

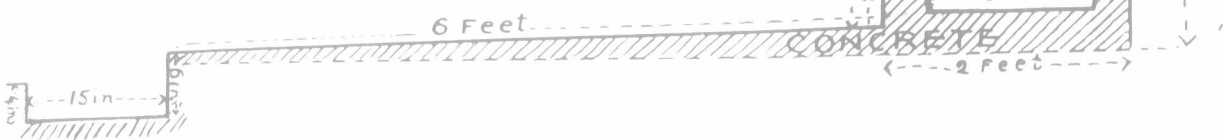
LIVE STOCK.

Ventilation of Stables at O. A. C., Guelph, Ont.

The satisfactory ventilation of stables under a lofty barn has always been regarded as difficult. In view of this fact, a few notes from last winter's experience with the system installed a year ago in the cattle stables under the main barn at the Ontario Agricultural College may be read with interest at this season.

During the summer of 1908 the interior fittings of the basement in this large end-drive barn were torn out and the whole plan entirely changed, the root cellar being placed at the south end next the approach. From a passage along the root cellar the rows of cattle extend northwards towards the silo and feed room at the other end. This gives long rows of stalls, with plenty of light admitted from windows on both sides, instead of having the west side darkened, as it used to be, by a root cellar extending along its whole length. There are sixteen windows of twelve lights each and five windows of eight lights each in the basement. The panes of glass are 10 x 14 inches. The dimensions of the stable are about 100 ft. long by 66 ft. 6 in. wide. Three rows of stalls are provided to tie 59 head of cattle, with box-stall accommodation for calves and young cattle. There are two box stalls each 10 x 13 feet, four 10 x 11 feet, and one 10 x 9 feet. There is also a calf run, 80 feet long and 7 feet wide, which, by means of gates, can be divided into smaller pens if desired. The stalled cattle are tied by chains. The stalls for cows nursing calves are 4 ft. 5 in. in width. Prof. Day considers this wider than necessary, but the location of the upright supports of the overhead structure rendered it inconvenient to have them otherwise without making them quite too narrow. The width of stalls for steers and young cattle is three feet eight inches. This would probably be wide enough for the majority of dairy cows. The length of stalls from back of manger to drop is 6 ft. in one row, 5 ft. 9 in. grading down to 5 ft. 3 in. in another, and 5 ft. 10 in. in the west row. The floors and mangers are of cement, with a sloping board front above the cement curbing next the passage. Other details are apparent from the cross-section diagram of gutter, floor and manger reproduced herewith. Water is supplied in a continuous galvanized-iron trough, four inches deep and ten inches wide at the top, made to special order by the Steel Trough and Machine Co., of Tweed, Ont., whose advertisement is familiar to readers of "The Farmer's Advocate." In the case of the larger animals, the bottom of the water trough is nearly three feet above the level of the platform on which the animals stand. This, however, is a matter that must be determined by the size of the cattle.

Now, as to ventilation, it should be first explained that the basement is well built, with a light ceiling and double or storm windows, to minimize waste of heat by conduction. The ventilation is a modification of the Rutherford system. The six 12-inch square inlets have registers which may be closed, though this was not done last winter. The outlet flues consisted of five boxes running up from the ceiling to above the roof, with a cowl turning automatically from the wind to prevent down draft. Each is 12x24 inches in size, and is double-boarded, with tar paper between. This system worked very satisfactorily, keeping the air comparatively pure and preventing the accumulation of hoarfrost and dampness, except at the north end, where the feed room was situated, and where no outlet had been provided. A sixth outlet was put in here the past summer, with a view to overcoming this difficulty. In spite of the care taken to insulate the ventilating flues themselves, there was considerable drip from them, the trouble being aggravated by their length. Indeed, it was found necessary to suspend pans beneath them to catch the drip. No difficulty was experienced last winter in maintaining a satisfactory temperature, 38 degrees being the lowest recorded by the thermometers. Except, perhaps, a little around the doors, Prof. Day thinks it did not freeze in the stable last winter, while the atmosphere was a great improvement upon anything ever experienced in this barn before. It is possible that in a more severe winter not quite such a high temperature could be maintained without sacrificing purity of air, but a few degrees of frost would do no harm, as the water may be turned off on cold nights to prevent trouble from freezing in the pipes.



