(No Model.)

J. HOLMAN.

STACKER.

No. 477,937. Patented June 28, 1892.

Fig. 1.

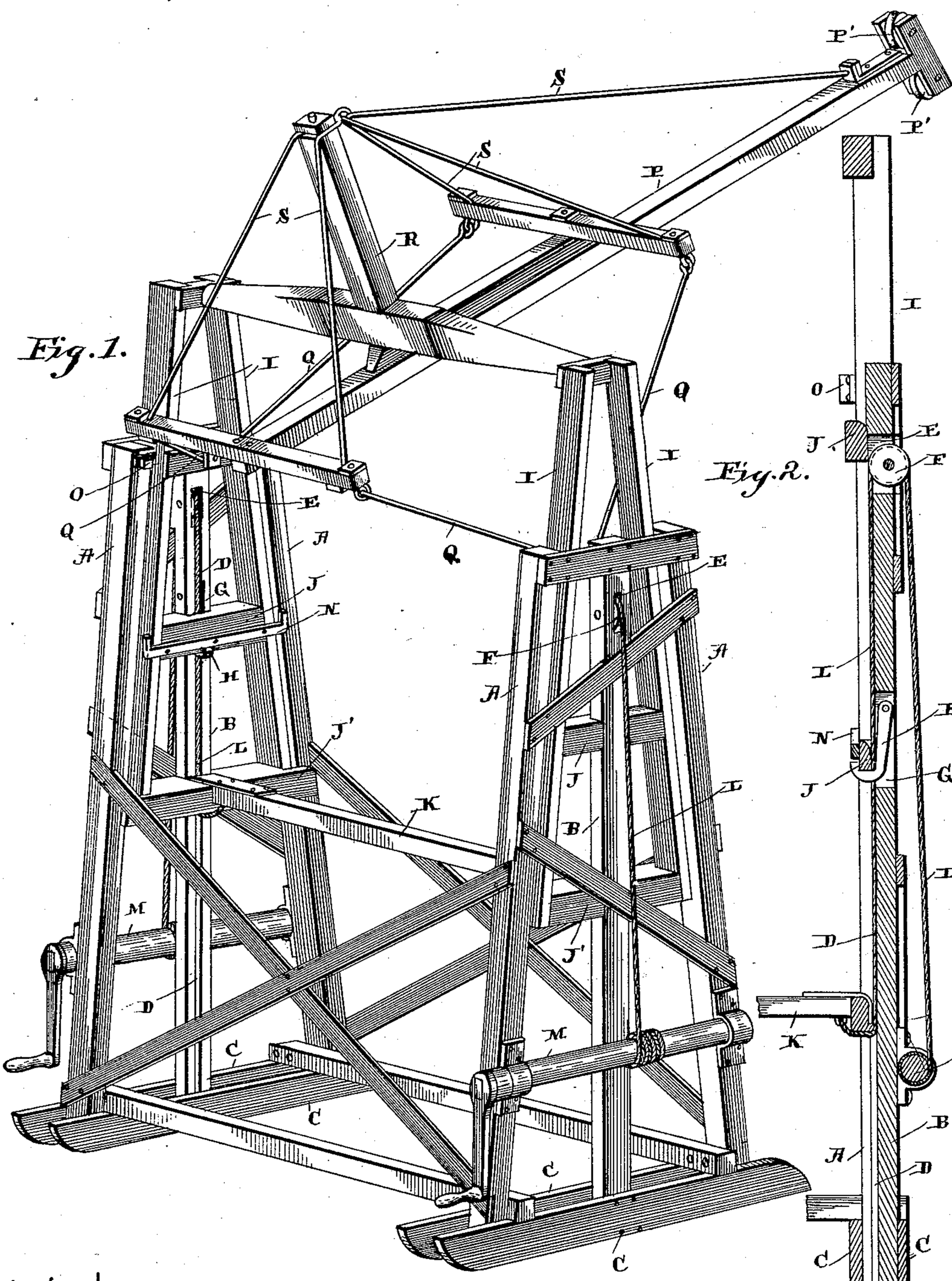

Fig. 2.

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JACOB HOLMAN, OF LIBERTY, ILLINOIS.

STACKER.

