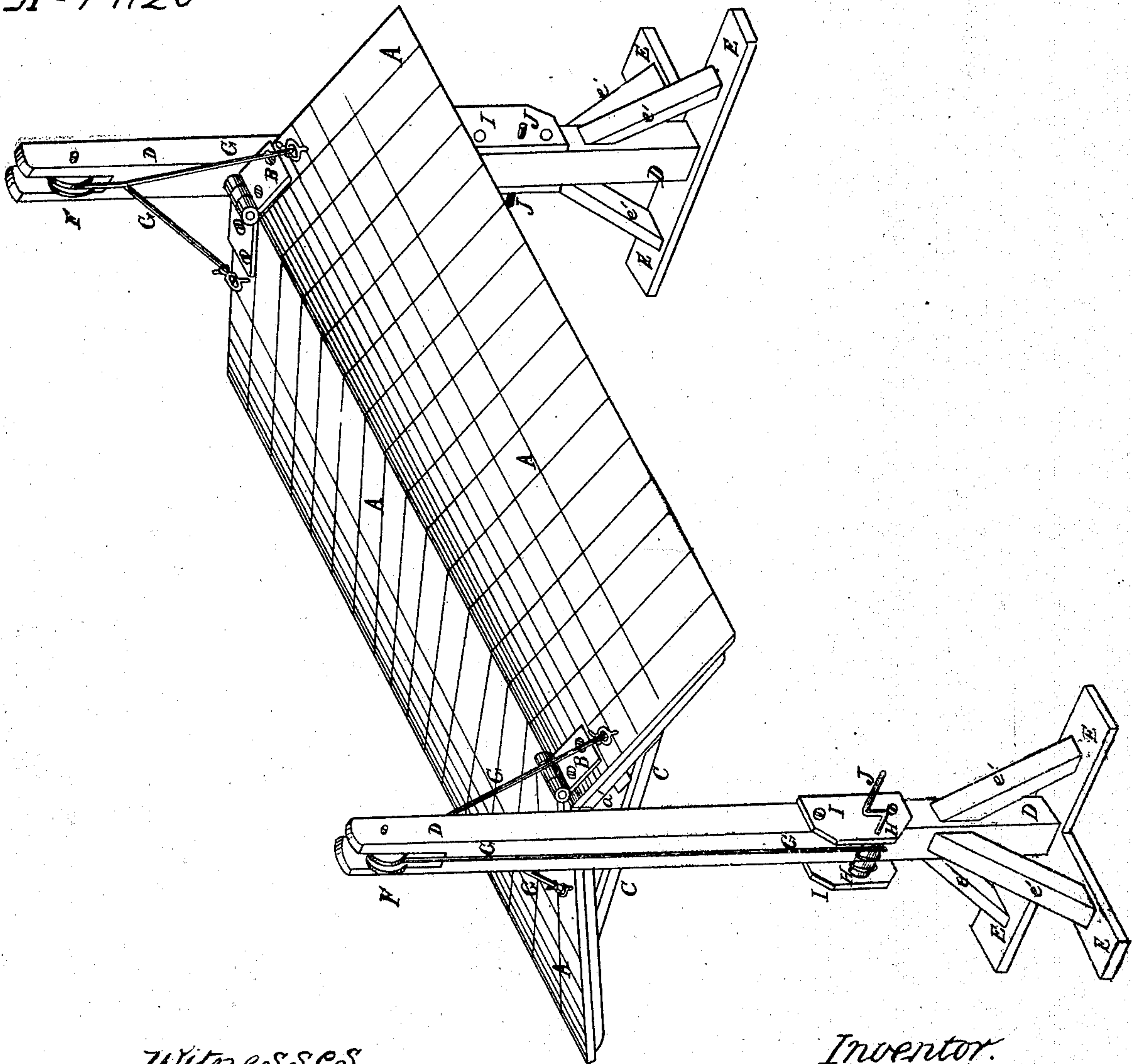


*J. J. Naylon.*  
*Hay & Grain-Roof.*

*N<sup>o</sup> 74120*

*Patented Feb. 4, 1868*



*Witnesses.*  
*Theo. Fische*  
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# United States Patent Office.

JOHN J. NAYLON, OF BRIGHTON, MICHIGAN.

*Letters Patent No. 74,120, dated February 4, 1868.*

## IMPROVEMENT IN PORTABLE HAY AND GRAIN-ROOF.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN J. NAYLON, of Brighton, in the county of Livingston, and State of Michigan, have invented a new and improved Portable Hay and Grain-Roof; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The figure is a perspective view of my improved hay and grain-roof.

My invention has for its object to furnish a simple and convenient roof for covering hay and grain-stacks, and for other purposes; and it consists in the construction and combination of the various parts, as hereinafter more fully described.

A is the roof, the two sides of which are securely hinged to each other at the ridge of the roof by two or more hinges, B, as shown in the figure. The particular construction of the roof, and its size, is immaterial, but I prefer to form it by attaching matched boards to a framework, said boards running from the ridge to the eaves. The roof may be strengthened by ridge-poles, *a'*, running longitudinally with the roof, and placed a few inches below the ridge. C are braces, upon the ends of which are formed ordinary brace-tenons, which enter brace-mortises in the framework of the roof, to further support and strengthen it. D are posts, of the requisite height, the lower ends of which are securely attached to a base or foundation-frame, E, of sufficient size to hold the said posts D in a vertical position, the connection being further strengthened by braces *e'*, as shown. To the upper ends of the posts D are pivoted pulleys or rollers, F, around which the hoisting-ropes G pass. G are ropes, the upper ends of which are branched, and hooked upon or otherwise attached to eye-bolts, or their equivalent, secured to the roof near the ridge, as shown in the drawing. The ropes G pass over the pulleys F, pass down the outer side of the posts, and their lower ends are secured to the shaft H, which works in bearings I, attached to the outer sides of the posts D near their lower ends. J are cranks, formed upon or attached to the ends of the shafts H, so that the roof may be raised and lowered by simply turning the cranks J.

In using the apparatus, the hinged roof A is laid flat upon the ground on the spot upon which the stack is to be built. The branched ends of the ropes G are then attached to the roof, the said ropes passed over the pulleys F, and the posts D raised into an erect position at the ends of the roof A. The cranks J are then operated, winding the ropes G upon the shafts H, and raising the roof to any desired height, or to the top of the posts D. When the roof A has been raised to a convenient height the braces C may be inserted in their places.

Should it begin to rain before the stack is completed, the roof may be at once lowered, so as to protect the hay or grain. When the stack has been completed the roof is lowered upon its top, and the ropes and posts may be removed and used with another roof in building another stack. The roof may also be used for a cattle or wagon-shed, or as a covering for carpenters or other mechanics when working out of doors, and for various other purposes.

I claim as new, and desire to secure by Letters Patent—

The ropes G, posts D, shafts H, and cranks J, when used in connection with the roof A, substantially as herein shown and described, and for the purpose set forth.

JOHN J. NAYLON.

Witnesses:

H. TUNIS,

H. C. HAUSE.