

down shown by Drummond and the reserve a Lincoln shown by J. T. Gibson, Denfield. This was highly satisfactory from a Canadian viewpoint.

Introducing James Leask, of Greenbank, Ont. Excellence excelled, vast proportions grown greater, increased entries, larger attendance, high-pitched enthusiasm, Canadian exhibitors more successful than ever. Canada broke into the beef-cattle exhibit for the first time and one of Ontario's greatest fitters, James Leask, captured the grand championship with a roan Shorthorn grade calf, Roan King, defeating all breeds and ages. Canada was placed on the map as a beef producer to be reckoned with from now on. The Graham-Renfrew Co. repeated in Clydesdales, Sir Marcus, the Toronto champion, getting the top place in stallions, while Graham Bros.' sensational two-year-old filly, Mono Minnie, got like honors in females. Cooper & Nephews, of England, entered the race in sheep, and with Canadian exhibitors made quite a clean-up in the breeding classes. In the fat classes Canadian exhibits swept everything before them. Sir Geo. Drummond again scored a grand championship over all breeds with a shearing Southdown. Before all this had happened the students from the Ontario Agricultural College had captured for a third time the bronze bull emblematic of championship in stock judging and added another phrase to their song, which now read, "The bull came back from Chicago to stay at the O. A. C.," and there he may be now seen in the library, defiant and grand, keeping fresh the memories of that grand victory.

Following up his success in 1907, Leask came back in 1908, but was beaten for the grand championship. However, his Roan Jim, a half-brother of the previous year's champion, was the best yearling in the fat classes and was only beaten by the "Doddie" Fyvie Knight from Purdue University. Foot-and-mouth disease in New York State necessitated strict quarantine regulations, consequently Canadian exhibitors were few in number. No Canadian horses were forward. The sheep classes were not up to their usual high standing. Drummond had the grand champion wether. This was rather an off year as far as Canada was concerned.

Canada was well represented as usual at the tenth International. Leask was regrettably conspicuous by his absence. Graham Bros., Claremont, Ont., and John Graham, Carberry, Manitoba, exhibited Clydesdales, but both championships for the first time when Canada was represented at the show went to American-owned horses. However, the champion stallion, Gartly Pride, had only recently been purchased from Graham Bros. All previous records were eclipsed in the sheep pens. All the breeding classes were strong with Canadians well up in the awards, but the grand championship class in the fat sections, all breeds competing, was again headed by a pure-bred yearling Southdown wether from the Drummond flock, making the fourth consecutive win of this prize by this flock.

After a year's respite Leask returned in 1910 and this time he had a wonderful steer in Roan James, champion of the Shorthorn fat classes, but again were the Shorthorn's colors lowered by an Angus, Shamrock 2nd doing the trick for the Iowa State College. It was a hard fight to lose, but it was lost without a murmur. Graham Bros. were the only Canadian exhibitors of Clydesdales. Mikado, a great horse by Marcelus, gave them another championship in select company. More interest than ever centred in the sheep-judging rings, from which our old friend, the Drummond flock of Southdowns from Huntlywood Farm, emerged victorious, the grand championship ribbon being laid on the broad back of a yearling Southdown.

In 1911 the International more than lived up to its past reputation, but it was an American show. However, Canada was not without worthy champions, for Macdonald, Ontario and Manitoba Agricultural Colleges sent judging teams to compete with America's best. Macdonald weathered the storm in the best condition and dropped anchor a good winner, with Manitoba second and Ontario fourth, seven of the ten highest scores being made by Canadian competitors. Leask did not compete in the beef classes. No Canadian horses entered the fight, but the sheepmen did not back down. American sheep were more numerous than ever before and the breeding classes were most keenly contested. Canadians had their innings in the fat classes and again did the grand championship journey to Ontario, the winner being a cross-bred yearling sired by a Shropshire ram and out of an Oxford ewe. J. Lloyd Jones, of Burford, fitted and exhibited this thick, low-set wonder.

