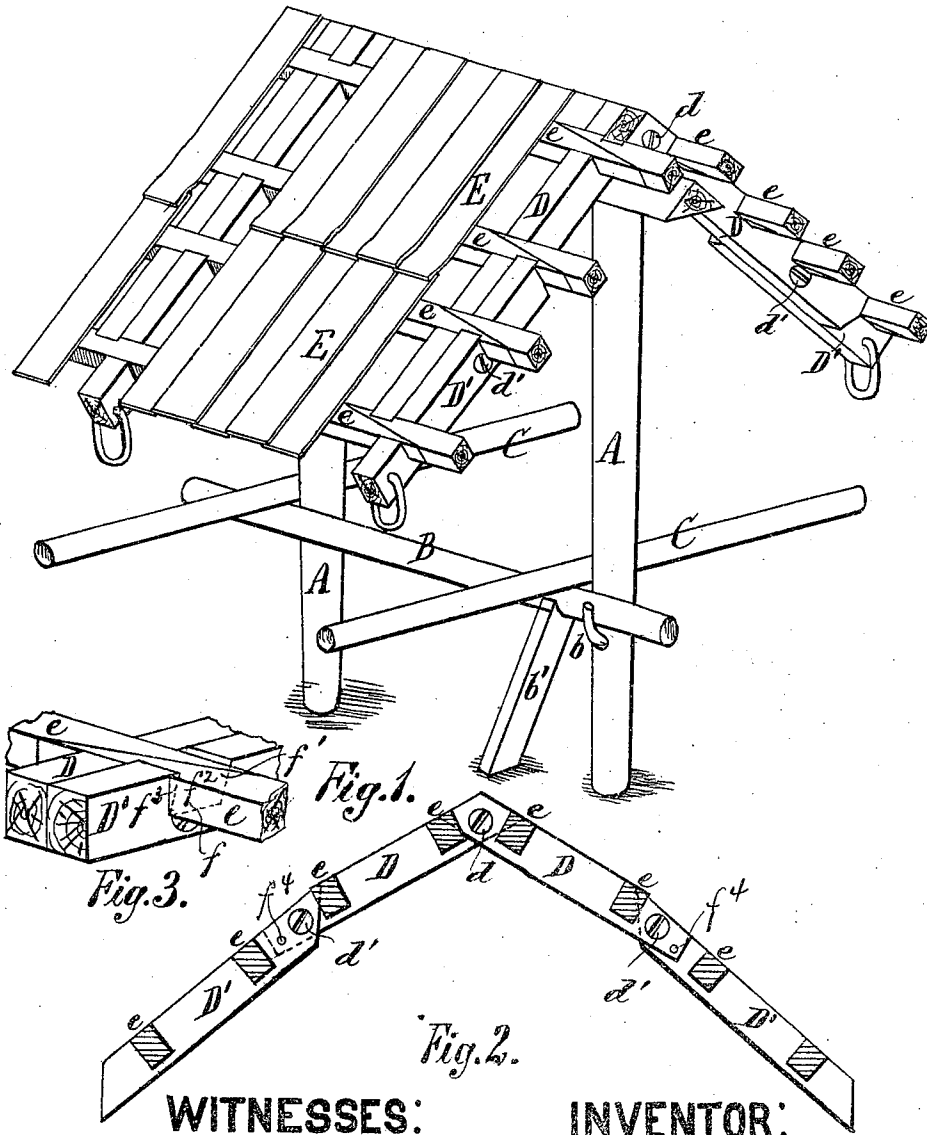


P. M. BROWN.

Rick-Covers.

No. 133,516.

Patented Dec. 3, 1872.



WITNESSES:

INVENTOR:

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UNITED STATES PATENT OFFICE.

PETER M. BROWN, OF CARROLLTON, ILLINOIS.

IMPROVEMENT IN RICK-COVERS.

Specification forming part of Letters Patent No. 123,516, dated December 3, 1872.

To all whom it may concern:

Be it known that I, PETER M. BROWN, of Carrollton, Green county, State of Illinois, have made a certain new and useful Improved Portable Roof for Ricks, &c.; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates, first, to an improved roof or covering for ricks, consisting of pivoted main and secondary rafters which are provided with mortises fitted to receive the ends and tenons of corresponding mortised horizontal slats of the sectional roof parts, the pivoted rafters, lever-like, clamping said roof parts together in a safe and permanent manner. The roof parts, being sectional, can readily be put on or taken off, or used as separate coverings, the rafters can be folded, and thus all parts, being constructed portable, can readily be manipulated. Also, this invention relates to an improved manner of ventilating wheat or grain in ricks by inverting the upright poles, so as to have their thickened ends up, and form, in combination with the ordinary center and cross poles or beams used, clearance space to allow ventilation to permeate the rick, all of which will now more fully appear.

