receive is cut and hauled to them in a horse-cart. Corn ensilage forms a large bulk of the ration. The enormous bulk of the manure, which is of the best possible quality, is allowed to remain in the sheds until the following autumn, when it is applied to the fields.

After viewing a very large stone quarry, and taking luncheon, we enjoyed a two hours' drive

of our visit. The illustration on page 426 (Fig. I.) is taken from a north-east view, showing the silos at the north, driveway between them into the barn proper above the large center stable, the east wing and the row of box stalls leading to it. It will be seen that this building was only partially sided up when our views were taken, the outside covering being clapboards eight inches wide with one inch lap. The west wing, though only commenced at the time of our visit, is to be a duplicate of the east one, which the ground plan cut indicates. As Fig. II. shows all the dimensions of the stables, nothing more need be said about that. The manure shed, 25x60 feet, shown in Fig. II., is to have a roof similar to the other buildings, be clapboarded outside, and lined with two-inch plank.

In construction the buildings have many new and excellent features. The center building, being the

barn proper, stands on a stone foundation, which is very little above the ground. The posts of the wings and lean-tos (on either side of the center barn) are set 14 feet apart, with 3 studs between, and 4 ft. in the ground. They are 16 feet long and have light plates upon them. The posts of the main barn stand upon the stone walls and reach to the eaves.

Fig. III., showing the inside of the barn, illustrates the style of roof used, which is one of the main features of the buildings. It will be seen that it is oval in shape, and is entirely without beams, braces or purlines. The rafters are 27 feet long, and each built of 5 pieces of 3x6 inch plank, sawed oval, as shown. Three of the pieces form half the rafter, extending the entire length, and 2 the other half. The two halves are spiked together, making each rafter 6x6 inches when finished. It will be seen by Fig. III. that one side of the rafters project down lower than the eaves and are spiked to the posts and studs. It is claimed that this sort of roof is perfectly safe for a barn 40 feet

wide. This barn above the lean-tos is just 42 ft. wide. Another feature of this structure is that it has neither a mortise nor a tenon throughout the whole building. The splices are all held by 5-inch cut spikes. We would consider wire spikes, made like wire nails, more secure.

The outside, as mentioned, is of inch clapboards, which serve to strengthen the building very materially. The inside of the stables is to be double boarded, with tar paper between. The silos are to be similarly lined. The floors are to be of cement concrete. The roof is covered with some 240,000 shingles. The little building at the north with the smokestack is the engine house. The shaft for driving the machinery in the barn and stables extends across beneath the barn floor, over the center of the feed-room, which occupies 28 feet of the north end of the center stable; the silos, root-house, and all the feeding alleys opening into it. It will also have chop boxes connected with the barn above by means of chutes. The barn, having an end drive, has two lines of horse-fork track, some eight or more feet apart; in fact, everything whereby economy of labor can be effected will be arranged. The whole set of buildings, which will be warm, light, well-ventilated, and modern in every respect, will house some 180 head of stock without crowding, and will not exceed in cost some \$3,000. For an economical and first-class dairy barn it can hardly be surpassed.

The Care of Harness.

Harness should never be allowed to get greasy and dirty, so as to need scraping and cleaning and scrubbing with stiff brush and soda water; but if it is in that condition, then take it apart, so far as practicable, and clean each part thoroughly, and work between the hands in warm, soapy water until quite soft and pliant. Castile soap is considered the best to wash with, but any good white soap will answer, and is cheaper. When quite clean, hang up in a room where it will dry slowly, and before it is entirely dry, rub it well with cod-liver oil, which is better than neat's-foot oil, because rats and mice won't touch harness rubbed with it, while they will that greased with the latter oil. Moreover, cod-liver oil has more body than neat's-foot oil. When well oiled, hang up to dry. When dry, give another coat of oil. When again dry, wipe carefully with a dry woollen cloth. This

