

Mr. E. D. Tilson's New Barns.

One of our staff recently had the pleasure of inspecting the fine buildings and commodious stables erected by Mr. E. D. Tilson, of Tilsonburg. Mr. Tilson has spent a vast amount of thought and labor in planning the arrangement of the stables, having written to all the experimental stations both in Canada and the United States for plans and suggestions. In addition to this, he has personally inspected all the most conveniently arranged stables in Ontario. The results of all this labor is seen in the almost perfect internal arrangement of the buildings. In the erection of these stables no expense was spared; the walls are built entirely of white brick, while the ceiling is ceiled with plained and matched lumber, the walls plastered and then covered with a coat of hard finish.

THE DIMENSIONS

of the main building are 125 by 60 feet. There is a wing attached, the walls of which are of the same height as those of the main building, of which it really forms a part. The size of this building is 46 by 48 feet. The stalls in this stable are three feet nine inches in width, the feed passages eight feet wide, and the passage behind the cows of sufficient width to allow of a team and sleigh being driven through for the purpose of cleaning out. As will be seen by the diagram, there is a gutter seven inches deep and fourteen inches wide behind the cows and protected on the side next the cows by a piece of timber to which one end of the plank flooring is attached. The Portland cement floor is of the best quality, being made from first-class material, and laid by city tradesmen in the winter season while pavements could not be worked upon. First-class labor was thus obtained at a low rate. The stalls are formed by plank set up at an angle and held in place at the lower end by the two-inch flooring, the upper end fits into a groove in the upright post. The manger is on a level with the floor and is six inches high on the inside, sixteen inches wide at the bottom and slants out into the feed passage ten inches, at a height above the floor of thirty inches; thus leaving an opening fifteen inches wide through which to pass the feed. In fig. 1 our artist failed to show the manger as it really appears. The feed board extending from the bottom of the manger to the passage should have been extended much higher than is shown in cut.

The system of fastening in use is the common cattle chain which slides upon an iron bar extending from the floor to the ceiling.

THE WATER SUPPLY

is collected from several springs at the upper end of the farm, and brought 150 rods in cast iron pipes to the barns, stables, yards, etc., having sufficient gravitation head to raise it sixteen feet at the barn and house. The supply is always sufficient to keep a four-inch pipe running full. There are three lines of two-inch pipe running the length of the stable, just back of the manger, partly underneath it, with fresh water continually running through the pipes from the west to the east end of the barn. There is an upright overflow at the east end to each one of the pipes, just sufficient height to keep the water boxes within one and a-half inches of being full. The pipes leading from the main to the iron buckets are one and one-quarter inches, entering the buckets at the bottom. They run at an angle of 45 degrees to within four inches of the box and then plumb up into the box, so that when the cows drink, the water will immediately rise, keeping the boxes full. It is so arranged that by turning a stop-cock at the lower end of the mains or by opening three stop-cocks, one in each main, it will drain all the boxes and pipes in the stable in one minute, and by closing the stop-cock all the boxes in the stable, 82 in number, will fill in five minutes, and as this is done each day a constant supply of fresh water is obtained. Some of the boxes are covered with lids hung with hinges, so that the cows will lift the lids and drink when they desire. The lid falls back in its place as soon as the cow removes her head. The water, coming as it does so far underground, is almost as warm in winter as in summer, a very important feature at both seasons.

There is a passage running through the centre of the wing. On the one side are the silos, four in number, 12 by 20 feet in surface measurement and 45 feet deep; the divisions are of brick and the walls cemented on the inside.

The varieties of corn which Mr. Tilson prefers are the Leaming and Mammoth Southern Sweet.

On the opposite side of the passage are the calf pens. Here there is no crowding at feeding time, for a row of stalls front the passage, each just wide enough to admit a calf. There is also a very convenient sliding door which is operated from the passageway by means of a pulley and cord.

VENTILATION.

One of the hardest problems for the farmer to solve has been the providing of an ample supply of pure air, both in winter and summer, and at the

same time preventing all draughts. Mr. Tilson appears to have effectually solved this question, and we must admit that the system of ventilation is the most complete which we have seen anywhere. The escape of foul air is provided for by chimneys in the wall, which open behind the cattle. The fresh air is drawn through an underground pipe which warms the air to the temperature of the earth in winter, and cools it to the same point in summer. The air is forced into the pipes by means of upright blowers, similar to those on steamers, with the exception that there is a vane on top which keeps the opening always against the wind. The air is brought into the stable by means of ventilation pipes which occupy the triangular space made by boarding up the space below the extension of the manger into the passageway. Air holes are cut into this pipe at regular intervals, and the fresh air is thus delivered where it is wanted—at the head of the animal.