SPECIFICATION forming part of Letters Patent No. 477,937, dated June 28, 1892.

Application filed January 27, 1892. Serial No. 419,424. (No model.)

To all whom it may concern:

Be it known that I, JACOB HOLMAN, of Liberty, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Stackers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in stackers; and it consists in certain novel features of construction and in the combination and arrangement of parts, which will be fully described hereinafter, and more particularly referred to in the claims.

The object of my invention is to provide a portable stacker-tower with a vertically-adjustable track-arm and supporting-frame therefor and an improved locking mechanism for holding the said frame in the desired adjustment within the tower.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved stacker. Fig. 2 is a vertical sectional view of one of the tower-posts.

The tower consists of the converging uprights A and the central posts B, which are secured together by suitable strips on their outer sides, as shown, and which are supported upon the runners C, upon which the stacker may be moved from place to place. The posts B are formed with the vertical grooves D on their inner sides, and formed near upper ends of the said posts are the slots E, in which are journaled the pulleys F. A short distance below these pulleys and to one side of the groove D is formed another slot G, in which is pivoted the hook or catch H.

The adjustable frame consists of the converging uprights I, which are adapted to move vertically between the uprights A B, and the said uprights I I′ are secured together by the notched cross-pieces J, which move on the posts B, and by this means the frame is guided in its adjustment and prevented from moving laterally in the tower. The opposite cross-pieces J are connected by the horizontal bar K. L represents ropes, which are secured at their lower ends to the ends of the said bar and which extend around under the cross-pieces J, as shown, and then vertically upward through the grooves D over the pulleys F and down the outer sides of the tower, where their outer ends are connected, respectively, to the windlass-rollers M, which are suitably mounted on the tower. When it is desired to raise the frame, the said ropes are drawn upon or rather are wound around the said rollers M, thus raising the frame to the desired height within the tower. The hooks H are so formed as to allow the cross-pieces J J′ to move by them in the upward movement; but in moving in the opposite direction the said cross-pieces are caught by the hooks and the frame thus held. It will be understood that either the pieces J or J′ may be made to engage the said hooks, according to the height at which it is desired to hold the frame.

Secured to the inner sides of the frame are the horizontal bars N, having their ends upturned, as shown, which engage the loops O on the upper ends of the tower, thus greatly strengthening the frame in its extended position.

Suitably supported on the upper end of the adjustable frame is the track-arm P, which may be of any preferred construction and upon which any suitable carriage may be mounted for transporting the hay-fork from the lower end of the said track where it receives its load from the wagon to the outer end of the said arm, which projects over the stack. Pulleys P′ are mounted in the outer end of the arm, over which pass the operating-ropes. The track is braced in its extended position by the rods Q, which are connected at their lower ends to the frame, as shown. The post R on the said arm is connected to the opposite ends thereof by the brace-rods S, so that the arm is securely braced in its extended position. The arm being capable of a vertical adjustment enables the operator to raise the same as the stack grows in height, thus avoiding the necessity of lifting all the hay to the extreme height before it is dropped upon the stack. Much labor is thus saved. When it is desired to move the stacker from one point to another by lowering the arm-

supporting frame to its fullest extent, transportation is made much more easy and safe than it would be were the arm non-adjustable.

Having thus described my invention, I claim—

1. In a stacker, the combination, with a tower and a vertically-adjustable arm-carrying frame moving therein, of horizontal bars secured to the sides of the said frame and which are formed with upturned ends and loops on the tower-frame, which are engaged by the said upturned ends, substantially as shown and described.

2. The combination of a support and vertically-recessed posts B secured thereto, having transverse slots G between their ends and transverse slots E adjacent their upper ends, both of the said slots communicating with the vertical recess of the posts, rollers journaled in the upper slots, inwardly-extending hooks pivoted at their upper ends in the lower slots, a vertically-moving frame, recessed end cross-pieces thereon, which move on the posts B and which when the frame is being elevated move freely past the said hooks, but which engage the same in their downward movement, ropes connected at their inner ends to the frame and which pass upward in the recesses of the posts and outward over the said pulleys, and a winding apparatus, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB HOLMAN.

Witnesses:
P. H. MERCER,
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