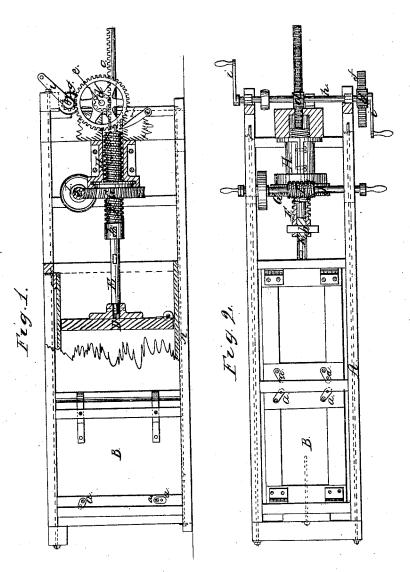
J. P. WHITE.
BALING PRESS.

No. 49,815.

Patented Sept. 5, 1865.



Witnesses

M. M. Simplin

Inventor. Joseph & phito

UNITED STATES PATENT OFFICE.

JOSEPH P. WHITE, OF NEW YORK, N. Y.

IMPROVEMENT IN BALING-PRESSES.

Specification forming part of Letters Patent No. 49,815, dated September 5, 1865.

To all whom it may concern:

Be it known that I, Joseph P. White, of No. 418 Greenwich street, in the city, county, and State of New York, have invented a new and Improved Baling-Press; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional side elevation of this invention. Fig. 2 is a sectional

plan or top view of the same. Similar letters of reference indicate like

parts.

This invention relates to a press in which the follower can be operated by a slow and by a quick motion, which are combined so as to form a compact and comparatively light and easy working mechanism. The slow motion consists of a hollow screw-spindle which screws into a worm wheel gearing into a worm, and it connects with the follower by a rod which passes clear through said screw-spindle, and is connected to it by a suitable key. The extreme end of this rod forms a toothed rack which gears in a suitable pinion, and if the key which connects said rod with the hollow screwspindle is withdrawn the pinion and rack form the quick motion for the plunger, which can be used independent of the slow motion.

A represents a frame, which is made of wood or any other suitable material, of suitable shape, strength, and durability. One end of this frame supports the press-box B, to which access can be had by suitable doors on the top and sides, and these doors are secured by buttons a or

any other suitable fastenings.

The press-box is fitted with a follower, D, made of wood or any other suitable material, and from this follower extends a rod, E, through the hollow screw-spindle F, as clearly shown

in the drawings.

The screw-spindle F screws into a worm-wheel, G, the hub of which is provided with a groove and fitted into a box, H, which is rigidly secured to the frame in such a manner that said worm-wheel is free to turn but not allowed to move in a longitudinal direction parallel to the axis of the screw-spindle. If desired, the friction between the hub of the worm-wheel and its box may be reduced by interposing suitable friction-rollers.

An endless screw or worm, I, which is mounted on the driving-shaft J, gears in the wormwheel G, and said shaft is turned by hand or by any other suitable power.

If the rod E is connected to the screw-spindle F by a suitable key, b, which passes through mortises in the spindle and rod, as shown in Fig. 2, and if the shaft J is turned a slow and powerful motion is imparted to the follower.

In order to obtain a quick motion of the follower, I have provided that portion of the rod E which extends through the spindle F with teeth c, which gear in a pinion, d. This pinion is mounted on a shaft, e, which connects by a cog-wheel, f, and pinion g with a shaft, h, which is furnished with hand-cranks i. If the key b forming the connection between the spindle F and rod E is withdrawn, said rod can be moved through the spindle and independent of the same, and by turning the shaft h a quick motion is imparted to the follower in either direction.

By the quick motion the follower is drawn back, and after the press-box has been filled with fresh material the follower is forced in again by the quick motion until the material is compressed to such a degree that the slow motion has to be brought in operation.

By the slow motion the final pressing is effected and the bale is finished. Several mortises in the rod E allow of coupling the quick and slow motion at different points, and the operation of coupling or uncoupling is effected simply by introducing or withdrawing the key b.

The power of this press can of course be multiplied to any desired degree by adding suitable gears; but with the simple mechanism shown in the drawings all the power requisite for an ordinary baling-press can be effected and the operation of pressing can be accomplished with comparatively little loss of time and with ease and convenience, free access being had to all parts necessary to form a bale with dispatch.

I claim as new and desire to secure by Letters Patent—

The rack-rod E and hollow screw-spindle F, when employed, inconnection with the worm-wheel G, worm I, and pinion d, to operate the follower D in the manner described.

JOSEPH P. WHITE.

Witnesses:

M. M. LIVINGSTON, C. L. TOPLIFF.