

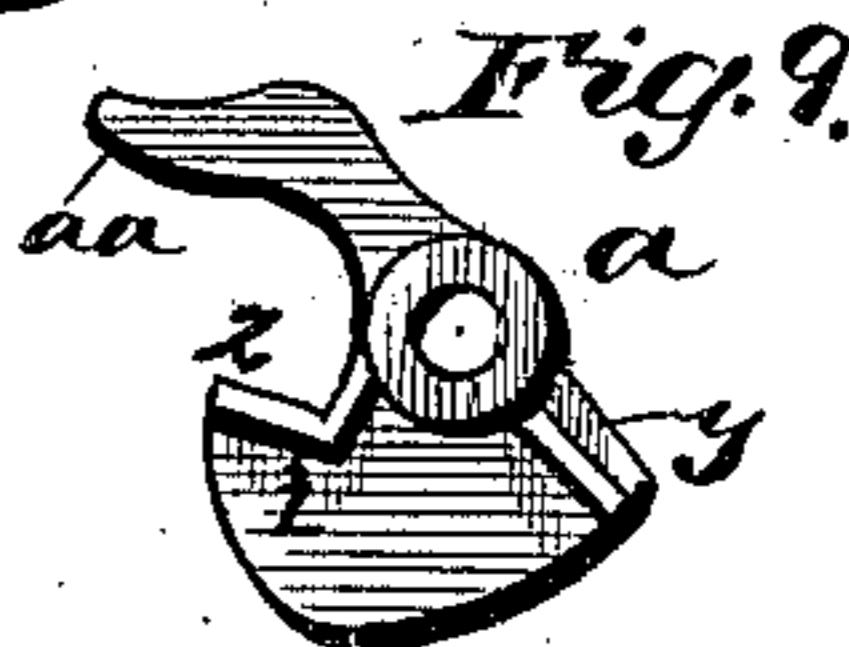
