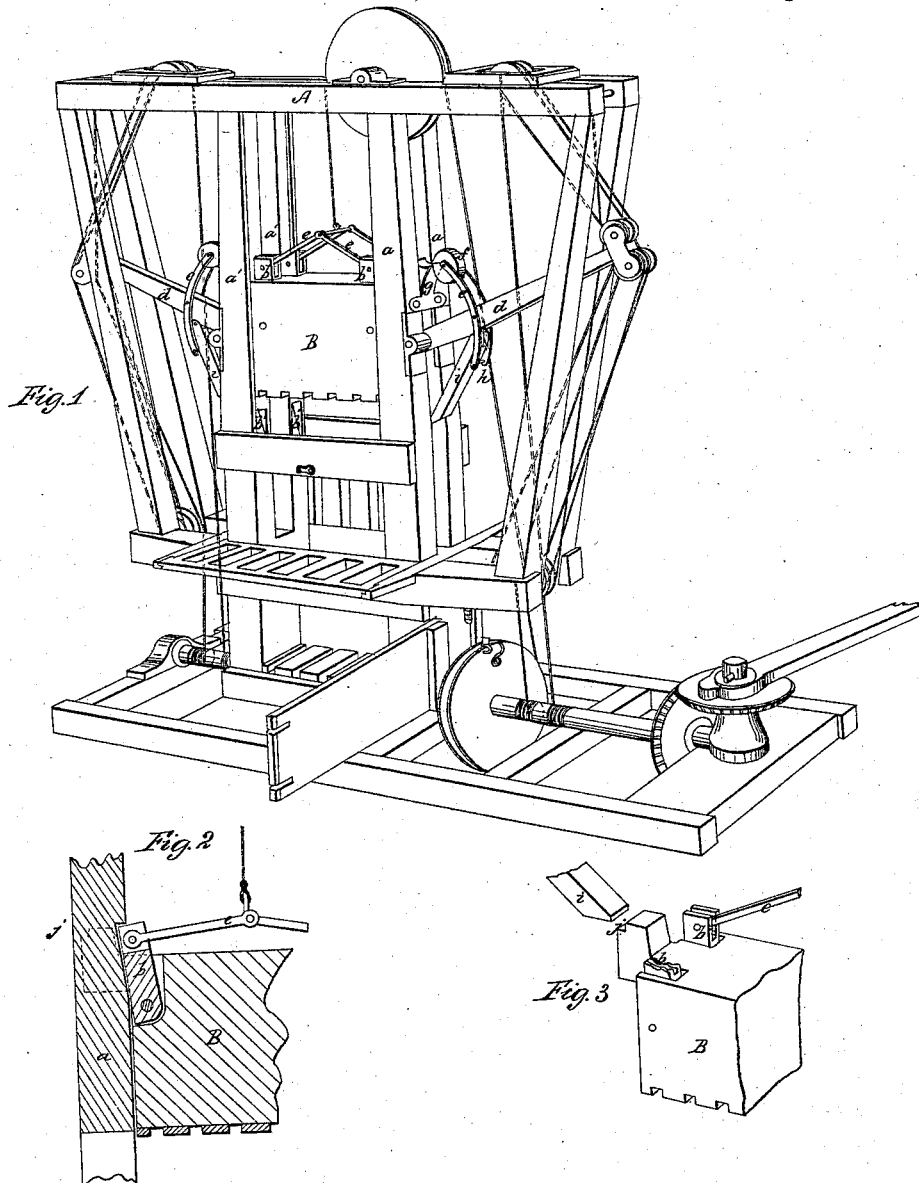


T.D. & F.R. Read & C. Dorrel,

Hay Press,

Nº 54,956,

Patented May 22, 1866



Witnesses;
Charles Perpho
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UNITED STATES PATENT OFFICE.

THOMAS D. READ, F. R. READ, AND CYRUS DORREL, OF RISING SUN, IND.

IMPROVED HAY AND COTTON PRESS.

Specification forming part of Letters Patent No. **54,956**, dated May 22, 1866; antedated May 3, 1866.

To all whom it may concern:

Be it known that we, T. D. READ, F. R. READ, and C. DORREL, of Rising Sun, Ohio county, Indiana, have invented a new and useful Improvement in Hay and Cotton Presses, of which the following is a full and clear description thereof, reference being had to the accompanying drawings, forming part of this specification.

Our invention relates to a series of clamps in the beater of the press and notches in the frame of the machine for their reception, for the purpose of preventing the upward motion of the beater when the press has been filled with the material to be pressed; also, to a mechanical device composed of levers and pulleys, for the purpose of compressing the material to be baled.

In the accompanying drawings, Figure 1 is a perspective view of our improved press. Fig. 2 is a sectional view of the beater and clamp. Fig. 3 is a perspective view of part of the beater, showing the clamps upon one side and the foot of the engaging-lever near the notched guide of the beater.

A is the frame of the press. B is a beater, which moves freely within the four parallel posts *a a'*.

In the four corners of the beater are pivoted in mortises the clamps *b*, which are moved out or in by means of the knuckle-jointed levers *c*.

To the center of levers *c* is attached a cord, which, after passing over a pulley immediately above the beater, is secured to a drum of the ordinary horse-power.

To the posts *a* and *a'* are pivoted the levers *d*, which are moved vertically in the frame by means of a series of cords connected with the main drum of the horse-power. At a convenient distance from the pivoted end of levers *d* are pivoted levers *e*, having at their upper ends the rollers *f*, which bear upon the inclined plate *g*.

In the lower end of levers *e* are pins or rollers *h*, which bear upon the engaging-levers *i*. The foot of lever *i* is so shaped as to fit securely in a notch, *j*, formed in that portion of the beater which runs between the uprights to guide the beater.

In the posts *a* and *a'* are notches *b'*, to receive the clamps *b*.

The hay, cotton, or other material to be baled having been placed in the body of the press, the beater having been drawn up, the beater is elevated by any mechanical device. When sufficient material to be compressed is in the press the clamps *b* insert themselves in notches *b*. At the time the horse-power is reversed and the time for hooping the bale has arrived the lever *d* is raised to its greatest height, the revolution of the driving-drum of the horse-power being reversed, the lever *d* is drawn down, lever *i* having had its foot in the meantime inserted in the notch *j* of the notched guide of the beater, during the ascent of lever *d*, through the agency of lever *e* and inclined plate *g*.

As our press is constructed it is much less expensive and more economical than those now in use; also, by having one of the platform-doors down during the filling of the press much time may be saved.

Having described our improved hay and cotton press, and the operation of its various parts, we make the following claim:

The combination of the levers *d*, *e*, and *i*, rollers *f* and *h*, inclined plate *g*, and notch *j*, in the guide of the beater, constructed as above described, and for the purpose set forth.

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