

## Doors, Windows and Feed Chutes as Ventilators.

Editor "The Farmer's Advocate":

In your issue of January 7th several questions are asked on the subject of ventilation, and it is well worthy of serious consideration; also, the different systems mentioned. While I have not the least doubt that any or perhaps all of those work satisfactorily, I think it will take a terrible lot of preaching to instil it deep enough into the minds of the majority of stable-owners to persuade them to instal such systems. I am not speaking of prospective builders, but those who have stables already fitted up, especially when they think it possible to get good ventilation and pure air into their stables with the system that is already installed in all basement stables, namely, doors and windows, and feed chutes, mixed with a little judgment and common sense. But, in the case of a great many stables that have not been refitted, and still have the old plank or paved floors, which have become badly out of repair, soaked and filled to overflowing with the accumulations of a stable, it would be impossible to get pure air if all those systems were installed. A good floor is one of the great essentials to pure air.

The writer has a stable, 40 x 60, inside root-house and feed-room included, in which there are at present 31 head of cattle and five horses, with no system, except three doors, windows, and four feed chutes; and, by regulating those so as to avoid drafts, finds no trouble in keeping the stable in good healthful condition. I think a great many of the stables are kept too warm. We endeavor to keep the temperature about 45 or 50 degrees. At this there is never any moisture on the walls (which are stone) or ceiling, the latter being as dry as the outside of the doors. Also, when entering, do not meet a gust of foul air waiting a chance for escape. When the stock are out for water or exercise, they do not shiver, as when kept too warm. This temperature may appear to be rather low to some of your readers, but I find by experience the animals do better than if kept too warm.

As to what are the benefits of ventilation, it would be impossible to exist without some form of ventilation. Animals of any kind could not live for any length of time in a close room; the oxygen would soon be all turned to carbonic-acid gas, which is very poisonous. It is, therefore (if not the greatest), one of the greatest essentials to good health in man or beast.

The advantages of my particular plan are that it is cheap and effective, if handled rightly (as all systems have to be governed to be effective), and the essentials are present in every basement stable, which means a great deal. No matter how strongly those other systems are advocated, it will be many a long day before they are installed in every stable, though I have not one word to say against other systems or of what benefit they may be.

JNO. R. PHILLIPS.  
Grey Co., Ont.

## THE FARM.

### How the Old House was Improved.

Anent the question of improving the old farmhouse, the writer has some experience to relate. The house in which most of my life was lived was built of brick, in 1840, the year in which I was born, and, having been well built, is still in use as a farmhouse, and in fairly good condition. When built, and while the family was small, it was not considered inconvenient to work in; indeed, in some respects it was too convenient, one feature being a well under the kitchen floor, and, as later an endless chain pump was installed, there was no need of an alarm clock to wake the family, as paterfamilias started the pump at five o'clock in the morning. But when the family grew to a baker's dozen, and half a dozen or more hired men had to be housed and fed, an extra kitchen was added, and, as the rear side of the house was but one storey high, it was decided to build a storey-and-a-half kitchen as an L to the main structure, the two rooms in the rear of the latter being turned into one large dining-room, the pump in that place being removed, and the well covered, but a plank cistern, which in time proved a greater nuisance, was placed under the new kitchen floor; and when, in the course of time, the planks rotted, the cistern leaked, and occasionally flooded the cellar, which, with a clay floor, was at such times in anything but a comfortable condition, as there was no drain leading from it. This was the condition of things when the farm came into the possession of the writer. The first improvement made was the tile-draining of the cellar, which required a trench of only about two hundred feet. Next was the building of a cement cistern outside the kitchen wall, and installation of a pump at the rear side. Later, a cement floor was laid in the cellar, and life began to be worth living in the old

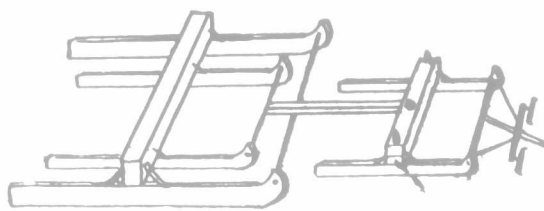
though bedrooms had been arranged for the men over the new kitchen and woodshed, there was a scarcity of chambers over the main portion of the house for the accommodation of a later, ambitious family growing up, and we began to study the possibilities of making improvements in the arrangement of rooms, with the result that, from two large rooms upstairs, three fair-sized ones were made, the center one being lighted by a pediment window, which made a gable in the roof, and considerably improved the outer appearance of the house. At the same time, the long room below, which, when the house was first built, served as a kitchen and dining-room, was divided, by means of folding doors, into dining-room and sitting-room, or library, and, on special occasions, was readily thrown into one large room. The entrance door to that portion of the house was strangely placed in one corner of the long room, and there was nothing in the way of a hall or vestibule, and no place to hang coats or hats, save on hooks along the walls of the room. There was, however, a space under the stairs, formerly used as a pantry, with a trap-door over the cellar stairs. This, in the remodeling, we utilized for a side entrance, the doorway in the corner being closed, and the door placed where the window of the pantry had been. A good-sized porch was built over the door, and we had then a respectable entrance, and a suitable place to hang coats and hats. A door was also opened from this entrance hall to the front parlor, the inside entrance to which was originally from a dark landing at the foot of the stairs, in the center of the house, the door at that point being now closed, supplying a clothes-closet for a ground-floor bedroom. Of course, after all these changes, the house was far from being perfect, but the improvements were real, and added much to the comfort of the family, to the convenience of working, and to the pleasure of the young people, to say nothing of the improved outward appearance of the house, making the home more attractive, and inciting ambition to keep it so. As it is over thirty years since these changes were made, I can give no definite figures as to the cost, but I estimate roughly that the whole expense was not over two hundred dollars, and it was certainly worth much more than that in saving of time and labor in the housekeeping, and especially in regard to sanitation, secured by the improved condition of the cellar. It may not be possible to make as many improvements in all old houses, even if required, but it is probable that in most houses, by a study of the conditions, considerable improvement may be effected, at a moderate cost.