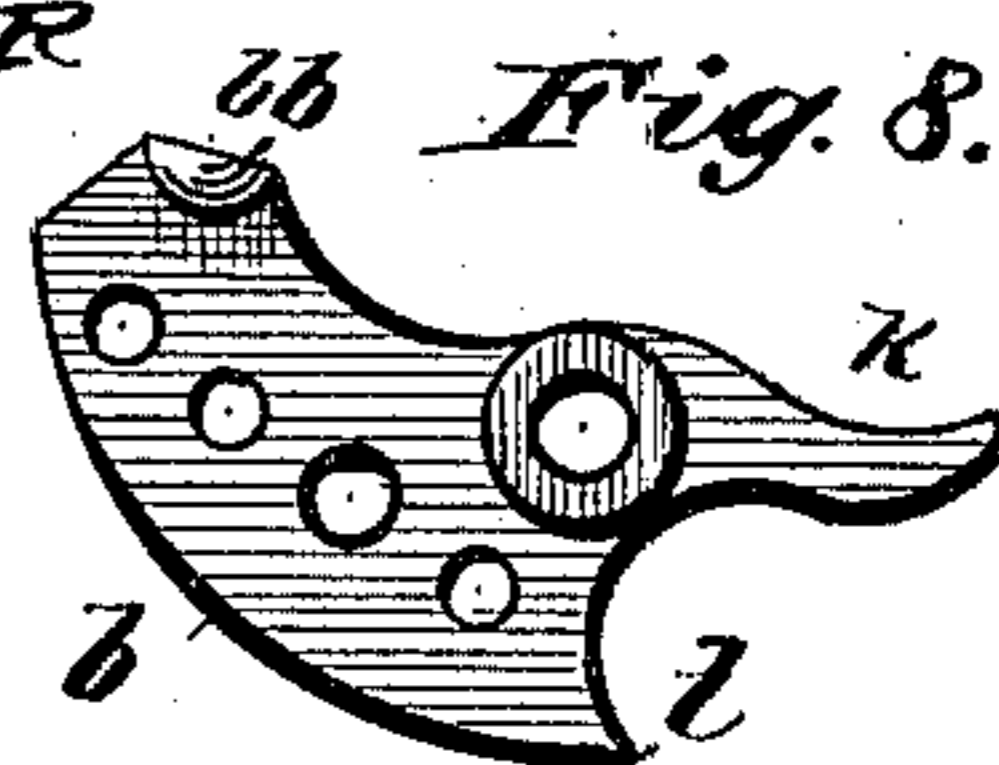
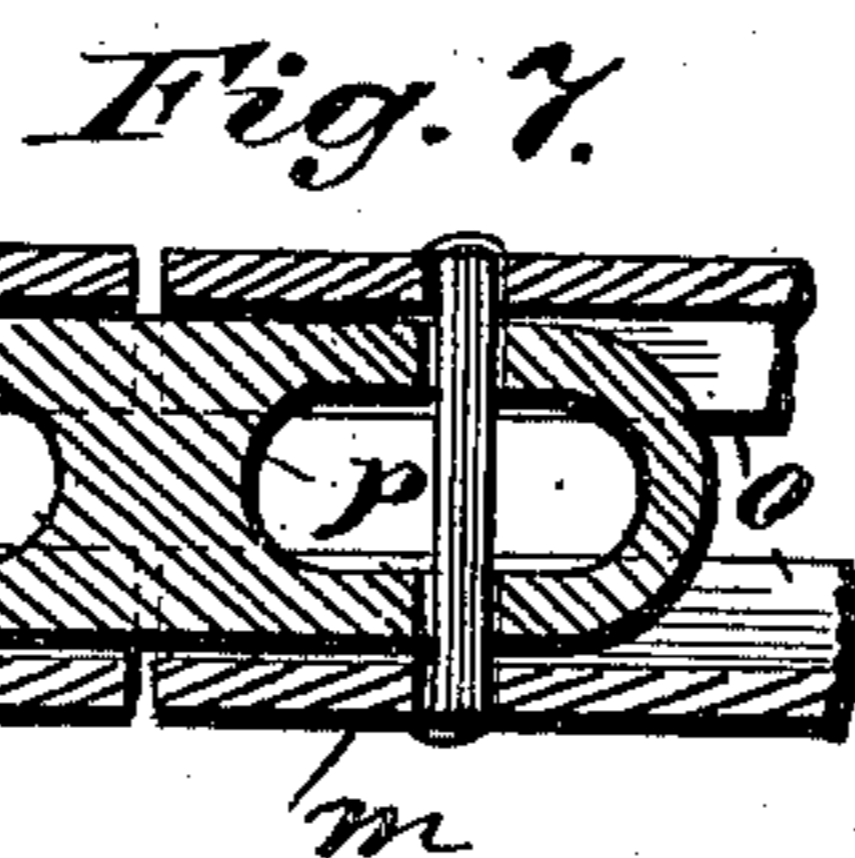
