

C. F. Paine,
Hay Press.

N^o 3561.

Patented Apr. 25, 1844.

Fig. 1.

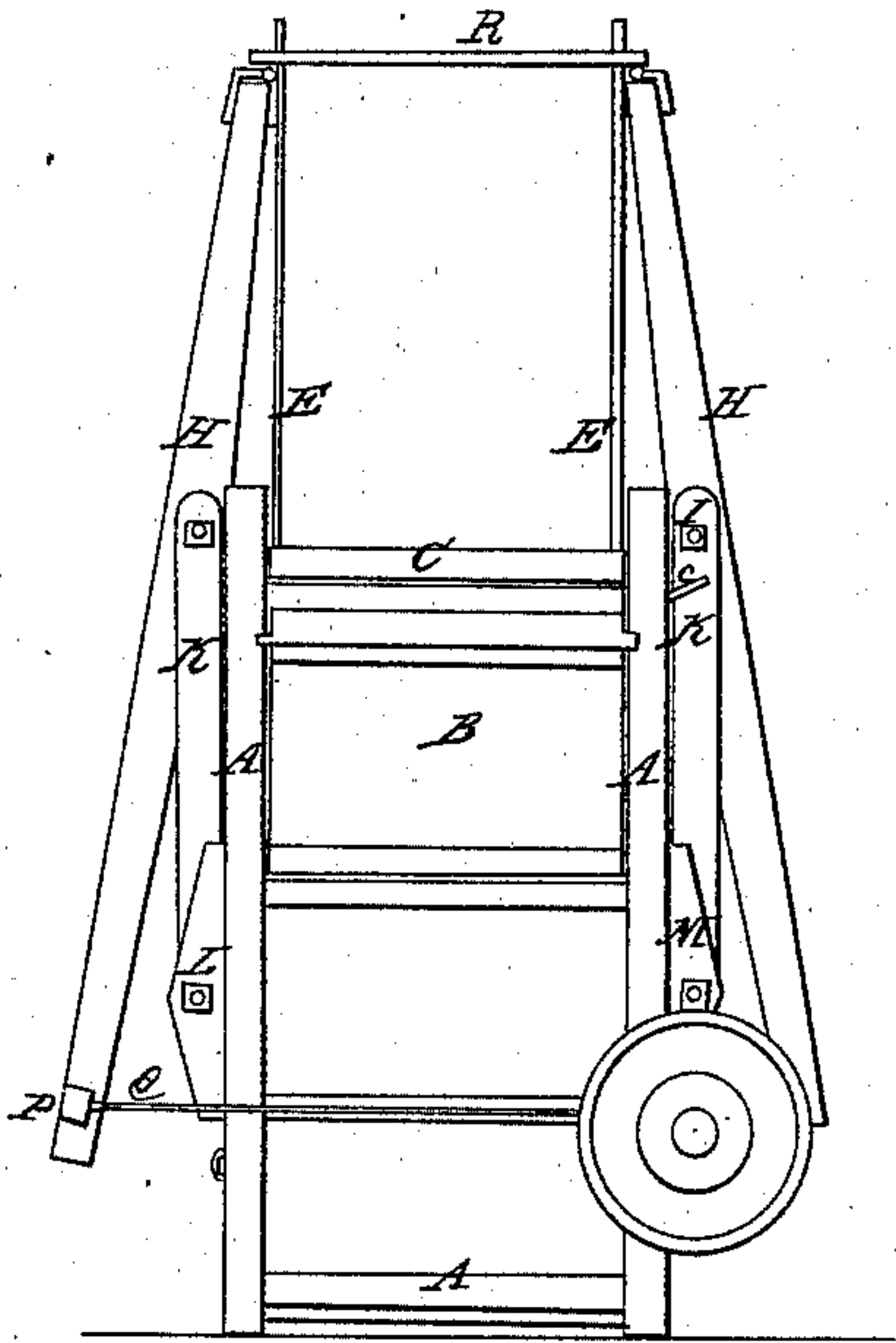


Fig. 2.

