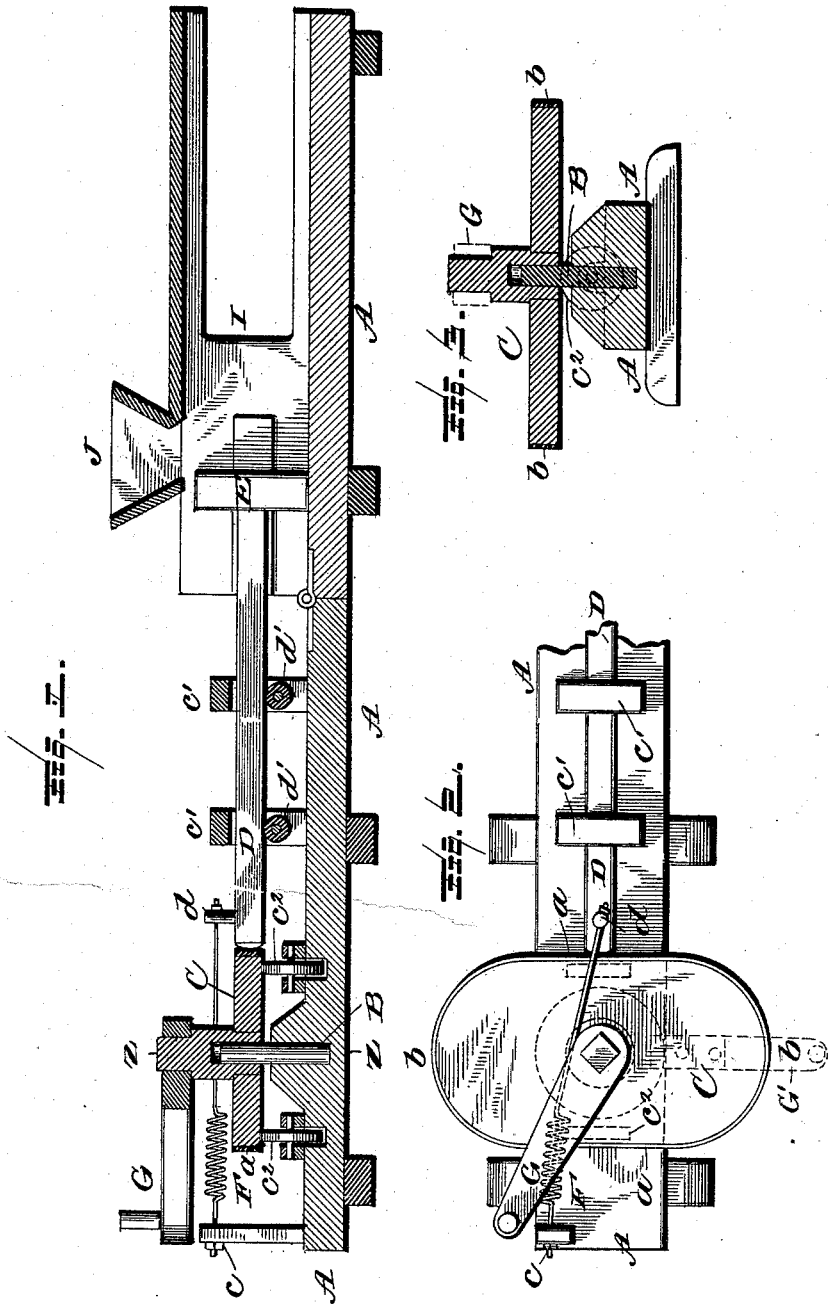
(No Model.)

W. R. MOSELEY.

BALING PRESS.

No. 456,834. Patented July 28, 1891.



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UNITED STATES PATENT OFFICE.

WILLIAM R. MOSELEY, OF JACKSON, MISSISSIPPI.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 456,834, dated July 28, 1891.

Application filed December 2, 1890. Serial No. 373,320. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. MOSELEY, of Jackson, in the State of Mississippi, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification.