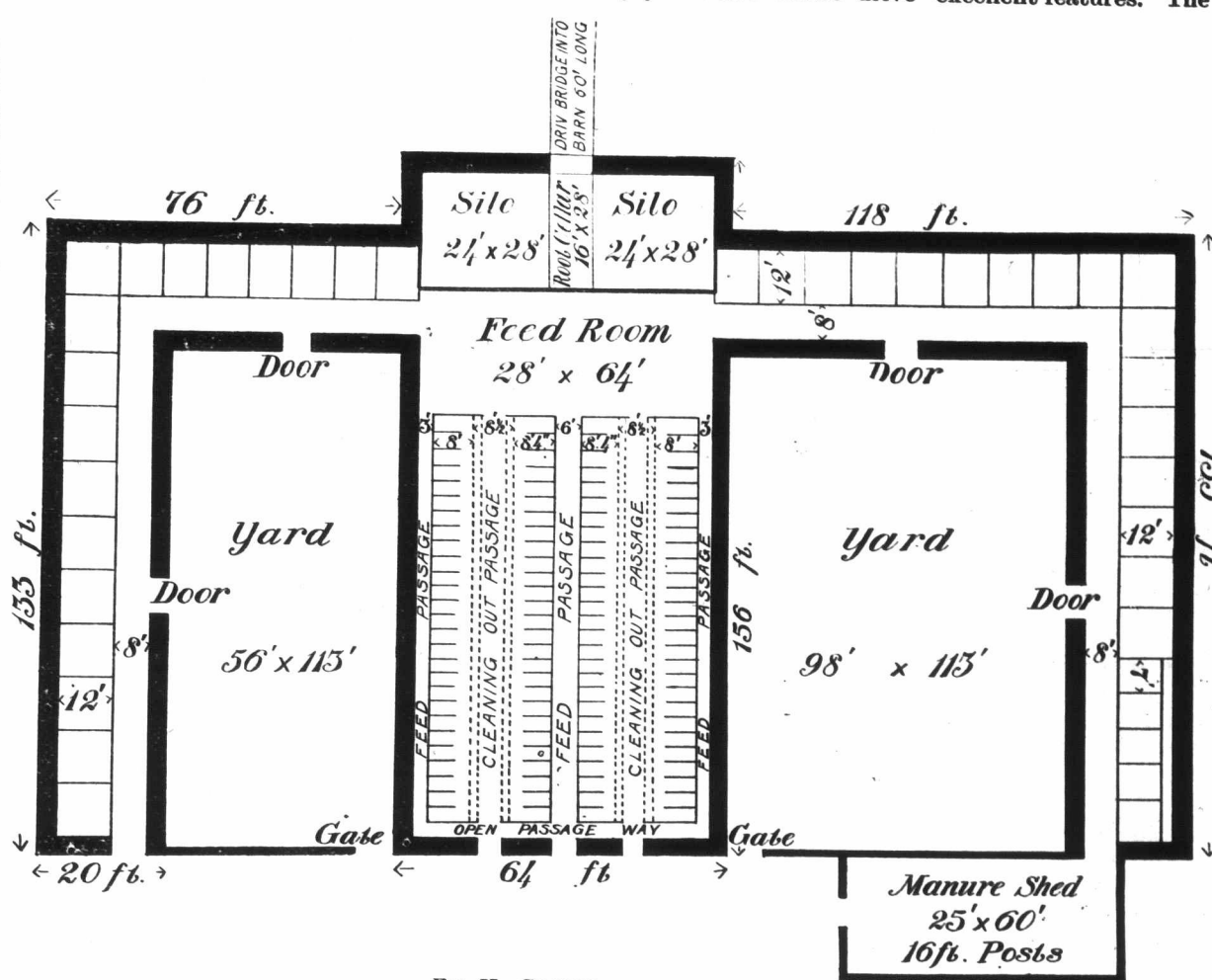


FIG. II.—GROUND PLAN OF STABLES.

through most beautiful scenery to North Nation Mills and the Laurentian Stock Farm, where Mr. Edwards' extensive Ayrshire and Jersey dairy herds are kept. We had a glimpse of some very picturesque rapids on the North Nation River, surrounded by rugged and majestic hills covered with foliage of every conceivable tint peculiar to autumn. We continued our observations under direction of Mr. A. E. Schryer, who superintends Mr. Edwards' lumbering and agricultural business at this point.

The farm here is of a rich clay character, of great producing capacity. The pastures were abundant, and the new clover as thick as a mat on

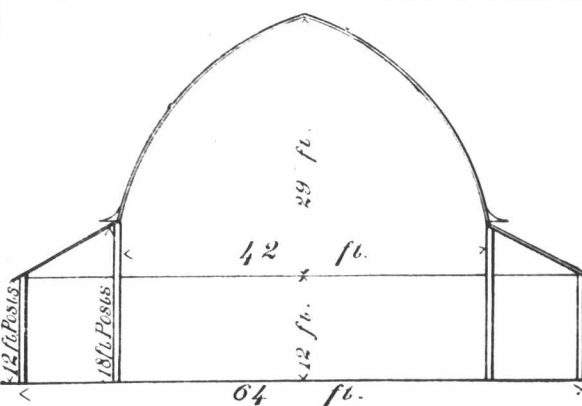


FIG. IV.—END ELEVATION OF CENTER BARN, WITH LEAN-TOS.

every seeded field. Their 30 acres of well-matured corn, grown for the silo, was unfortunately still in the field, on account of the stock barn and silos having been destroyed by fire some time ago, and the new silos were not yet completed.

This farm is run strictly on dairy lines. The cows kept are pure-bred and grade Ayrshires and Jerseys. Their milk and cream is separated by a De Laval machine, and the butter (some 250 pounds per week) is put up into half-pound prints and sold to the Russell House at Ottawa, and other large houses, for 25 cents per pound the year round. The cows mostly freshen in the fall, but some calves are coming throughout the year.

The site of the destroyed barn is being occupied by a large modern and very economical set of stables and barns, in course of erection at the time