N. H. COLLINS.

BALING-PRESS.

No. 188,104. Patented March 6, 1877.

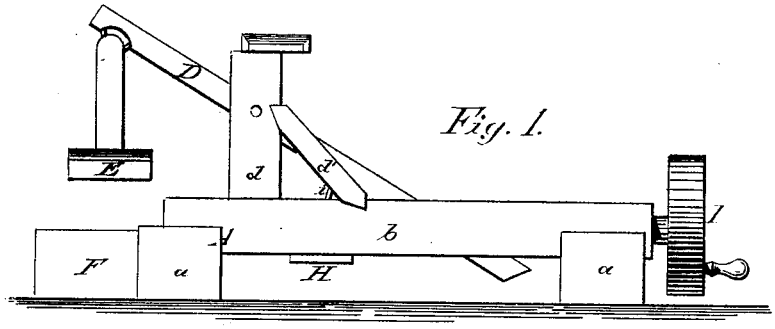

Fig. 1.

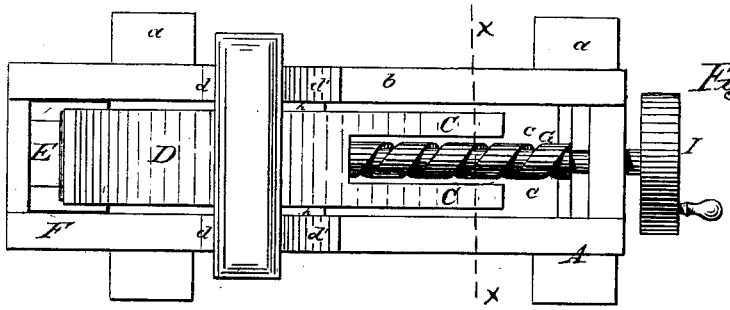

Fig. 2.

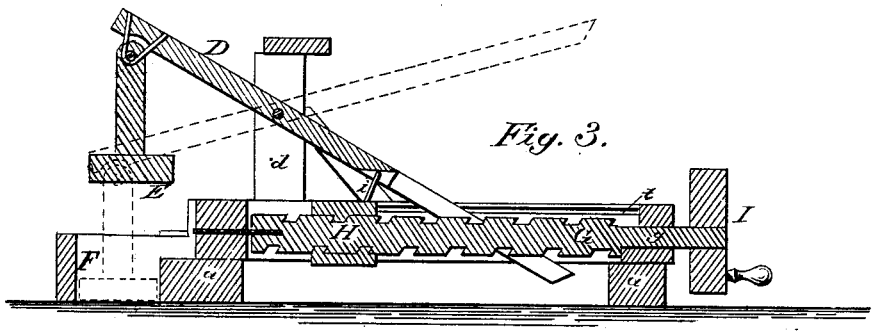

Fig. 3.

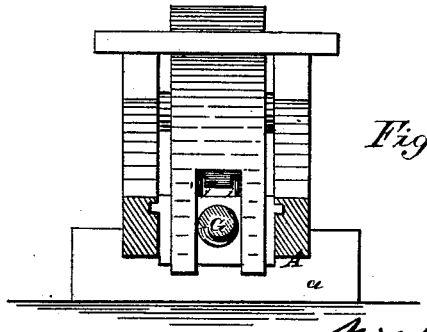

Fig. 4.

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UNITED STATES PATENT OFFICE.

NICHOLAS H. COLLINS, OF RAYVILLE, LOUISIANA.

IMPROVEMENT IN BALING-PRESSES.

Specification forming part of Letters Patent No. **188,104**, dated March 6, 1877; application filed September 8, 1876.

To all whom it may concern:

Be it known that I, NICHOLAS H. COLLINS, of Rayville, in the county of Richland and State of Louisiana, have invented certain new and useful Improvements in Baling-Presses; 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 which it appertains to make and use the same, reference being had to the accompanying drawing, which form a part of this specification, and in which—

Figure 1 is a side elevation. Fig. 2 is a top plan. Fig. 3 is a longitudinal section, and Fig. 4 is a cross-section after the line *x x* in Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to that class of baling-presses which are operated by means of force derived from a horizontal screw; and it consists in the construction and combination of parts hereinafter more fully shown and specified.

In the drawing, A is the frame of my improved machine. This consists of stout bottom pieces *a a*, crossed by longitudinal beams *b b*, which form a box, *c*, in which the screw operates. At one end of the beams *b* are stout uprights *d*, strengthened by means of braces *d'*. Between the uprights *d* is pivoted a long stout lever, D, at the upper end of which a plunger, E, is hinged in the manner shown. The lower end of the lever D is slotted, as shown at C, in order to enable it to sink into box *c* on the sides of the screw. F is the cotton or hay box, which is placed at the end of the beam *b*, so as to be convenient for the plunger E.

The screw G, which may be made of any suitable material, should be made stout enough to withstand considerable pressure. It is placed in the box *c*, formed by beams *a b*, suitable boxings for it being provided in the beams *a a*. H is a follower, working upon screw G, and having sidewise projections *h* that slide in corresponding recesses *t* in the inner sides of beams *b*. The end of the lever D rests upon this follower, and is prevented from getting out of place by means of upward projections *i i* upon the follower. The end of screw G projects at the rear end of the frame-work of the press, forming a shaft, *g*, upon which may be secured a drum-wheel, I, when the press is to be operated by horse-power or steam, or a crank when it is to be operated by hand-power.

From the foregoing description the operation and advantages of my improved baling-press will be readily understood.

When the follower H is at the forward end of the press, or nearest the plunger E, the rear end of lever D, which is longer and consequently heavier than the forward end, is allowed to sink down on the sides of screw G, between beams *b b*, thus raising the follower E. The material that is to be pressed is now placed in the box, and the screw G is operated by means of the drum-wheel or crank at the end of the same. As the follower H is carried backward it raises the rear end of lever D, thus forcing the plunger E down into the box, the contents of which are thus compressed. As the follower H comes farther backward, the leverage, and consequently the force exerted, becomes greater, until, at the end of the screw, it becomes increased in proportion to the length of the screw and lever. The bale may now be secured by hoops and ties, and the pressure ceased by bringing the follower H forward.

My improved press consists of but few parts, and is therefore simple, easily operated, and not apt to get out of order, while its construction is cheaper than that of most presses now in general use.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a baling-press, the slotted lever D, having a pivoted plunger, E, in combination with the horizontal screw G, working in box A, and follower H, substantially as and for the purpose shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

NICHOLAS HYRAM COLLINS.

Witnesses:

WILLIAM STENCET,

JNO. S. SUMMERLIN.