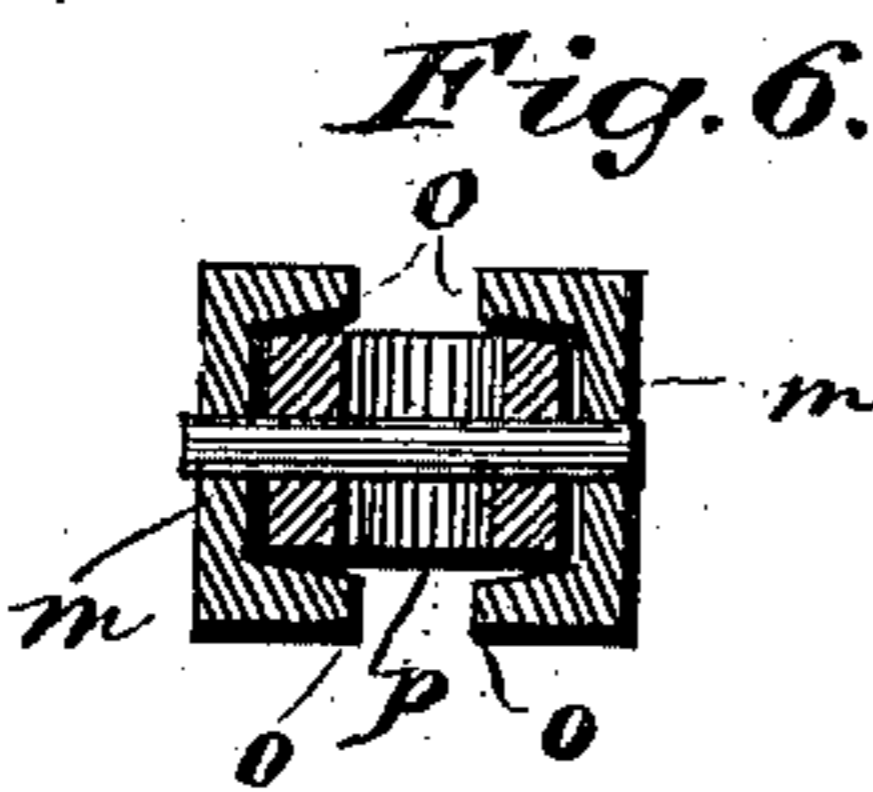