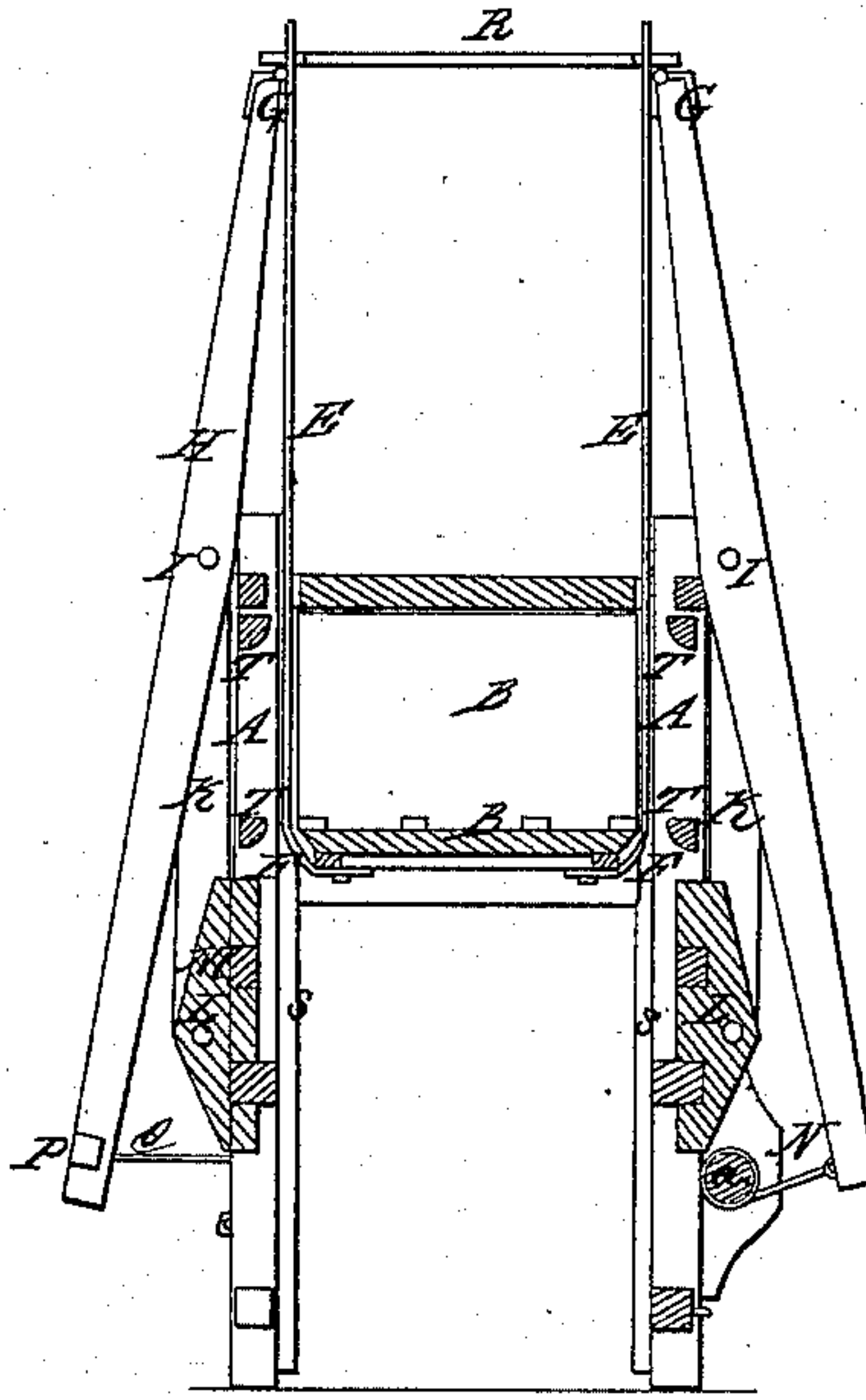


Fig. 5.

