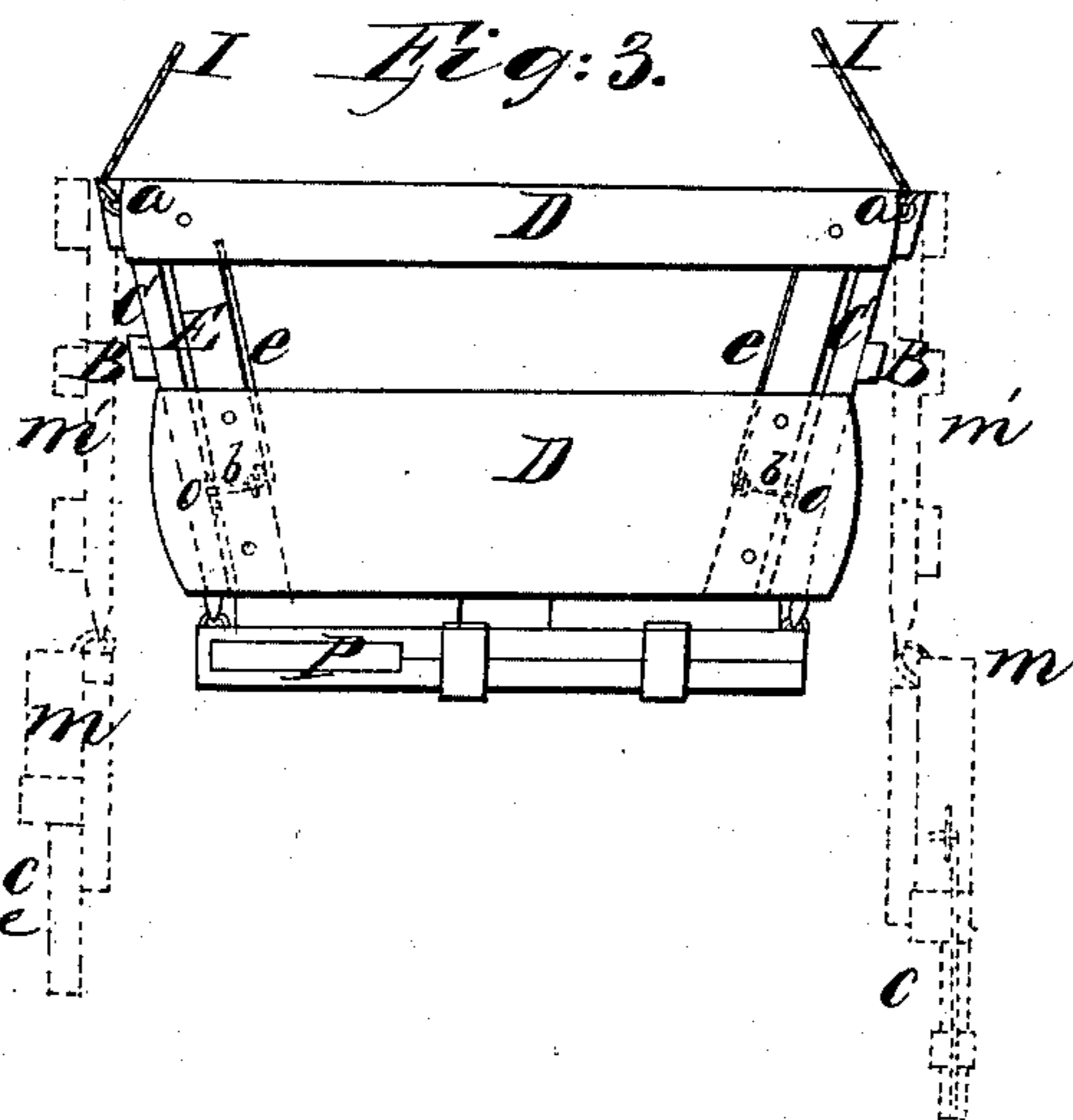