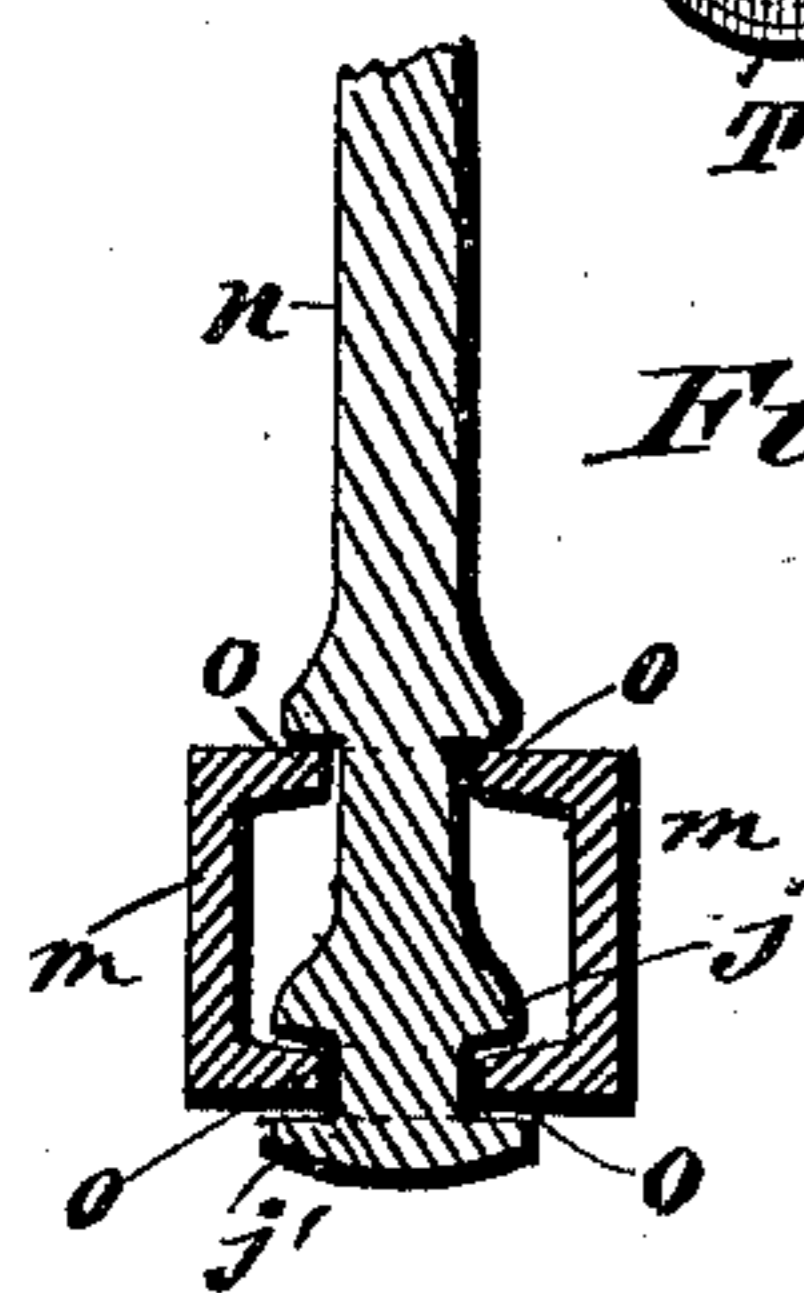
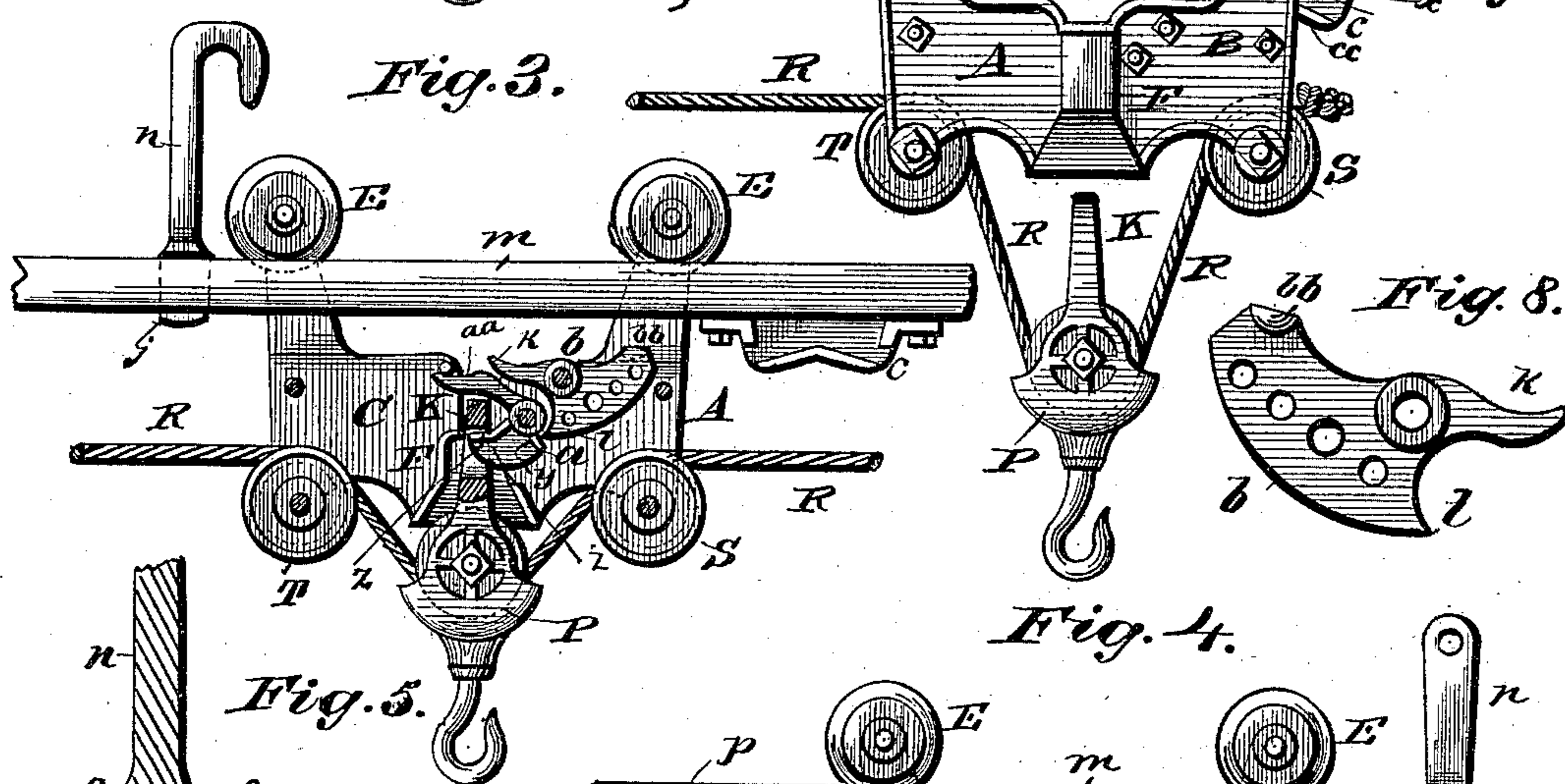
