

PLAN NO. 3—THIRD FLOOR OF BARN OWNED BY A. S. M'BEAN.

A—Top floor of granary and passage from stairs; a1, hopper bins; a2, passage and door opening opposite barn floor; a3, top of elevator on which is a swivel spout, which can be adjusted to put any grain or feed into hopper bins; a4, door leading to second floor.

B—Mow over tool room, office and barn floor; b1, mow over horse stable; b2, mow over root cellar.

C—Space over barn floor; c1, space over barn floor where hay and straw are put in mows, either in barn or feeding stable; c2, space over straw and ensilage cutter, which allows elevator to swing into silo and over cattle barn.

D—Silo.

E—Top of oat hopper bin; e1, top over stairs leading to horse stable.

F—Door into silo.

G—Windows in different places.

H—Passage to allow man to pass from one side of loft to the other when loft is filled with hay.

I—Large mows used for hay.

J—Spaces used for keeping cut straw for bedding.

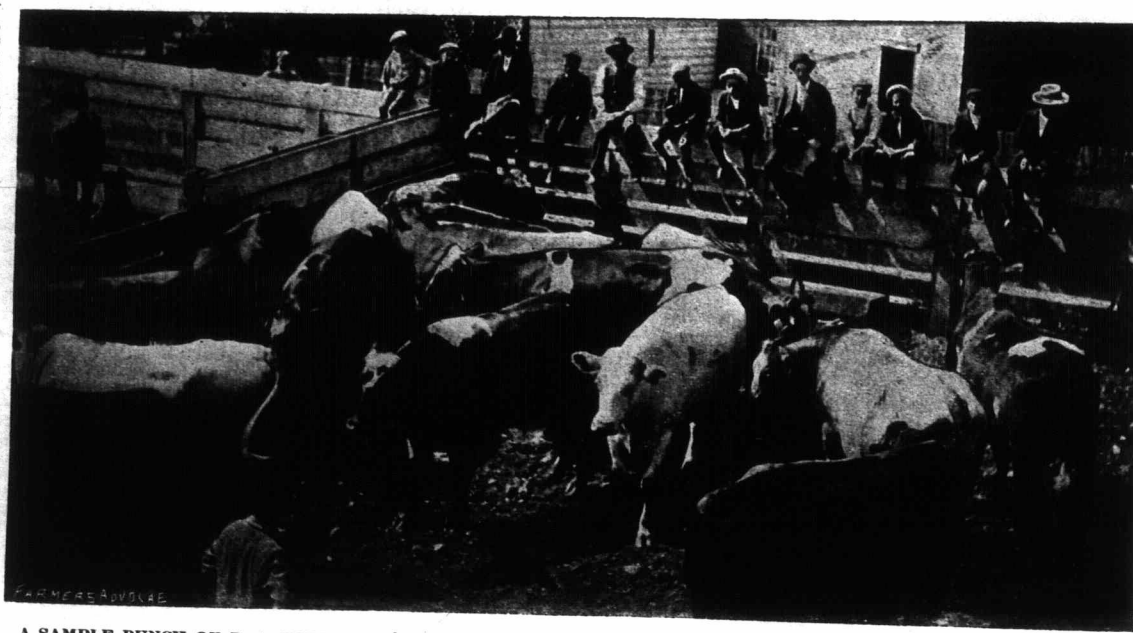
K—Trapdoors through which straw is dropped to basement for bedding.

L—Top of feed racks and trapdoors through which they are filled with hay. Dotted line is the main chain used in raising and lowering feed racks.

Feeding Cattle Loose in Pens of Five.

MR. D. A. FORRESTER, OF HURON CO., ONT., FED 40 LOOSE AND 49 TIED.

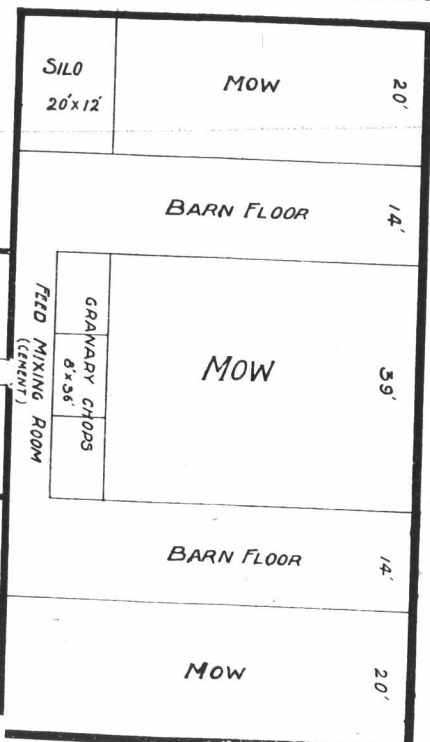
It is but a very few years since the fattening of steers in loose boxes was commenced in this country. We believe Mr. W. C. Edwards, M. P., Rockland, Ont., was among the first to discover its advantages, and the plan was soon investigated and adopted by other progressive spirits, until today we find the system growing in favor in almost every district where beef-raising is engaged in. There is perhaps no county in Canada where more good cattle are fattened than in Huron, and there we find loose feeding rapidly coming into vogue. Near the town of Clinton is Mr. D. A. Forrester's farm, from which he delivered, on June 17th, 89 head of nicely finished beefs. They were shipped by E. Watson, of Blyth. Forty of them had been fed loose in pens, and 49 tied in stalls. The loose lot were kept in bunches of five in the pens, the plan of which we show in this issue. The building of eight pens was planned and put up for loose feeding two years ago. The pens are each 15 feet square. The passage down the center is 4½ feet wide, floored with cement, which is raised 2½ feet above where the cattle stand. This passage forms the manger for the cattle on both sides. They were fed from a truck which is filled in the mixing room. The feed consisted largely of corn in the form of ensilage and corn chop. With the ensilage was mixed cut straw, which was given morning and evening, along with 6½ pounds per day of corn chop, with a light admixture of oat chop after January 15th. They also received clover hay at noons, and drank at their pleasure from the troughs, which were supplied by a windmill pump. Above the pens is a loft, which is filled with straw direct from the threshing machine. The cattle were kept well bedded, and the pens were cleaned