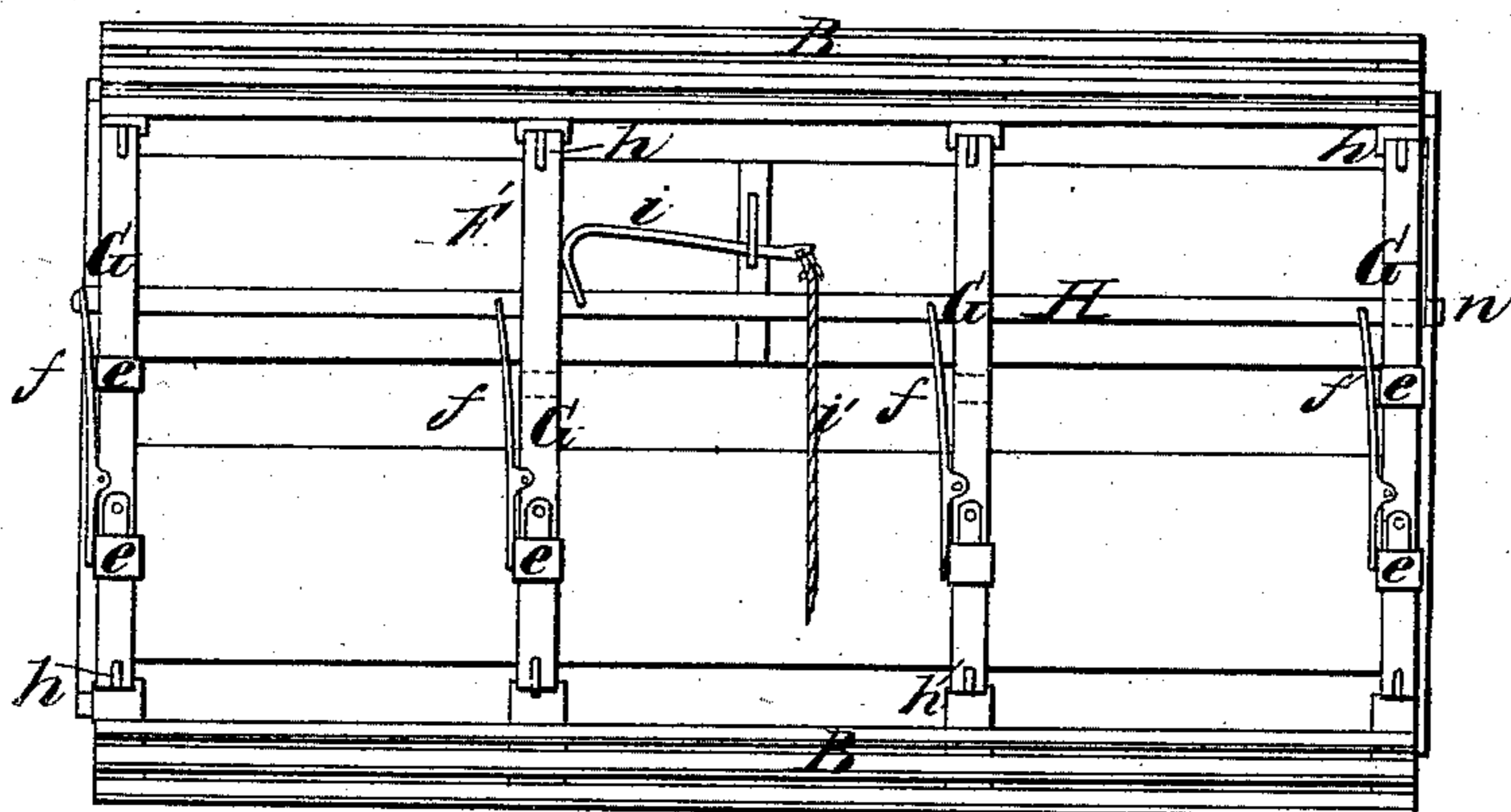