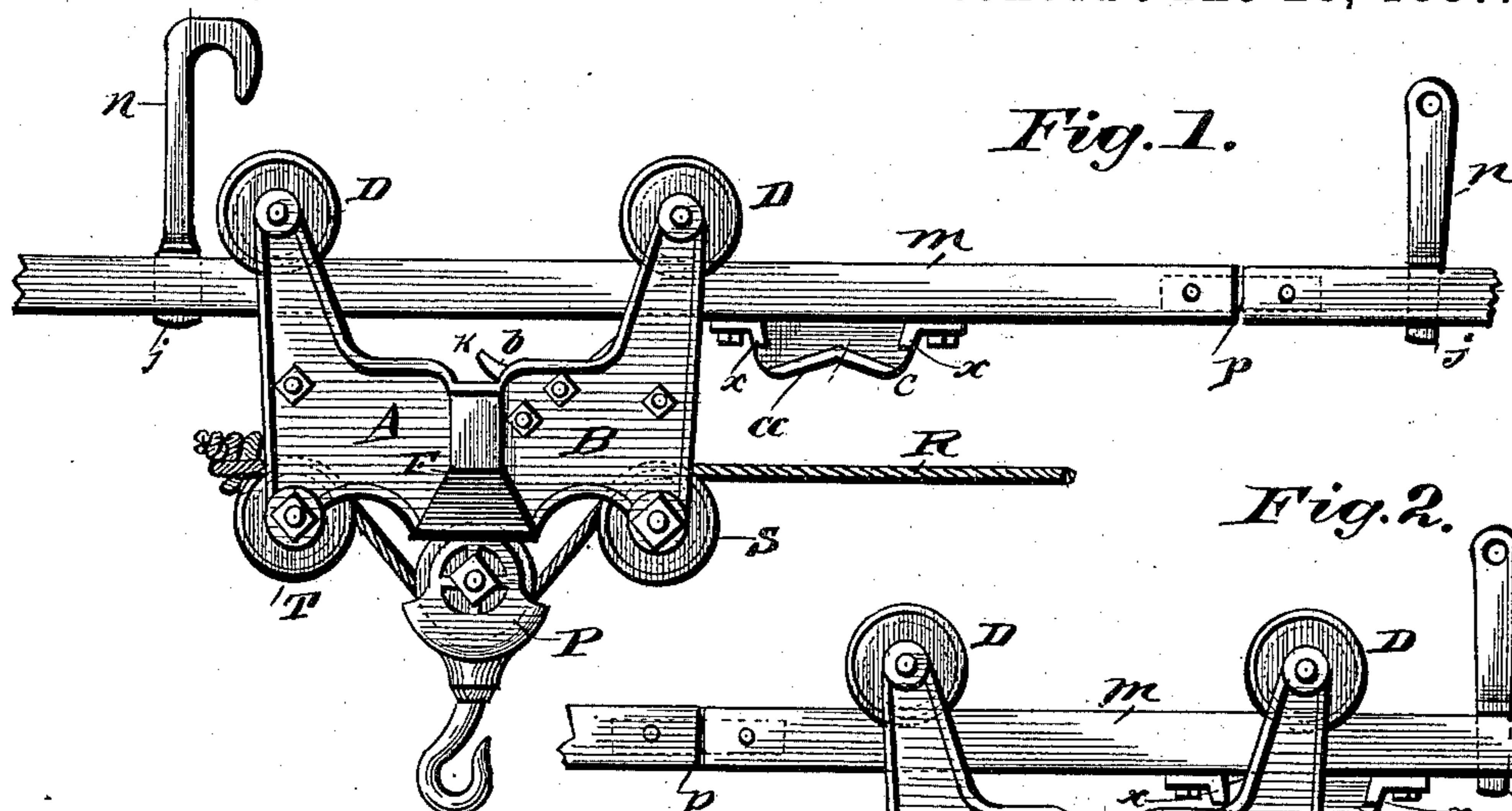
(No Model.)