Cross section Diagram of Stall in O. A. C. Stable.

Our Scottish Letter.

Cheese shows and Shorthorn sales have kept us pretty busy during the weary month of October. But farmers who had the misfortune to have their crops out in the fields had an anxious time, and were very off. The month has been one of the wettest on record. Rain fell with the force of a deluge, and farmers whose crops were still in the field had a sore time. The harvest of 1909 will long be remembered, and if it was not everywhere as desperate as that of 1879, it was in some districts almost equal to that record year of misery. The last week of October witnessed an improvement, and much grain that seemed almost lost has been saved in a kind of a way. We had very hard frost during the nights, and it was well on in the forenoon before anything could be "led." But in the end of the day, the four or five hours of bright sunshine were found to have wrought a great change, and, with plenty of workers, a big extent of grain can be saved in that time. After a week of hard, cold, frosty weather, there is again a break, and to-day (November 1st) we have conditions about as miserable as may be. Potato-lifting proceeds apace, and the dry, hard weather of this week has been conducive to rapid progress here also.

CHANGE IN CHEESE TASTE — MEATY CHEESE IN FAVOR.

Cheese shows at Frome, in Somerset; London, and Chester, have revealed a hopeless divergence in the public taste for cheese. The hard, dry, good-keeping cheese which was in favor in Scotland, is no longer the leading article. The kind wanted is soft and "meaty," something that fills the stomach, and gives one the impression that he has had a big feed. An English and a Scots cheddar judge spent a day at the London show endeavoring to come to a decision, and in the end had to give it up, and call upon other two—a Scot and an Englishman—to place the lots for them. This they did, and the English cheddars won. The demand is for a soft, "meaty" cheese, one that melts away in your mouth. One of the judges at the Kilmarnock show told us that the first-prize Dunlop white cheese, if made after the cheddar shape, was what he wanted. If such is to be the type of cheese wanted, there must be a big change in the method of making cheddars. The problem seems to be how to preserve the "meaty" character of the cheese without producing too much acidity. The Dairy School and the itinerant instructors have been challenged by the merchants to alter their methods; and so far, at least, the net result is in favor of Canadian cheese. In spite of its long ocean travel, and equally difficult land transit, the wonder is to find Canadian cheese competing so keenly with what is produced at home. Cheshire cheese, which is little better than ill-digested curd, is in great demand. It is shown bound in cloths, and must entail heavy expense in marketing. It commands a very high price, in spite of the immature state in which it is put before the public.

SHORTHORN INTERESTS BRISK — COLOR PREJUDICE.

Shorthorns have had a wonderful innings this month. Great sales have taken place in the North of England and North of Scotland, and symptoms of depression are not to be discerned in the ranks of the patrons of the red, white and roan. In Cumberland, Mr. Barries, a tenant-farmer, got 665 gs. for the two-year-old bull, Good Friday, the buyer being Mr. Miller, La Belen, Birkenhead, the well-known buyer for the Argentine. At Haugh of Ballechin, near Ballinbrigg, in Perthshire, the herd built up by the late Alexander Robertson, was dispersed, 80 head, of all ages, and both sexes, made the fine average of £61 14s. 3d. Figures like 280, 270, 180, 150, 100, 210 and 185 guineas, mainly for cows and young cattle, with very few bulls, indicate how lively the bidding was. Mr. Robertson was a fine judge of Shorthorns. He had a capital eye for the type wanted, and the dispersion sale was attended by

in the bone. She shows high action, and trots for 25 yards with quite a burst of speed, in spite of her 1,300 pounds. Market value, \$175 to \$200, as she is just five years old. The judge places her first, and turns down the aged mare, because she is "not as valuable an animal." In the class for draft brood mares is a little mare, whose picture would answer the purpose well of illustrating Clydesdale type. But she weighs only 1,350 lbs. Beside her is a 1,700-lb. mare, with a rather coarse head, and not such "silky feather." She is rather low in flesh, and this makes her appear flatter on the rib than her rival. The judge says that the little mare has the shape of a drafter, and has neither blemish nor unsoundness, while the large mare has faults; therefore, he decrees that the small mare carry the honors of the class.