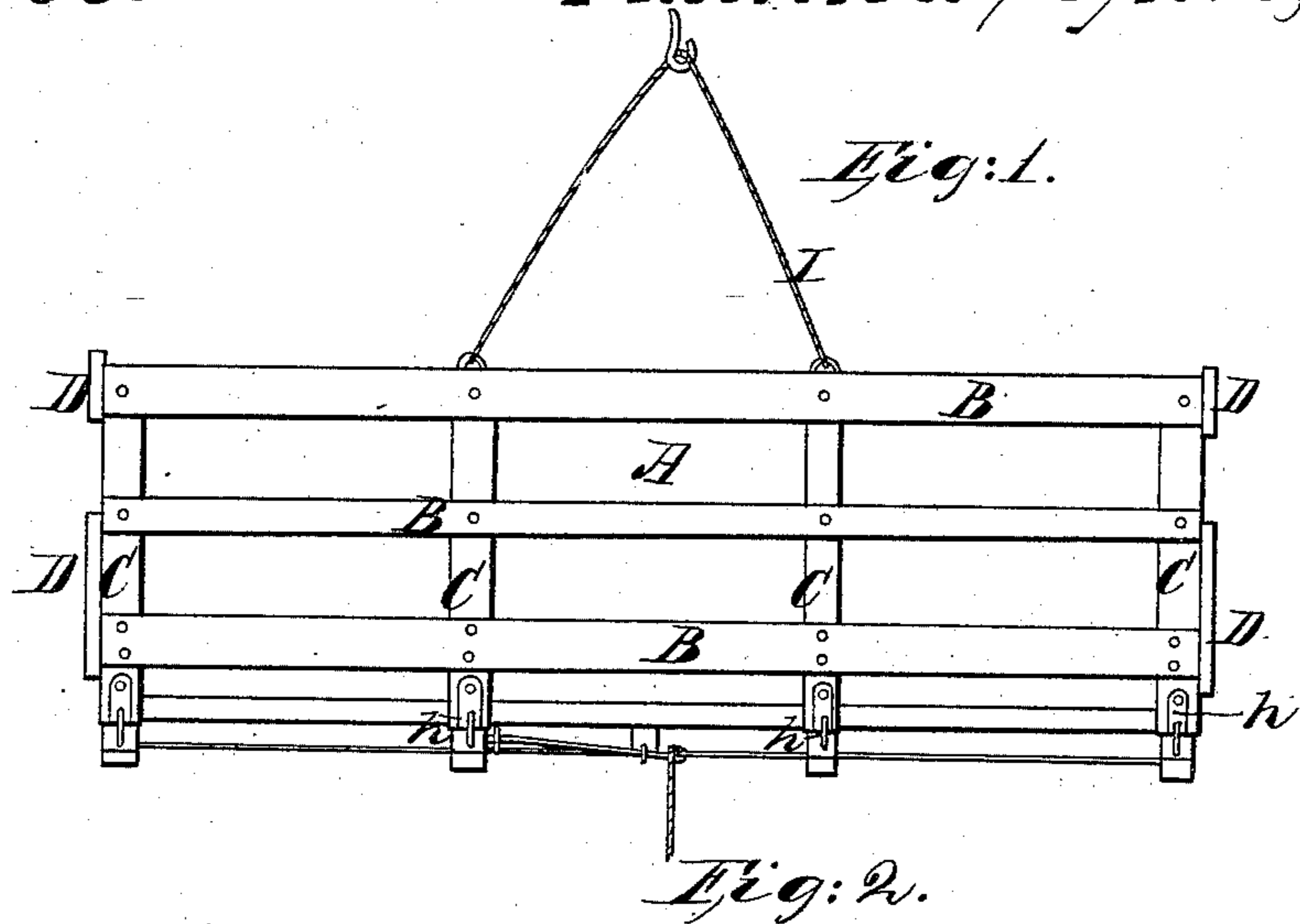