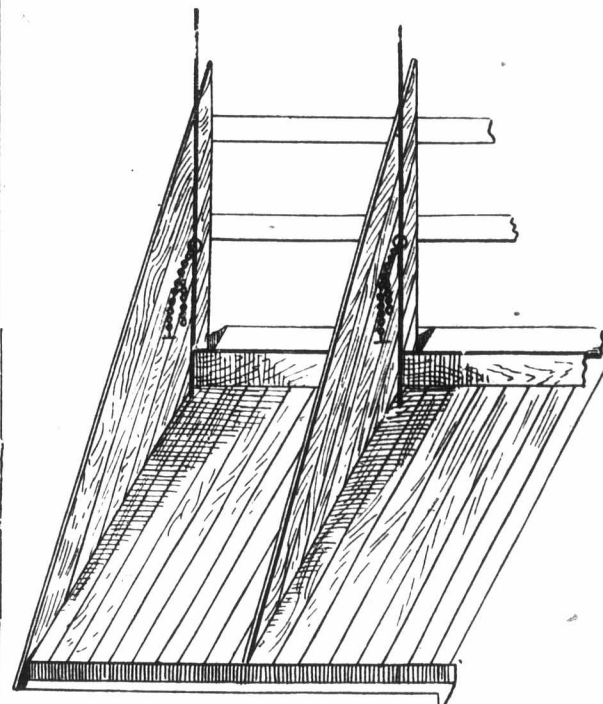


FIG. 1.—REAR VIEW OF STALL.

The milk from the herd is all made into butter in a perfect model of a creamery. This butter is sold at high prices to private customers.

Mr. Tilson believes he has the best lighted, best ventilated, best watered, most comfortable for man and beast, the purest air, with the least bad odor, of any stable in Canada. Cool in summer and warm in winter, and when the ground ventilation, which is to be completed before winter, is put in order there will be nothing to equal it for ventilation in America.

We would strongly advise any person who is thinking of putting up new stables to pay a visit to those of Mr. Tilson, and though he may not be able to invest the same amount of money, still he will fish up ideas which can be worked out in cheaper material, and which will be of lasting benefit to him.

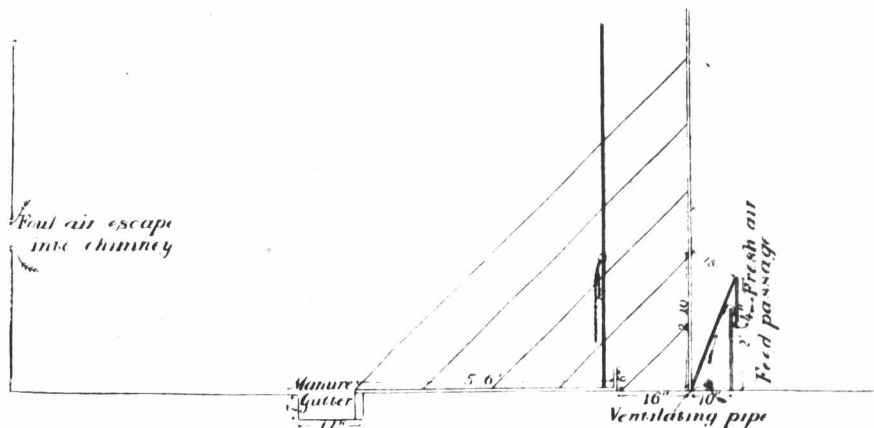


FIG. 2.—SIDE VIEW OF STALL.

Too Much Ventilation.

The Poultry Keeper reminds us of a truth that we had almost forgotten concerning the poultry-house. When a fowl-house is of medium size the greatest trouble in this country is to keep it warm enough during the winter season. Ventilators mean draughts, and draughts mean roup and no eggs. Some resort to putting in a glass front to obtain heat, and so long as the sun strikes directly upon it the end is obtained, but within one hour after sunset the temperature will have reached too near that of outdoors. A medium amount of window doubled in the winter season is all right, but don't allow the heat that has been accumulating all day to pass out through ventilators in the roof. Better to throw the door and a window open for an hour about noon, when the sun is unclouded, if it is thought a change of air is necessary.