Now, these are examples of what may be seen in any of the classes at only too many of the fall fairs. Some reasons for such a state of affairs are these: 1. The man who is labelled "judge" does not know the qualifications of a good horse, and does not know how to distinguish the different classes (general-purpose, roadster, carriage, etc.). 2. He is hampered by absurd regulations of the directors. 3. Animals are not properly fitted or uniformly fat—fat covering to some extent the weak places, and the thin ones looking worse than they really are.

The first of these reasons, it seems to me, is the cause of more errors than either of the other two. If a carriage horse is shown among roadsters, he has no right to any prize at all, and the judge should send it out of the class. Thus the public (who, let us hope, are there to learn) have a chance to see why he is not given a prize. A 1,350-pound mare should be ordered out of the ring for draft brood mares, regardless of her conformation. If her owner does not know enough to keep her out, he, as well as some of the on-lookers, will have a chance to learn what a drafter ought to be. To sum it all up, an animal should not be allowed in a class to which it does not belong. What is the value of having classes for horses at the fairs if these classes are not kept separate? We hear people say (and sometimes it is even put in print) that judges should often "break away from type." If that is true, then the only right way to show horses is to put them all in one big class, and at one show the most valuable horse will take first rank; at another the fastest will be rated highest; and somewhere else the first-prize horse will have to be the fattest. But it will take a long line of argument to convert me to the belief that such a plan would tend to produce the best or even good horses.

Perth Co., Ont. A. DOUGLAS CAMERON.

Canadian Clydesdales at Madison Square.

Besides our winnings in the hunter and jumper classes, and reserve Hackney female championship, at the New York Horse Show, in Madison Square Garden, Canadian exhibitors had things their own way in Clydesdales. Graham Bros., of Claremont, and Hodgkinson & Tisdale, of Beaverton, appear to have been the only competitors:

Clydesdale mares, two-year-olds and over—1, Graham Bros.' Crosby Gem; 2, Graham Bros.' Lady Fergus. Clydesdale stallions, two-year-olds—1, Graham Bros.' Baron's Fancy; 2, Hodgkinson & Tisdale's Abbey Blacon; 3, Graham Bros.' Duke of Montrose. Clydesdale stallions, three-year-olds—1, Graham Bros.' Meteor; 2, Hodgkinson & Tisdale's General Favorite; 3, Graham Bros.' Coniston. Clydesdale stallions, four-year-olds or over—1, Graham Bros.' Gartly Pride; 2, Hodgkinson & Tisdale's Royal Baron; 3, Graham Bros.' Boreland Chief. Clydesdale stallions for championship cup offered by Alfred G. Vanderbilt—1, Graham Bros.' Gartly Pride; 2, Graham Bros.' Meteor.

The Manitoba Agricultural Department's report for 1908 shows that 339 stallions were registered in that year under schedule A of the Stallion Enrollment Act, and certified as pure-bred and sound. The breeds were represented as follows: Clydesdales, 244; Percheron, 51; Shire, 21; Suffolk, 7; French Draft, 1; Draft, 3; New York Jockey, 5; Coach, 3; Thoroughbred, 1. In schedule B, pure-bred, but with no certificate of soundness, 9 stallions were enrolled, and in the class for grades there were 194, making the total number of stallions in the Province 542.

A special feature this year in connection with the programme of lectures at the Ontario Winter Fair, Guelph, December 6th to 10th, will be a discussion of the proper type to be sought for in breeding the various pure breeds of live stock. Each breed will be dealt with by a recognized authority, and representative animals will be used for illustration purposes. One of the general subjects to be taken up will be that of "Underdrainage," which will be discussed by Prof. Wm. H. Day, of the Agricultural College, who will illustrate his remarks by charts and the appliances necessary for the proper carrying out of the work.