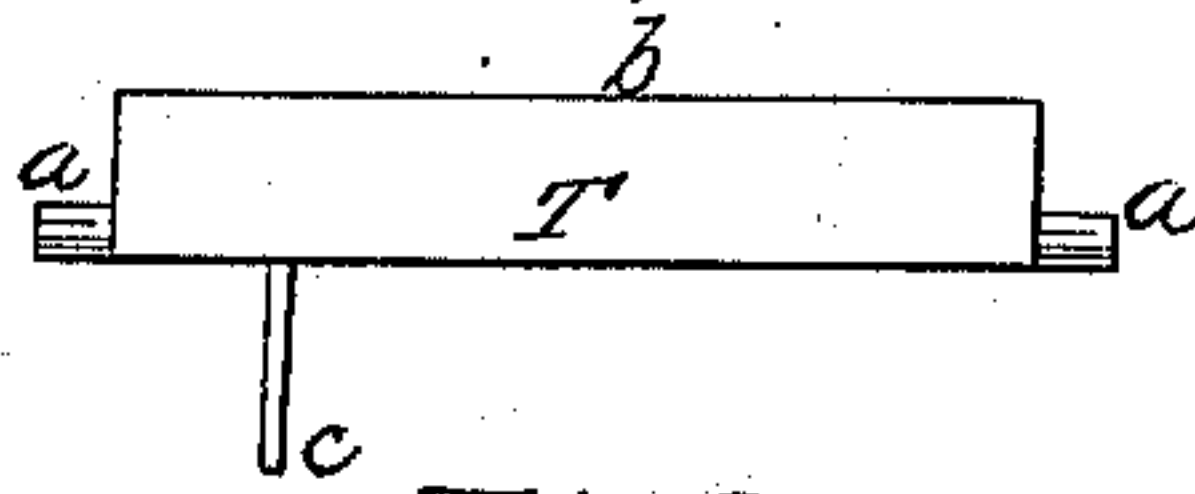


Fig. 6.

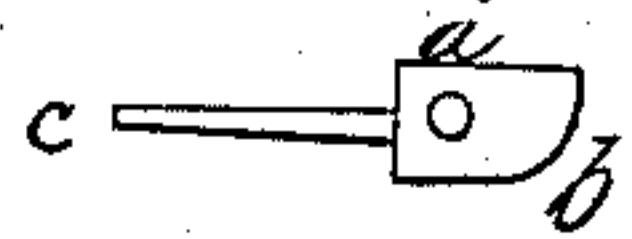


Fig. 3.