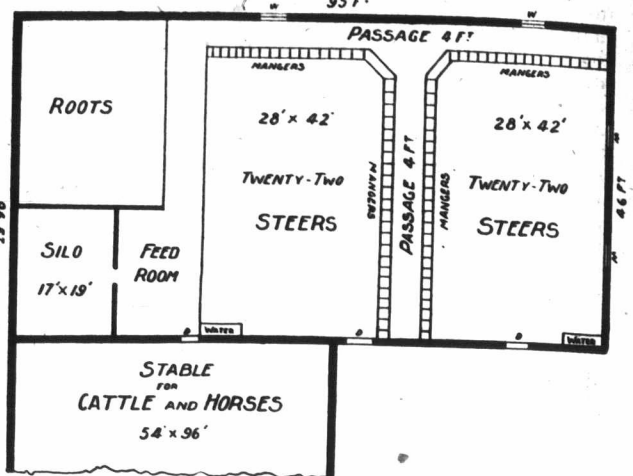
A SAMPLE BUNCH OF D. A. FORRESTER'S STEERS, FED IN LOOSE BOXES. AVERAGE WEIGHT, 1,401½ POUNDS EACH.

Forty-four Steers Fed Loose—Bedding Not Used.

The plan we give of Mr. Wm. Murdock's cattle-feeding barn, in Huron County, Ont., represents clearly the arrangement of the part where he has for two winters fed steers loose. Each of the two pens is 28 by 42 feet, and sufficient to accommodate 22 head. Mr. Murdock



GROUND PLAN OF MR. W. A. FORRESTER'S BARN, SHOWING ANNEX WHERE 40 STEERS WERE FED LOOSE.



GROUND PLAN OF MR. WM. MURDOCK'S BASEMENT, SHOWING PENS WHERE 44 STEERS WERE FED LOOSE.

has fed 18 steers tied in double stalls, so that he has had a fair chance to estimate the relative advantages of the two systems. The pens in which the loose cattle are fed are floored with cement. They are furnished with water in each pen, and feeding mangers on two sides. The mangers of the old stalls, which were seven feet wide, are each divided into three compartments, separated only by a scantling at the top, so that stronger cattle cannot crowd the weaker ones away from the feed. The mangers are about 30 inches high, so that the feed is easily put in from the passage.

When the cattle were put in at the approach of cold weather they were fed on cut hay and straw and ensilage, with a light allowance of crushed grain. The hay and straw were mixed in equal parts and put into the mangers first. The chop was mixed with the ensilage, along with ten pails of water, twelve hours before feeding. This softened the granular particles, which were thus rendered easily digestible. At the commencement each beast received 20 to 25 pounds of ensilage mixed with four pounds of bran and chopped oats in equal parts. This was placed in the mangers on top of the cut straw and hay. With the feed was mixed half an ounce of salt for each animal daily. The ensilage was increased up to almost 30 pounds per day, and the meal ration to 10 pounds per day by New Year's, and then the grain consisted of three pounds of corn, one of peas and six of oats. Mr. Murdock considers corn more economical than peas at the prevailing prices, but as the peas he used were broken and buggy, he could not sell them to advantage. He is also favorable to bran feeding—especially in the

early part of the season. The cattle were bedded for the first month, and cleaned out once a week. After that they received no bedding for a time, but the cement floor was scraped twice a day and cleaned out once a day. Mr. Murdock would prefer to use bedding, but his farm of 100 acres is not large enough to furnish sufficient straw. During the last six weeks they were bedded with cut straw, which gave them a chance to get cleaned up before being shipped. The 18 head of tied cattle were fed in the same way as the loose ones, but they received water only once a day and that when they were turned out. On February 3rd, 52 head of the cattle were sold. On April 5th, 40 of those fit to ship were selected out from the entire herd. Of the 44 loose animals 34 were chosen and six were selected from the 18 tied up. That is, about 75 per cent. of the loose-fed cattle were ready to ship early in April, when only 33½ per cent. of the tied ones were equally well finished. The lots were very uniform when put in and were fed alike, but Mr. Murdock attributes some of the advantage of the loose cattle over the tied ones to their free access to water at all times. He claimed that when the cattle were in one month he could plainly see the loose cattle doing better. The last of the cattle went away about the last week in May, a well-finished lot. They were not heavy cattle, but well finished, weighing upwards of 1,250 pounds. Mr. Murdock is so well pleased with the loose feeding that he intends to enlarge his loose-feeding pens for the coming winter, and feed all his beefing cattle in that way. He is greatly in favor of ensilage, and is growing 14 acres of Leaming and Butler dent corn for his silo.

LOOSE FEEDING FAVORED AFTER A TRIAL.

Near the farm of Mr. Murdock is that of Messrs. John Kitchen & Son. For lack of stall space, Messrs. Kitchen fed six head of steers loose, in 1897-8, in a pen 16 by 18 feet. The cattle were considered too crowded, and last winter just three head occupied the box stall, while 14 head were fed tied. Their feed consisted of well-cobbed silage and cut straw, half of each by bulk, and a mixture