R. C. JORDAN.

HAY CARRIER.

No. 365,750.

Patented June 28, 1887.



WITNESSES
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UNITED STATES PATENT OFFICE.

RICHARD C. JORDAN, OF OTTAWA, ILLINOIS.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 365,750, dated June 23, 1887.

Application filed February 15, 1887. Serial No. 227,688. (No model.)

To all whom it may concern:

Be it known that I, RICHARD C. JORDAN, a citizen of the United States, and a resident of Ottawa, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Hay-Carriers; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a side view of this invention, showing hook in locked position. Fig. 2 is a side view of the same, showing hook unlocked. Fig. 3 is a sectional view showing hook in locked position. Fig. 4 is a sectional view showing hook unlocked. Figs. 5, 6, 7, 8, and 9 are details.

My invention relates to hay-carriers; and it consists in the construction and novel combination of parts, as hereinafter set forth.

The track *m*, preferably employed in connection with my improved hay-carrier or hoisting and carrying apparatus, is formed of two pieces of steel or iron running side by side parallel with each other and supported on edge by iron or steel supports *n*, passing between them. The two pieces of steel or iron have along the entire length of their sides, which face each other, a rib, *o*, at top and bottom, extending inwardly, forming a groove. The two pieces of steel or iron that form the track are held together at proper distances apart, and the track *m* is spliced by pieces *p*, of iron or steel of proper thickness, inserted to fit in the groove between the inside ribs, *o*, and to these pieces *p* the track *m* is riveted or bolted. The supports *n*, which sustain the track, pass between the two pieces and project at their extreme lower ends to each side to form rests *j'* for the track, and above the lower ribs lateral projections *j* are provided to prevent the track from rising. Thence the supports taper to pass between the upper ribs or flanges *o*, to stiffen and steady the track and to prevent it from tipping from one side to the other. At their upper ends the supports *n* are provided with eyes or hooks, so that they may be hung or suspended from suitable

brackets or fixtures in the building in such manner as to permit the track to swing laterally. This form of track is peculiarly adapted by its shape for being stiffened by the pieces which are used for splicing it and the pieces to which it is riveted for holding its sides together. These pieces form a bearing for the ribs above and below, whereby the ribs and inserted pieces receive the strain, instead of the strain being thrown on the rivets when the load passes over, as is the case with other kinds of steel tracks, which latter tracks are liable to bend and to part at the splices on that account. Furthermore, the track being of the same construction on the top and bottom surfaces, it can be turned over when worn on top and the under sides placed in position for receiving the wear of the wheels.

A description of the carrier used in connection with either of the tracks mentioned above is as follows:

A designates the carrier-frame, which is composed of two side plates, B C, between the upper edges of which are journaled the track-wheels D E. The carrier-frame A is provided with a diverging centrally-located channel, F, having its wide and open portion downward, said channel F narrowing as it extends upward into the carrier-frame. At the ends of the carrier, below the track, are journaled the rope-sheaves S T. Over one, T, of these rope-sheaves is a rope, R, which is stopped at the proper place from pulling through by a knot or other obstruction upon the rope. The rope R passes from the sheave T under a sheave pivoted in the pulley-block P, thence over the sheave S of the carrier-frame, and thence under the track to the power. The pulley-block P hangs upon the rope R, and at its lower end supports the hay-fork or load. At its upper end the pulley-block is provided with a loop or slotted knob, K, which knob, as the pulley-block is raised by the rope R, enters the opening in the under side of the carrier-frame, striking the upper projecting end of the crescent shaped carrying hook or clutch *a*, pivoted between the sides of the carrier-frame and to one side of the channel F, forcing the lower end of said hook or clutch *a* to engage said loop or slotted knob K and at the same time forcing the upper projecting end of said hook *a* to lift that part directly over it of

the locking-latch *b*, hereinafter described, forcing said locking-latch to engage a shoulder or projection on the back of said carrying-hook in such manner as to lock said hook or clutch to carry the load.