And now for the climax. Canada finished strong in 1912 at the greatest of them all. R. W. Caswell, of Saskatoon, made a strong bid for the highest Shorthorn honors, seeking to win championship on the great Gainsford Marquis, with which J. A. Watt, of Salem, Ont., had secured reserve on the previous year. The odds

were against him and he lost out. J. D. McGregor, of Brandon, Manitoba, the champion of the Aberdeen-Angus, cleaned up the breeding classes of this breed and succeeded also in winning the grand championship on his grade two-year-old Angus steer, Glencarnock Victor. Never before has a single breeder reaped such a harvest. Leask had the best grade steer sired by a Shorthorn bull. One hundred and seventy Clydesdales were out at this great show. Lord Gleniffer, Graham Bros.' big, brown stallion, succeeded in defeating the champions of 1910 and 1909, Flisk Prince and Mikado, trotting away with the championship in the final reckoning. The fat sheep exhibit was a "hummer." This year a Canadian pure-bred yearling wether took the grand championship and this time it was a Shropshire from the flock of J. & D. J. Campbell, Woodville, Ont. He was as square as a block, a thick, even wether.

This is the past record. Hundreds of prizes have been won in the breeding classes for horses, cattle and sheep. Few swine have been exhibited from this country, as our ideal type of hog and

been accomplished and now that each year sees great progress in this large exhibition in Chicago and that Canada is to have a National Show to which exhibitors and visitors from the country to the south of us are sure to come and are sure to receive the cordial welcome which Canadians have received in Chicago, and with the facilities for live-stock trading between the two countries being increased from time to time it remains for our stockmen to keep up the good work, increase their efforts, overcome all obstacles, conquer new fields and hold for themselves and for Canada the eminent position already attained and which commands the admiration of stockmen the world over. We have the country to produce the feed; we have the stock to consume it; and we have the men to feed the stock to produce the champions. But competition is likely to become keener and no relaxation of efforts can be dreamed of. Stockmen must stick to their guns, hold what they have, and go after higher laurels.

### Cattle Barn Ventilation.

This is the season of the year when the thoughtful stockman is concerned about the common methods of ventilating stables. He knows from experience that fresh air without direct draft is absolutely necessary for the cattle closely confined in winter. We can do no better, knowing that many have this subject in mind at the present time, than reprint a portion of J. H. Grisdale's new bulletin on Milk Production, which discusses ventilation problems and outlines one system. What he says on the subject follows:

The absolute need for pure air in our stables of all kinds is to-day conceded by practically every stockman. Yet only once in many visits does one find things right. The causes of imperfect success where efforts have been made are various. One of the most common is failure to give proper attention to the system installed. Another often met with is imperfect installation. Ignorance of what good ventilation really is, however, accounts for the most failures of all.

To spend good money and careful thought installing a ventilating system, only to neglect keeping it in operation is criminal. No effective system ever devised for use in stables is automatic in adjustment to varying atmospheric conditions. Changes in temperature or variation in wind velocity will always necessitate some change in the arrangement of the controls or checks.

Neglect to open or increase the capacity once it has been cut off in some measure in a cold time, is the most common cause leading to the condemnation of what might otherwise have been a good system. Another quite frequent cause leading to the condemnation of a system is the too small capacity of the installation. The average carpenter is apt to gauge the requirements of the stable in the way of air by the coldest weather requirements. For this reason, installations are very apt to be too limited in capacity for average weather conditions, and too limited for warm weather.

Then again, an installation may be condemned unfairly, because the owner of a stable expects it to do more than any system of ventilation could ever do. A common standard by which the effectiveness of a system is judged is its ability to keep the walls and ceiling free from moisture. This is frequently a most unfair test. Precipitation of moisture on walls or ceiling is due to the warm vapor or water-charged exhalations of the animals, rising and lying for too great a length of time in contact with the cold wall or ceiling as the case may be. If the construction of wall or ceiling be faulty, as for instance, where only double boards with paper between constitute the same, then no system of ventilation could keep them dry without lowering the inside temperature to practically the same as the outside. Walls possible of being kept fairly dry must have more or less insulation, that is, a dead-air space or a concrete core, or shavings, or something to prevent too rapid conduction of heat. Then with a fairly rapid circulation of air the walls and ceiling may be kept dry. A ceiling protected by straw or hay overhead is the most satisfactory.