My invention relates to presses for baling hay. It relates more particularly to that class of presses known as "rebounding" plunger-presses.

My improvements are directed to the motive power employed in connection with cotton-presses and means for relieving friction between the shaft or journal and its bearing.

It consists in the combination of an oblong wheel having two flat opposite sides and two rounded opposite ends mounted upon a shaft or journal, a spring-retracted plunger-rod, a lever adapted to revolve said wheel, and anti-friction rollers or wheels, arranged and substantially as will be hereinafter more fully described.

The object of my invention is to simplify the construction of the motor, whereby the efficiency and capacity of the press is materially increased and the labor of baling hay correspondingly decreased.

A further object of my invention is to support the main wheel in such manner that any friction between its shaft or journal and its bearing will in a great measure be greatly relieved.

The nature of my invention and the manner in which the same is or may be carried into effect can be best understood by reference to the accompanying drawings, in which—

Figure 1 is a longitudinal central section of a press made in accordance with my invention. Fig. 2 is a top view of the same; and Fig. 3 is a cross-section on line *z z*, Fig. 1.

In said drawings, A is the base of the apparatus, made of cast-iron.

B is the wrought-iron perpendicular shaft, which is rigidly secured to the base at the proper point by molding the cast-iron well up around it, so that the base at this point will be double the thickness of its edges. Such an arrangement will prevent any sagging and firmly and securely hold the shaft in an upright position.

C is the main wheel somewhat longer than its width, and is provided with two flat opposite sides *a a* and two rounded opposite ends *b b*, resembling in shape an elliptical or oblong wheel. It is loosely secured at its center upon the perpendicular shaft B, so that it can revolve freely thereon.

D is the connecting-rod, and E is the plunger secured at one end of said rod D.

A spiral spring F is secured to the base A at *c* and to the free end of the connecting-rod at *d*. The spring F tends to press the end of connecting-rod D constantly against the periphery of the wheel C, so that when the wheel C is revolved by the lever G, which is secured at the proper point upon the wheel C, the connecting-rod will be caused to move forward when its end is upon either of the rounded ends *b b* of wheel C and to recede or rebound when playing upon either of the flat sides *a a* of the wheel C. It will thus be seen that owing to the location and shape of the main wheel and the relative position of the end of the connecting-rod to the periphery of the wheel there will be two strokes of the plunger for every revolution of the main wheel, thereby facilitating the operation of baling hay and very materially reducing the labor required to carry the operation into effect.

In order to increase or give more power to the large wheel and to relieve as far as practicable the friction and weight of the same, I have placed under it two small anti-friction wheels or rollers *c c*, having bearings in the frame in such manner that when the wheel is revolved its entire weight is upon the small wheels or rollers and not upon the end of the shaft or journal B. By this arrangement all friction is completely overcome and the motive power is enabled to work smoothly and evenly.

If desired, the periphery of the main wheel A may be bound with iron or any other material to guard against wear consequent upon the continual sliding upon it of the end of the connecting-rod. This is a nicety, not a necessity.

At a proper point upon the base A I form guides *c' c'* for the passage of the connecting-rod, and to insure the accurate working of the rod in said guides I place therein rollers *d d*, so that the said rod can be freely moved back and forth.

The press-box I at the right of the motive

power is similar to those now in use and forms no part of my invention. It is provided with the usual hopper J, into which is deposited the hay which falls into the press-box. The press is now put into operation, and the wheel, being elliptical or oblong in shape and centrally mounted upon its journal, causes the plunger to make two strokes for every revolution of the wheel, whereby the capacity of the press is greatly increased.

What I claim, and desire to secure by Letters Patent, is—

In a baling-press, the combination of an oblong-shaped wheel A, having two flat opposite sides and two rounded opposite ends centrally secured upon its journal or shaft, a spring-retracted plunger-rod held in constant contact with the periphery of said wheel, a lever adapted to revolve said wheel, and anti-friction rollers or wheels located beneath the said wheel A, substantially as and for the purposes hereinbefore set forth.

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

WILLIAM R. MOSELEY.

Witnesses:
L. R. HART,
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