*D. N. Webster,*

*Hay Rack.*

*N<sup>o</sup> 58,158.*

*Patented Sep. 18, 1866.*



*Witnesses:*  
*W. H. Burridge*  
*J. H. Burridge*

*Inventor:*  
*Dennis N. Webster*

# UNITED STATES PATENT OFFICE.

D. N. WEBSTER, OF GENEVA, OHIO.

## IMPROVEMENT IN HAY-RACKS.

Specification forming part of Letters Patent No. 58,158, dated September 18, 1866.

*To all whom it may concern:*

Be it known that I, D. N. WEBSTER, of Geneva, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Hay-Racks, &c.; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the rack. Fig. 2 is a bottom view of the same. Fig. 3 is an end view.

Like letters of reference refer to like parts in the views.

My rack consists of a light frame-work of wood, and is constructed in the following manner: A, Fig. 1, represents one side of the frame, and consists of three or more narrow boards, B B B, the upper and lower ones being a little wider than the middle one, for the purpose of giving more strength to the frame. These boards are fastened to four cross-pieces, C C C, &c. The opposite side of the rack is constructed in the same way.

Fig. 3 is the end of the rack, and is made of two pieces of board, D D, the lower being much wider than the upper piece, for greater strength and durability. Both ends of the rack are constructed alike, and are connected to the sides of the rack by a loop, *a a*, Fig. 3, one at each of the upper corners, the lower part being held in place by a catch, *b*. This catch consists of a small iron rod, one end of which passes through the lower end of the cross-piece E, the point inward. It is then doubled back upon the cross-piece and kept in its place by a staple, which prevents it from being pulled out, at the same time allows it to slide through it, in order to catch into a notch or staple, O, on the side of the rack. A spring, *e'*, on the inside of the cross-piece E, forces the catch into the notch. One of these catches is fixed to each end of the lower corners of the ends of the rack, and will be hereinafter referred to. The bottom of this rack consists of two sections, F F', Fig. 2.

G G G are four sills, to which the boards of the bottom are fastened. These sills are not one entire piece, reaching from side to side, but are each divided, one-half of the thickness to a certain length of each being cut out, as

shown by the dotted lines *c c*, Fig. 3, so that when they are together they lap over upon each other, the half of the one fitting into the corresponding half of the other.

Around the shoulder of the two end sills, and projecting a little over, are bands of iron *e e*, so that when the two are together the ends of each pass under the bands, and are thereby held firmly together or from falling downward.

The two sections are prevented from pulling away sidewise, as follows: H, Fig. 2, is a bar reaching the length of the section F', and made to slide through the cross-sills G G'. To the side of each sill is attached a lever, *f*. One arm of this lever is connected to the bar H, and the other terminates in a hook, which hook falls into a catch or notch on the side of the sill of section F. By this arrangement the two sections are held together. The sides of the rack are connected to the bottom or bed by the loops *h h h*, &c., Fig. 1, which allows the bottom of the rack to fall downward, for a purpose hereinafter shown.

The manner of using this rack is as follows: The rack, on being put together in the manner above described, is then placed upon a wagon and filled with hay, straw, grain, or other material, which is then brought to the place in which it is to be deposited. A sliding pulley is then attached to the loops I I, Fig. 1. The whole is then lifted from the wagon and swung over to the bay or stack, and when over the proper place the bottom of the rack is sprung open by the curved lever *i*, Fig. 2, by pulling it toward the side of the rack by the cord *i'*. This lever being connected to the bar H, and levers *f* also to the bar, it will be seen that pulling the lever *i* in the direction stated will cause the sliding bar H to move in the direction of the dotted lines *n*, Fig. 2, at the same time carrying the long arm of the lever *f* with it, and thereby causing the short arm to draw out from the notch in the side of the sills, and when it is thus released the bottom or bed of the rack falls down in the direction indicated by the dotted lines *m*, Fig. 3, and the sides also to spread out, as shown by the dotted lines *m'*; the hay therefore falls through to the place required. The rack is again put together by bringing the ends of the sills in place, as above described, and then lowered upon the

wagon, as before. The hooks on the short arm of the lever *f* are prevented from drawing out until required by a spring, P, Fig. 3. This spring presses upon the end of the bar H, which, being connected to the long arm of the lever, forces the hook into the notch above mentioned, thereby holding them securely until released in the manner above described.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The sliding bar H, spring P, cross-sills G G', and the levers *f* and *i*, in combination with the sections F F', as arranged in the manner and for the purpose set forth.

2. The sides A, as hinged and arranged, in combination with the sections F F' and ends D, for the purpose and in the manner herein described.

3. The ends of the rack D D, the catch *b*, spring *e*, and the loops *a*, as arranged, and in combination with the sides A and sections F F', in the manner and for the purpose as substantially set forth.

DENNIS N. WEBSTER.

Witnesses:

W. H. BURRIDGE,  
J. HOLMES.