Walls with a dead-air space may usually be kept dry fairly easily. Stone walls or solid cement walls must be lined to insure their being fairly dry. No system of ventilation would otherwise ever keep them dry in very cold weather.

The number of cattle in a given cubic space is quite an important factor making for the effectiveness of any system. Too many cattle make it difficult to ventilate in such a way as to avoid drafts, too few make it impossible to keep the temperature up to the comfortable point and at the same time provide for sufficient air circulation. Low temperature does not always mean pure air, and here is a point where a great many stablemen make a mistake. The air in a stable where the thermometer shows several degrees of frost may quite easily be most vile. From all which, it seems important, in the first place to so arrange matters that there shall be

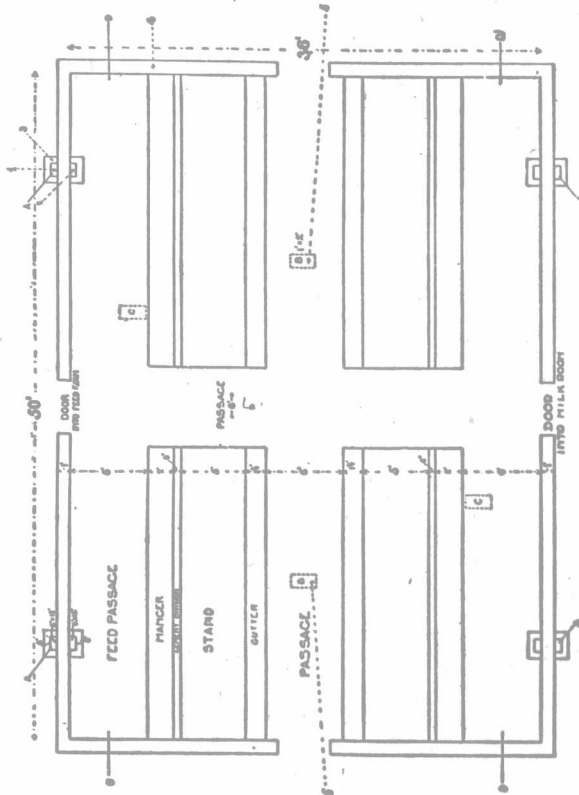


Diagram A, showing arrangement of dairy barn, stands, passages, and ventilators.

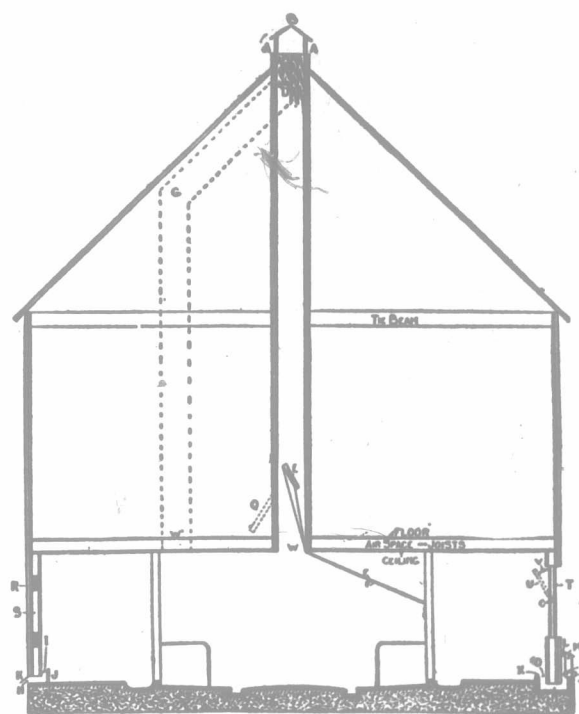


Diagram B, showing a stable in cross-section will indicate the best method of building wall and ceiling, and illustrating two different methods of introducing fresh air in the Rutherford system.

that of the American buyer and feeder are so different that the two cannot possibly compete in the same classes—ours are long, neat and trim; theirs thick, heavy and fat.

These winnings have been accomplished with the best judges of the world passing upon the animals—horse judges from both sides of the Atlantic and from both sides of the imaginary line dividing Canada and the United States, beef cattle judges the best practical men of Great Britain and the United States, and sheep judges recognized to be the best available. This is what has