(No Model.)

M. S. COLEMAN.

HAY AND COTTON PRESS.

No. 342,427. Patented May 25, 1886.

Fig. 1.

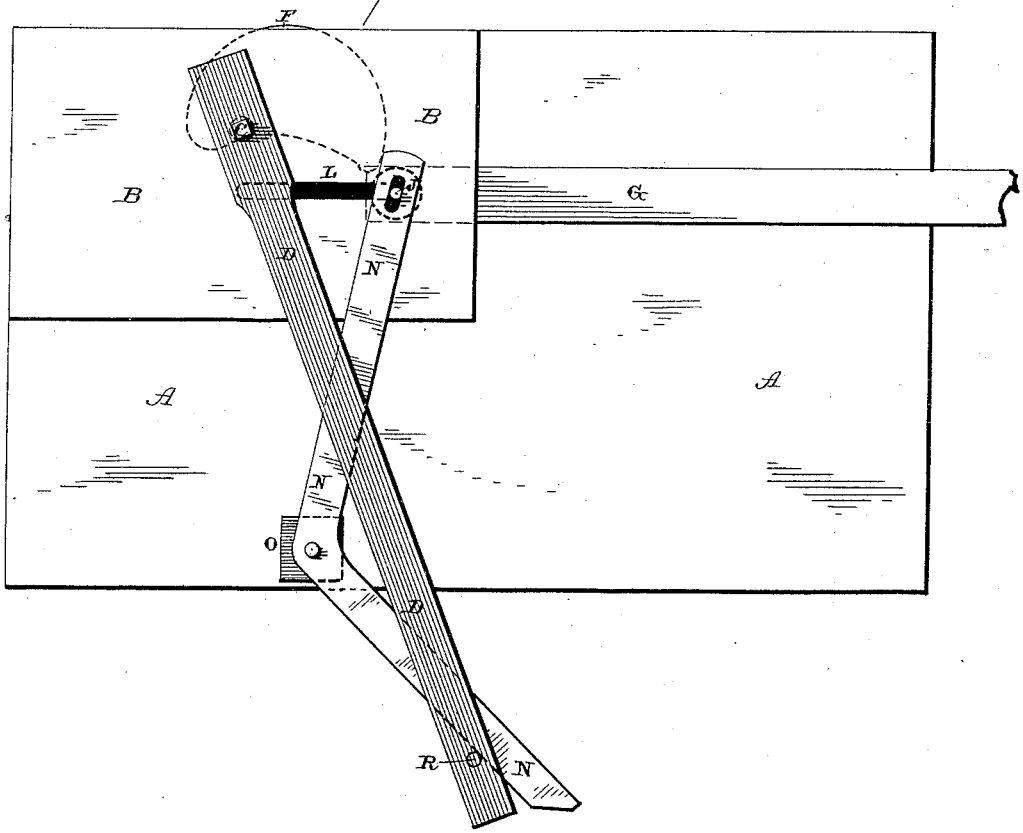
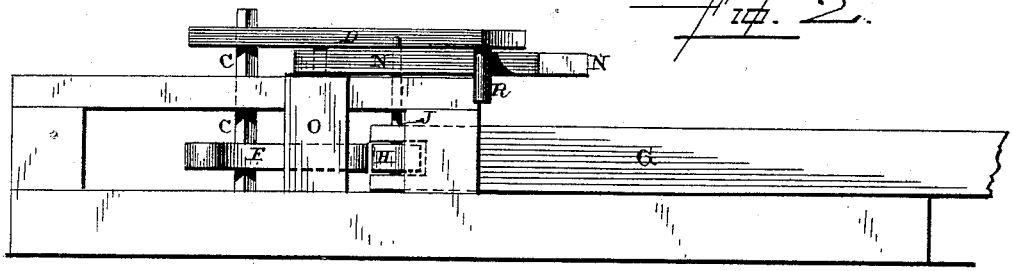


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

MINOR S. COLEMAN, OF COTOPAXI, COLORADO.

HAY AND COTTON PRESS.

SPECIFICATION forming part of Letters Patent No. 342,427, dated May 25, 1886.

Application filed October 10, 1885. Serial No. 179,482. (No model.)

To all whom it may concern:

Be it known that I, MINOR S. COLEMAN, of Cotopaxi, in the county of Fremont and State of Colorado, have invented certain new and useful Improvements in Hay and Cotton Presses; 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 hay and cotton presses; and it consists in the combination of a vertical shaft, to which is attached a cam for operating the pitman and the sweep, the pitman having a vertical pin or projection connected thereto and extending through the top of the frame in which the cam revolves, and a bent lever which is connected to the pin upon the pitman, and which lever is operated in one direction for the purpose of forcing the pitman back by a projection on the under side of the sweep, as will be more fully described hereinafter.

The object of my invention is to force the pitman in one direction by means of a cam, and then to force the pitman back ready for another movement by the same movement of the sweep, and thus to impart to the pitman a constant reciprocating movement while the sweep moves continuously in the same direction.

Figure 1 is a plan view of a mechanism embodying my invention. Fig. 2 is a side view of the same.

A represents a suitable base, upon the top of which is built a frame-work, B, either of the shape here shown, or any other that may be preferred. Passing vertically through this frame-work is a shaft, C, to the upper end of which is secured a sweep, D. To the lower end of the shaft, inside of the frame, is secured the cam F, which, as the shaft is made to revolve by the movement of the sweep, forces the pitman G in one direction, for the purpose of compressing the material in the box of the press. This cam upon the shaft C may be given either the shape here shown or any other that may be preferred.

The inner end of the pitman projects through the inner side of the frame B, and carries in its end a friction-roller, H, against which the cam presses while it is forcing the pitman toward the box of the press. Through the end of this pitman and the friction-roller is passed a pin, J, which extends upward through the slot L in the top of the frame B sufficiently far to have the slotted end of the bent lever N to catch over it. The opening in the end of the box or frame B is just large enough to allow the end of the pitman to play freely back and forth through it, and this pin and slot serves to help to keep the pitman in a straight line. The bent lever N is pivoted upon a suitable support, O, placed to one side of the box or frame B, and the outer end of this lever is turned at an angle, as shown, so that the projection R, which extends down from the under side of the sweep, will always strike against this bent end, and cause the lever to turn upon its pivot in such a manner as to force the pitman back after it has been forced forward its full distance by the cam.

When the cam strikes against the end of the pitman, it forces it toward the box of the press, and this forward movement of the pitman through the pin in its end causes the bent end of the lever N to be forced outward in such a manner as to be struck by the projection on the under side of the sweep. Just after the cam moves beyond the end of the pitman on the under side of the sweep it strikes against the outer end of the lever, and this lever in turning upon its pivot forces the pitman backward. In this manner the sweep moves continuously around and imparts a reciprocating motion to the follower of the press.

Having thus described my invention, I claim—

1. The combination of the pitman, having a pin or projection connected to its end, a shaft carrying the sweep, a cam, and a bent lever which is connected to the pin or projection on the end of the pitman, the sweep being provided with a projection for operating the lever in one direction, substantially as shown and described.

2. The combination of the box or frame B, having a slot through its top, the pitman hav-

ing its outer end pass through an opening in one end of the frame, and provided with a friction-roller for the cam to strike against, a pin which extends through the slot, a cam to operate the pitman, a sweep having a projection, and a bent lever which is operated in one direction by the pitman and in the other direction by the projection on the sweep, substantially as set forth.

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

MINOR S. COLEMAN.

Witnesses:
GEO. H. RUMMEL,
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