Notes from a Few Agents and Readers of the Farmer's Advocate.

GEO. L. HASLAM, Springfield, P. E. I.:—"Your paper is much appreciated, especially on the cheese and dairy questions."

WM. C. WILSON, East Oro, Ont.:—"The watch which you sent me for getting subscribers for the ADVOCATE has given entire satisfaction, being an excellent time-keeper. I will try to get you some more subscribers."

ERNEST WELCH, Burgessville, Ont.:—"I received the ring all right, and presented it to my sister, who says the more she wears it the better she likes it."

JACOB STOLTS, New Dundee, Ont.:—"I received the premium watch, and it has given entire satisfaction in every way. I will always endeavor to further the interests of your paper by sending a few names now and then."

D. KYTE, Richwood, Ont.:—"I have been a reader of the FARMER'S ADVOCATE, London, for a good number of years, and heartily recommend it to the farming community as an able journal—fearless and open in its advocacy of all questions. I have received many valuable suggestions on many important questions, and wish it increasing success. I hope my friends will give it hearty support."

S. HARRIS, Verschoyle, Ont.:—"I have been a subscriber to the FARMER'S ADVOCATE for the past five years, and have found it the best agricultural journal that I can read. Since it comes twice a month it is far more valuable than ever before."

GEN. ALLAN, North Nation Mills, Ont.:—"Please accept thanks for your premium, 'Canada's Columbian Victors,' which I have received. It is a very handsome premium, and more than I could reasonably expect."

R. P. MCGINNIS, Iberville, P. Q.:—"Canada's Columbian Victors' came to hand. I have to thank you for same, as well as for another copy of 'Canada's Pride.' The Ayrshires are splendid."

WM. STEWART, JR., Menie, Ont.:—"I find the ADVOCATE a first-class advertising medium, and a welcome friend at the Seymore Stock Farm, old and young looking for its arrival."

JOHN MCKERLIE & SON, Fergus:—"We consider the ADVOCATE the best agricultural journal in America."

Mission City Fair.

BY T. WADDLE

The first annual exhibition of the Mission City (B. C.) Fair Association was held on October 4th, in the new Cannery building, which is one of the largest and most substantial frame buildings erected in the Province, being 300 feet long by 100 wide, and two stories high, it being admirably adapted for the purpose, as the entire exhibit was made under one roof. In the north end of this building were exhibited the fruits, vegetables, roots, domestic manufactures, etc., while in the section next to the river were shown a fine display of live stock. The President of the Association, Mr. J. R. Wren, an able and energetic officer, occupied the chair of honor at the head of the banquet table, having as his guests the judges and a number of visitors from a distance, among those from Vancouver being J. W. Horn, ex-M. P. P.; J. C. McLagan, A. H. B. MacGowan, F. S. Timberlake, L. W. Paisley, R. Hickinbotham, V. S., and Harry Arkell. The inner man having been refreshed, and

before the work of judging had been entered upon, President Wren delivered an opening address, which was followed by remarks from some of the other gentlemen present.

The live stock, though limited, was considered very good; the principal exhibitors in this department were G. Gibbard, Geo. Wharton, J. T. Wilband, J. R. Wren, Geo. Monroe and A. York, who exhibited imported pedigree stock or grades raised at home from such, some of them being very fine. These gentlemen were all prize takers.

On the tables along the east, north and west sides of the building, were displayed the fruits, roots and vegetables, as well as the product of the dairy and domestic manufactures. In these classes the exhibits were really excellent, and were in every respect equal to the best seen this year anywhere. A portion of this exhibit, shown as a "collection," consisting of potatoes, peas, beans, cabbage, etc., was raised since the flood in the Fraser Valley, some of which were really prodigious in size. Fruits were also exhibited which had been raised in Mission City, the products of trees not yet four years old, and of excellent flavor. The displays made by Messrs. Wren, Gibbard, Murray, York, McKee, Henry, and others in this class, were extremely creditable, and we wish particularly to call attention to the exhibit of preserved fruits, which were simply put up in pure water; the flavor and a perfectly natural color had been retained, no acid or saccharine matter being used.

Take it all in all, the first show of the Mission City Agricultural Fair was a perfect success. To the President, J. R. Wren, and his able and zealous Secretary, H. B. French, aided by F. C. Potts, and an energetic board of directors, are due the credit for the success of the enterprise, and they have a perfect right to be proud of their labors. In Novem-