Pivoted between the sides of the carrier, to swing in the same direction as the carrying hook or clutch *a*, but placed higher up and farther back and to the same side of the channel *F*, is a locking-latch, *b*, having a forwardly-projecting end extending over and in close proximity with the forward projecting end of the crescent hook *a*, and which, when depressed, (by lifting its opposite end,) presses upon the forward-projecting end of the hook *a*, causing said hook *a* to discharge the pulley and to turn its shoulder in front of the lower end of the locking-latch *b*, whereby said latch *b* (until the pulley is again raised) is supported and prevented from leaving the block *c* on the track. It should be observed, therefore, that this carrier cannot be forced untimely beyond the block *c* on the track.

On one side of the upper end of the locking-latch *b* is a shoulder or projection, *bb*, which, as the carrier is moved to the block *c* on the track, is engaged by the inclined plane *cc* of said block, and thereby said upper end of the locking-latch *b* is raised between the depending ends *x* of said block *c* on the track to a point higher than the lower edges of the same, and there locked in the manner aforesaid by forcing with its forward-projecting end the crescent hook *a* to turn and support it.

It will be seen that the crescent hook and locking-latch have each three important operative points, all performing important functions, the crescent hook *a* having the forward-projecting end *a*, for forcing the locking-latch *b* to engagement for holding the hook *a* in the carrying position, the hooked portion *i*, for engagement with the slot of the pulley-block, and the shoulder *y*, for engagement with the lower end of the latch *b* to lock latch *a* in the carrying position. The locking-latch is important in having its forward-projecting end *k* for causing crescent hook *a* to rotate at the proper time, and its lower end, *l*, or point, for locking the crescent hook *a* in the carrying position, and its upper end having a side projecting shoulder, *bb*, which slides up the inclined plane *cc* of the track-block *c*, and which engages the downwardly-projecting ends *x* of the track-block and holds the carrier at the proper time from leaving. The track or stop block *c* depends from the under side of the track, extending in like direction with the same over the spot from whence the load is

to be drawn, and has along its perpendicular side, which faces inwardly toward the locking-latch in the carrier, a rib, *cc*, inclining from the lower portion of each end of the block. Upon this inclined plane (the carrier advancing in either direction) the said locking-latch *b* is raised.

Depending from the upper portion of each end of the latch-block *c* and in line with the rib *cc* forming the inclined plane, is a shoulder or stop, *x*, which engages the upper end of said locking-latch *b* when raised by said inclined plane *cc* and arrests it from leaving in either direction until unlocked by the rotation of the crescent hook *a*. The shoulders and rib are on one side only of the block. It will be observed in this construction that the locking arrangement consists of but two pieces in the carrier pivoted nearly on a horizontal line, thus lessening the depth of the carrier, whereby its strength is increased and the load may be carried nearer the peak of the building; and the locking-latch, being pivoted, works easier to perform its proper functions with less friction, and with greater certainty and promptness than a loose latch adapted to slide up and down in a slot or groove, as used in other carriers.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a hay-carrier, the combination, with the sheave-block having the slotted knob *K*, and the pivoted clutch-hook *a*, provided with the arm *aa*, and the hook *i* to engage the slot in said knob, and having the shoulders *y* and *z*, of the pivoted locking-latch *b*, provided with the arm *k*, hook-point *l*, to engage on the curved edge of the clutch-hook, and the shoulder *bb*, and the track-blocks *c*, provided with the depending ends *x* and inclined plane *cc*, substantially as specified.

2. An iron or steel track formed of two pieces side by side, having ribs or projections *o o* running horizontally along them and facing inwardly, the supporting bars *n*, having hooked upper ends and supporting-lugs for the edges of the ribs *o*, and the blocks *P*, riveted to the adjoining ends of sections of the track to hold together and stiffen and brace the joints, all combined substantially as specified.

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

RICHARD C. JORDAN.

Witnesses:

NAT. E. DEGEN,
CLYDE SMITH.