To enable those herein skilled to make and use my said improvements, I will now more fully describe the same, referring to—

Figure 1 as a perspective view of roof or covering; to Fig. 2 as a modification of rafters adapted for rounded roofs for straw-ricks and the like; and to Fig. 3 as a detail perspective, showing manner of fitting the tenoned slats of the roof parts proper in the rafters.

Heaped wheat and other grain is stacked in ricks. In order to create a more perfect ventilation throughout the rick the upright poles A are inverted, with small ends stacked in the ground. (See Fig. 1.) B is the center-pole passing through rick. Said pole can be properly secured to rest on pins *b* in the uprights A, or secured by props *b'*. C are the cross-poles resting on the center-pole B. I am aware that poles A B C have been used for this purpose. However, by thus inverting the uprights A, the grain settling on the platform at bottom, and also top grain supported

on the poles B C, prevent the ordinary tight packing of the grain, and the tapering condition of the uprights A creates clearance space for ventilation. The air passes from bottom to top of said uprights A, running lengthwise and crosswise of the poles B C, thus more perfectly permeating the rick than ordinary, with advantages of a more speedy cure of the grain and prevention of molding.

My improved covering or roof for ricks is constructed as follows: The main rafters D that straddle the top of rick are pivoted together at *d* on top. To the rafters D are pivoted, at *d'*, secondary rafters D'. Thus said rafters act as levers to clamp firmly the sectional roof parts, as indicated in each figure. E are the roof-boards attached to the horizontal pieces *e*, and forming sections. The main and secondary rafters D D' are relatively provided with mortises *f*, fitted to receive the corresponding mortises *f'* of the horizontal pieces *e*. To allow for the clamping action of the pivoted rafters D D' the same have beveled or inclined edges *f''* fitted to engage the slightly beveled sides *f'''* of the roof-pieces *e*. (See Figs. 1, 2, and 3.) Where two ends of the roof-pieces *e* are to be joined in one mortise, as in the center, said contiguous ends are diagonally tenoned, as clearly shown in Figs. 1 and 3. The main and secondary rafters D D' are first placed on top. The roof parts or sections are next fitted in said rafters. This is readily effected by turning the lever-rafters D D' in open position, a pin, *f''*, retaining said rafters in this position until the horizontal slats *e* are fitted in their respective mortises. One or more roof sections thus fitted, the rafters D D' are turned in closed position, which clamps the mortise-joints and effectually secures the roof-pieces *e* with the covering. The leverage gained by the pivoted rafters secures the roof parts sufficiently, although all possible liability of disengagement can be obviated by the further securing of the ends of the rafters D D', by a rope, with its pin properly stacked in the rick.

A rounded roof or covering can be formed by providing the rafters D with several pivoted additional rafters, D', as shown in Fig. 2. For straw-ricks the roof can thus be made to conform to the rounded top of said straw and similar ricks.

Having thus fully described my said improvements, what I claim is—

1. An improved sectional roof, consisting of pivoted main and secondary rafters provided with mortises fitted to receive the tenoned and mortised horizontal pieces of the sectional roof parts, said pivoted rafters acting as levers to clamp said roof parts firmly together, substantially as and for the purpose set forth.

2. The upright poles of ricks, inverted so as to taper downward, as here shown and described, and for the purpose set forth.

3. The combination of the inverted poles A, as shown and described, with poles B C, as and for the purpose set forth.

4. The combination of the roof-sections E, horizontal rafters *e* with pivoted rafters D',

and main rafters D, arranged and constructed to operate as and for the purpose set forth.

5. The sectional roof parts, consisting of horizontal pieces *e*, mortises *f*¹, and bevel sides *f*³, when arranged in combination with rafters D, pivoted rafters D' having mortises *f* and beveled edges *f*², as and for the purpose set forth.

6. The combination of the sectional roof parts, constructed as herein shown and described, and stacks or poles A B C, arranged to operate as and for the purpose set forth.

In testimony of said invention I have hereunto set my hand.

Witnesses:

PETER M. BROWN.

J. K. SHARON,

H. W. FISHBACK.