

**The Field.**

**Ventilators for Stacks and Ricks.**

The practice of stacking hay and grain is far less general in Canada than either in the adjoining States or in England, owing, it is presumed, to the proportion of barn accommodation in the respective countries. Barns of sufficient extent to hold anything like the amount of grain crops raised on the farms, are very uncommon in the western and newly

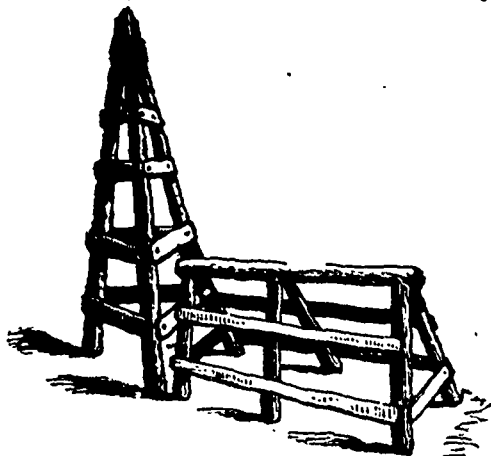


FIG. 1.

settled States of America; and in many sections of the country it is the universal practice to stack not only the hay cut either from meadows or prairies, but also the wheat, barley, oats, and other grain crops, and to trash them from the stack. The stacking is often very inefficiently done, and it has been our lot to see, year after year, a very large amount of grain more or less spoiled, after being safely harvested, and when all danger ought to have been over, by either heating or getting rotten in the stacks. In England the large amount of hay and grain cut, and the extremely wet and variable climate, render the task of securing the crop after harvesting one of considerable difficulty; but the care, skill, and appliances made available for the purpose are usually sufficient to overcome all these difficulties, and it is not often that loss is incurred in storing the produce of the earth after it has been gathered from the field. Occasionally, even in England, however, hay-stacks take fire, and grain is damaged in the stack. To diminish the risk from the heating, to which all collections of vegetable matter, especially when imperfectly dried, are subject, various contrivances have been adopted for securing a thorough ventilation in the stacks. Some of them are extremely simple as well as efficient; and as they may be found serviceable to Canadian farmers, we give a brief description and illustrations, which are taken from the *Farmer*

(Scottish), of ventilators used for stacking grain and hay in several parts of England and Scotland.

Fig. 1 represents one form of these ventilators, or *bosses*, as they are called in Scotland. It is constructed of three light poles, eight feet in length, usually the thinnings of a larch plantation, placed in a triangular form, and kept up and steady by means of short pieces of wood nailed upon them at regular intervals. The three poles are either tied together at the top, as represented in the figure, or have a wooden pin passed through them. When put in their proper position, the lower ends of the poles will be three feet apart from each other. Where the corn stack is built on a frame elevated on pillars, the ventilator is placed in the centre of the frame, and the air enters from underneath; but where the stack is built on the ground it is necessary to have a small trestle, two feet high, and long enough to reach to the outside of the stack, for the purpose of making an opening for admitting the air. No ventilator is required at the top, as the air passes out readily enough through the upper part of the stack. Fig. 1 shows the centre ventilator or boss, with the trestle placed in position previous to commencing building the stack. Sometimes two trestles are used, one on each side, in order to secure perfect ventilation.

Fig. 2 is another form of ventilator. In this case the upright poles are equidistant at top and bottom. This form of ventilator can be used, as in the other case, both with stacks built on frames or with such as are built on the ground, and trestles are also necessary in the latter case. Both forms of ventilators, when placed on frames elevated above the ground, should be attached to the frame by nailing one end of a stay to each leg and the other to the frame. We have experienced great advantage from the use of such ventilators, especially when the weather was not favourable to thorough drying, and with the help

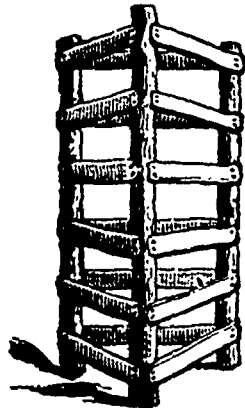


FIG. 2.

of these have stacked corn in a state which would have entirely prevented any attempt to save it without the help of these simple contrivances.

Another useful invention has lately been introduced into the old country, and appears to be very serviceable both in determining the condition of the interior of a hay-stack, and in affording the relief of additional ventilation when required. The inventor is Mr. E. Lyewood, a Hampshire farmer. In order that the contrivance may be understood, we have given the accompanying engraving (No. 3), which, with the subjoined description, will, we think, sufficiently explain the method of using this simple and efficient explorer and ventilator.

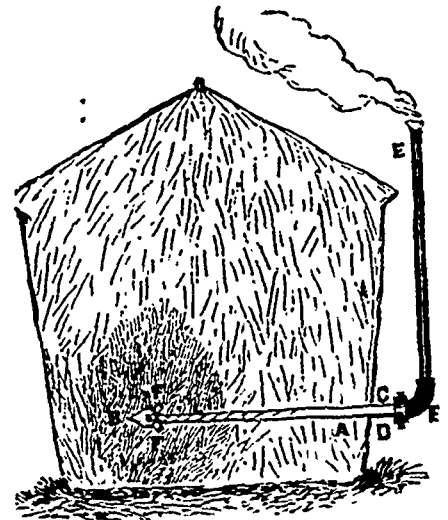


FIG. 3.

A wrought-iron tube (A) three inches in diameter, long enough to reach the centre of a stack, is perforated with holes about two-thirds the length, and furnished with a point (B) at one end, and a strong iron band (C) with lugs (D) at the other. This tube is driven horizontally into a heated rick with a mallet or beetle, and at once affords the means of ascertaining the temperature of the stack, which is done by passing a thermometer on a stick into the tube. When it is ascertained by this means that any part of a stack into which a tube is inserted is of too high a temperature, a vertical sheet-iron funnel (E) is attached to the neck of the tube, at once establishing a current of air from the centre of the rick to the atmosphere, and immediately removing the superfluous heat, without disturbing or damaging the contents of the rick in any way. At the back of the point (B) several small hooks (F) are placed, so that in drawing out the tube a sample is brought from the centre of the stack.

It should not be forgotten that ventilation for hay or grain, if we would preserve its good condition and quality, is perhaps even more requisite in the barn than in the rick.