J. C. S.

### Improved Device for Sleighs.

A correspondent of "The Farmer's Advocate and Home Journal," of Winnipeg, writes to thank that paper for the description given last winter of a sleigh with a pair of runners on the outside of the hind bob. He says:

"I built one after the description you gave, just to use about the farm, as the boys were always getting into trouble with the ordinary sleigh when hauling in hay and straw. Now they



use the new sleigh for everything, as it is so much safer and handier, so I have ordered another for my own use. It certainly solves the problem of keeping roads in shape in winter, and good roads mean light work on horses, as well as a saving in time. This is the best thing I ever saw in a farm paper."

The design from which the accompanying cut was made was supplied by a North Dakota reader, who is very enthusiastic about it, especially for hauling out grain loose in the box, as he says it never upsets.

### How to Renew.

A \$1.50 paper for \$1.25 is the bargain that may be obtained by an subscriber who will send us three other renewals along with his own. In clubs of four renewals or over we will accept \$1.25 per name.

Better still, send us the name of two new subscribers, recommended by \$3.00 (\$1.50 from each), and we will advance your own subscription one year. Or send one new name, recommended by \$2.25 (being \$1.50 from the new subscriber and 75 cents for the balance of your own subscription), and the date on your label will be extended one year. This is a rare opportunity.

## THE DAIRY.

### Western Ontario Creamery Conditions.

There were 77 creameries in operation in Western Ontario in 1908, four more than in 1907. Nine of them made both cheese and butter. Milk and cream is sent to these 77 creameries by 14,115 patrons, only 2,150 fewer than are sending to the 217 cheese factories. This makes a total of 30,440 patrons producing milk and cream for the factories of Western Ontario, according to the report of creamery instruction by Chief Instructor Hems. In 1907 there was produced 2,932 tons of butter; in 1908, 3,270 tons, being a gain of 338 tons. Sixty-eight creameries collect cream, nine receive both cream and milk. There are no entirely milk-gathering creameries in operation. Sixty-five creameries pay by the Babcock test and only 12 by the oil test. Seven creameries are using the scales for sampling cream for testing, as against only four in 1907. Seventy-two creameries are using the combined churn, the box churn having practically gone out of use. Fourteen creameries are using a pasteurizer, 7 more than in 1907. Thirteen creameries are using large cans for collecting cream, 12 using individual cans, 6 using jacketed cans, 15 ordinary cans, and only 18 now use cream tanks. Thirty-eight creameries have first-class cream haulers, 36 only have fair-class haulers, 16 of which have a very poor class of cream haulers. The cream hauler has a wide influence among the patrons, since on him depends to some extent, at least, the responsibility of getting the patrons to handle the cream in better condition, and he should be well informed on creamery conditions, and other practical points, in order to give the patrons necessary information for improving the quality of the cream. Twenty-five creameries are using the cooler. The average temperature of the storages was 49.1 degrees. This is far too high, and some effort should be made to maintain a lower temperature, as butter soon loses its fine flavor if allowed to stand even for a short time at high temperature. Twenty-seven creameries kept the buttermilk tanks clean, 22 in fair condition, 21 in very bad condition. An effort should be made to keep these tanks clean as far as possible. The average per cent. of fat in the cream was 22%; for the northern creameries, 20%; for the southern creameries, 24%.

More uniform methods should be adopted by the creamerymen. It would be well to cut out measuring the cream in inches and adopt the plan of weighing. Decide on a uniform system of paying patrons with butter-fat or pounds of butter. Do away with the oil test, and all adopt the Babcock test. Have a system as nearly alike as possible in charges for manufacture. Then the patrons would know that every creamery was trying to do a good straight business.

Six hundred and forty-eight tests were made by the Beaker method for moisture in the butter; the average per cent. of moisture for the season was 14.33%. There were 61 samples with over 16% of moisture. These 61 samples, however, came from 19 creameries—6 in the northern group and 13 in the southern group.

Further improvements are reported in the quality of the cream, in the quality of the butter, and in the general equipment of the factory. The total amount of money expended in creamery improvements was \$8,240.00.

### Cheesemakers' Difficulty.

The quality of the cheese up to the end of June was fine, but when hot weather came in July there was the same difficulty as in 1907, at a few factories, with small round holes in the cheese. This difficulty was discussed at the district meetings, and the general opinion seemed to be that the remedy was to get a better quality of milk, cut the curds fine, using the 1/4-inch curd knife; get the curds firm before acid came on; not draw the whey to the surface of the curd too soon; get rid of all surplus moisture in the cooking if possible, and by stirring the curds sufficiently in the sink before piling, holding a little longer before milking, getting the curds well flaked, and give plenty of time before salting to get the curds well matured and free from moisture. Some of the late-fall cheese do not get sufficient attention in the matter of curing before being shipped. Some of the buyers complained bitterly of the neglect on the part of some of the makers along this line. The fall cheese should not be allowed to go below a temperature of 58 or 60. The boxes in one section were also complained of by the buyers. Very few acrid cheese were reported. The finish is improving, and the August and October makes were exceptionally fine. If we can ever get the milk in hot weather coming in good condition, and cool curing rooms established, there is no reason why most cheese could not be made during the whole season. In visiting cool-curing rooms during the very hottest weather, one could not help but notice the fine smooth texture of the cheese. Chief Instructor Frank Hems, before the Western Ontario Dairymen's Convention.