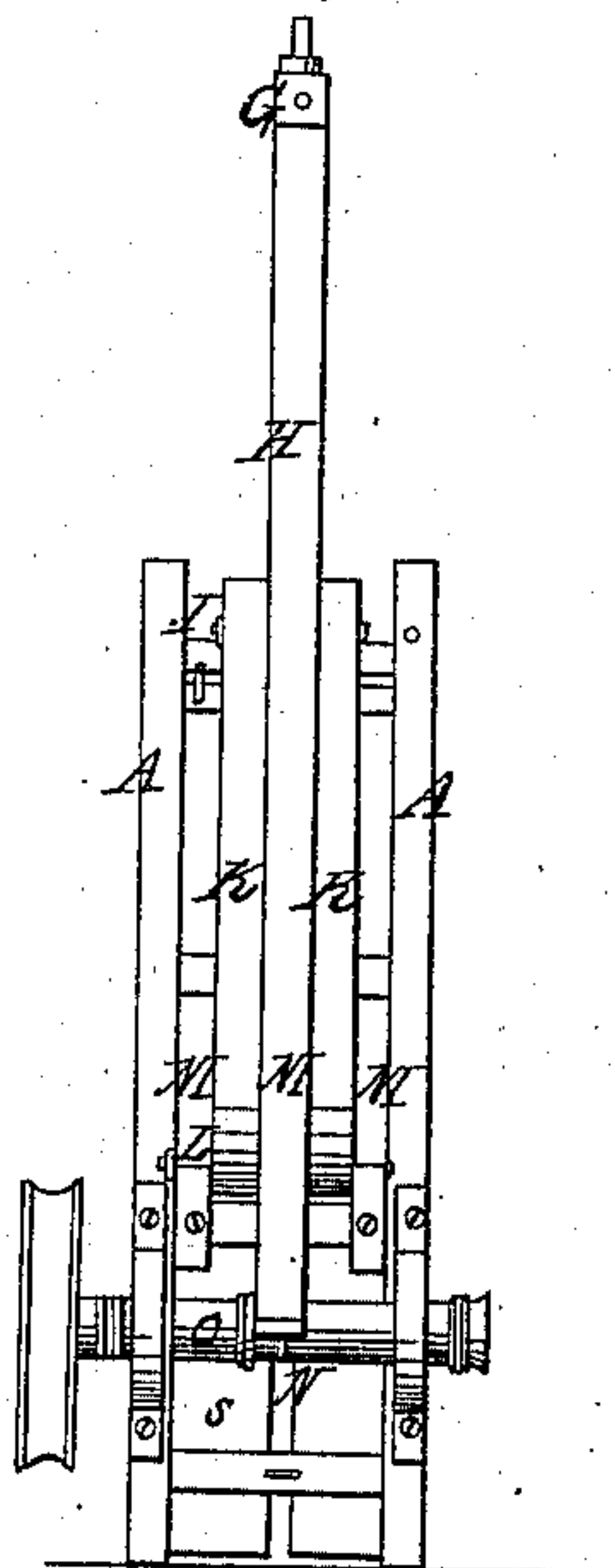
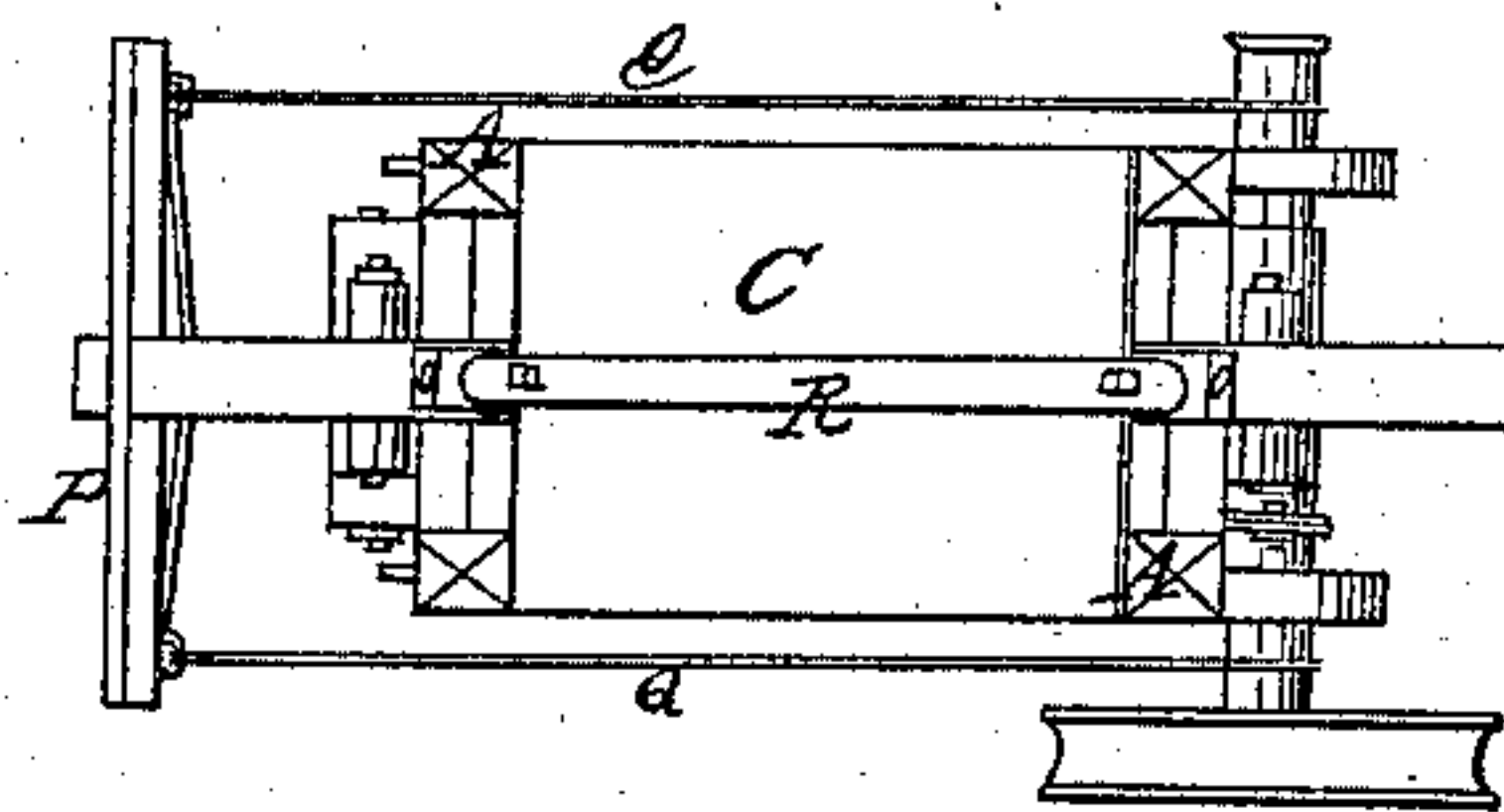


Fig. 4.



UNITED STATES PATENT OFFICE.

CHARLES F. PAINE, OF WINSLOW, MAINE.

IMPROVEMENT IN HAY-PRESSES.

Specification forming part of Letters Patent No. 3,561, dated April 25, 1844.

To all whom it may concern:

Be it known that I, CHARLES F. PAINE, of Winslow, in the county of Kennebec, in the State of Maine, have invented a new and useful Improvement in Hay-Presses; and I do hereby declare that the following description and accompanying drawings, taken in connection, constitute a full and exact specification of my invention.

Figure 1 of the drawings above mentioned represents a side elevation of my improved press. Fig. 2 is a central, vertical, and longitudinal section thereof. Fig. 3 is an end elevation of the same, and Fig. 4 is a top view thereof.

The body of the press consists of an upright frame, A, formed of posts and cross-ties suitably tenoned and bolted together, and lined on the inside thereof with boards or planks in the usual manner. The upper part, B, of the front and rear sides is made to turn down or outward upon hinges arranged in any suitable manner, while the top or bed plate, C, is also hinged or otherwise similarly connected to the frame, so as to admit of its being turned upward into a vertical position. When in a horizontal position it is confined therein or to the frame by means of pins or bolts, or in any other convenient and proper manner. The platen or follower D (see Fig. 2) is supported by two long vertical rods, E E, which are connected to the same by links F F, each of which is jointed to one of the rods and to the platen in such manner that a depression of the rod will cause the lower end of it to move outward or away from the end of the platen. The upper end of each of the rods E E is connected by a hinge-joint, G, to the top of an extended or long lever, H, whose fulcrum is at its center, or thereabout, and upon a bolt, I, passing through it and the top of two shorter levers, K K, arranged on each side of the long lever, as seen in Fig. 3. The feet or lower ends of the two short levers K K rest and turn upon a bolt, L, passing through them, and three cheeks or pieces of hard wood, M M M, Figs. 1, 2, 3, firmly bolted to the end of the frame A. The lower end of one of the extended levers has a rope or chain, N', attached to it, which proceeds therefrom and winds around the barrel of a windlass, O, applied to the side of the press just below the cheeks M

M. The lower end of the opposite extended lever has a horizontal cross-bar, P, bolted to it, the ends of said cross-bar extending each way from the lever a sufficient distance to admit of two ropes or chains, Q Q, being attached to it and extended therefrom to the windlass-barrel. On winding up the windlass by any suitable power applied thereto the lower ends of the extended levers will be drawn toward the ends of the frame, which operation will cause the toggles to move inward and elevate the platen or follower toward the top or bed piece.

The rods E E may have a horizontal bar, R, extending from one to the other, as seen in Fig. 1, in order to steady them at their upper ends.

The planks S S, Fig. 2, composing the ends of the pressing-box, and which are disposed against the sides of the upright rods E E, are confined at their lower ends to the frame of the box, their upper ends being left free, so as to easily spring outward. They (the said upper ends) rest against turning lever bars or blocks T T T T, which are composed of horizontal pieces of timber having journals on their ends, as seen at Figs. 5, 6, the former figure being a top view of the lever-bar and the latter an end view thereof. The said journals play in suitable bearings formed in the posts of the frame A, and each of the inner sides of the lever-bars is rounded, as seen at b in Figs. 5 and 6, and extends beyond the axis of the journals a greater distance than that between the axis and the upper and lower surface of the bar T. A rod or iron bar, c, is inserted in each bar T, as seen in the drawings, the object of the rod being to enable a person to turn the lever-bar on its journals. When the rods of all the bars are turned into a vertical position, the sides or planks S S may be pressed away from the bale of hay, or may be forced outward; but when the rods are turned down toward a horizontal position the rounded edges of the bars crowd the sides S S inwardly a short distance toward each other. By this arrangement it will be seen that after the pressure of the hay has been completed the ends of the pressing-box may be moved from close contact with the ends of the bale, so as to permit the latter to be easily withdrawn from the press. A slight vertical de-

pression of the rods E E will cause them also to be moved away from close contact with the hay.

Having thus described my invention, I shall now proceed to state such part thereof as I claim, and for which I desire to secure Letters Patent, viz:

Connecting the feet of the platen-rods E E with the platen or follower by means of links or other contrivances of similar character, the object of the said links being to permit the

lower ends of the rods to be moved laterally from the ends of the bale, as set forth.

In testimony that the foregoing is a correct description of my improvements I have hereto set my signature this 7th day of September, A. D. 1843.

CHARLES F. PAINE.

Witnesses:

R. H. EDDY,
JOHN NOBLE.