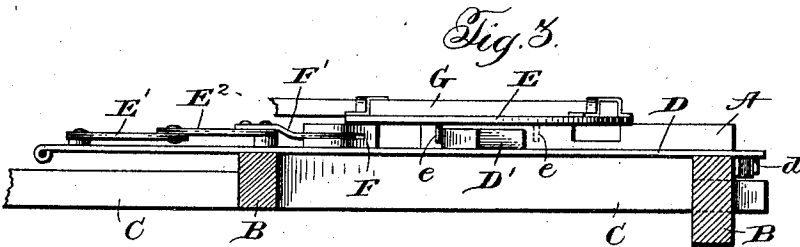
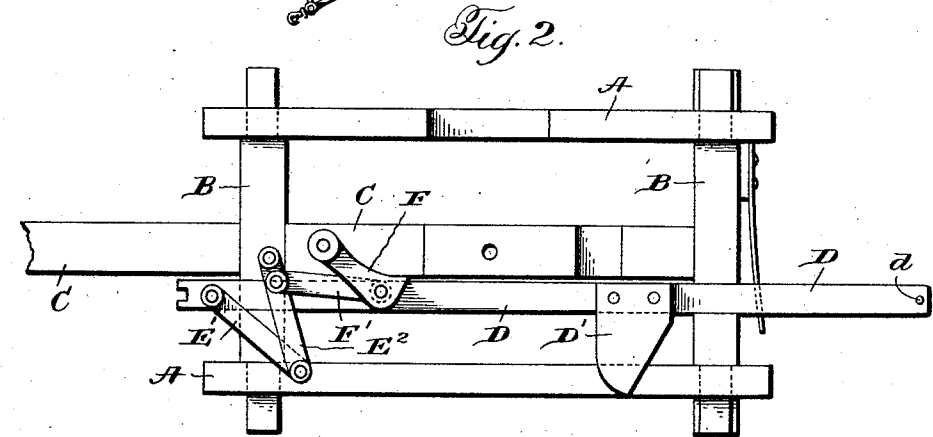
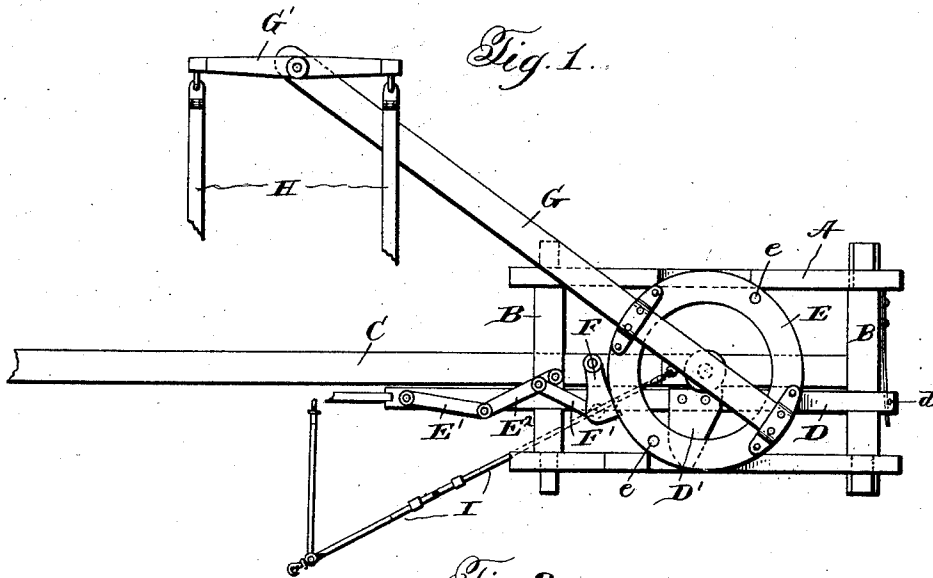


A. B. BENNETT.
 OPERATING MECHANISM FOR BALING PRESSES.
 APPLICATION FILED MAY 3, 1911.

1,005,144.

Patented Oct. 10, 1911.



Witnesses:
James Hutchinson
Thos. C. Stark

Inventor:
Abijah B. Bennett
 By *J. C. van Ryz* Attorney.

UNITED STATES PATENT OFFICE.

ABIJAH B. BENNETT, OF OPELIKA, ALABAMA.

OPERATING MECHANISM FOR BALING-PRESSES.

1,005,144.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed May 3, 1911. Serial No. 624,797.

To all whom it may concern:

Be it known that I, ABIJAH B. BENNETT, citizen of the United States, residing at Opelika, in the county of Lee and State of Alabama, have invented certain new and useful Improvements in Operating Mechanism for Baling-Presses, of which the following is a specification.

This invention relates to an improvement in operating mechanism for baling presses and more particularly to an operating mechanism for baling presses which is designed to be actuated by horse power.

One of the objects of the present invention is the provision of operating mechanism of this character in which the plunger of the press is positively operated in both directions without the employment of any springs or like devices.

A further object of the present invention is the provision of an improved operating mechanism for baling presses by means of which the press plunger will be positively actuated in both directions twice during each revolution of the sweep of the horse power.

Other objects of the invention will be apparent from the detailed description hereinafter when read in connection with the accompanying drawings forming a part hereof wherein a convenient embodiment of the invention is illustrated, and wherein like numerals of reference refer to similar parts in the several views.

In the drawings:—Figure 1 is a top plan view of the improved operating mechanism for baling presses. Fig. 2 is a similar enlarged view with the actuating wheel removed; and Fig. 3 is a side elevation of the device, parts being shown in section.

Referring now more particularly to the drawings, the frame of the operating mechanism comprises the longitudinally arranged side sills A A, the ends of which are connected by suitable transversely disposed sills B B. Positioned between the side sills A A of the supporting frame is a longitudinally extending beam C, the forward end of which projects for a considerable distance beyond the end of the supporting frame. The upper end of the portion of the beam C within the supporting frame is flush with the upper edges of the upper surface of the sides and ends of said frame. In the use of the device the outer end of the beam C is connected in any suitable manner to the frame of the bal-

ing press, which may be of any well known construction and which I have deemed it unnecessary to illustrate in the present application. The connection of the outer end of the beam C with the frame of the press prevents relative movement between the supporting frame and the press frame when the plunger is being operated. The transverse beams B of the supporting frame are provided at one side of the beam C with portions positioned below the plane of the top of the beam C and slidably mounted in suitable bearings secured to such portions is a longitudinal bar D which is adapted to lie directly alongside of the beam C and to move parallel thereto. The forward end of the bar D is adapted to be connected in any suitable manner to the plunger of the hay press, and as such connection forms no part of the present invention, I have deemed it unnecessary to illustrate the same herein.

E designates an actuating wheel which is journaled on a suitable shaft projecting from the upper surface of the portion of the beam C which is within the supporting frame. The actuating wheel E is provided with two diametrically opposed pins or projections *e* which are located adjacent the periphery of the wheel and project downwardly therefrom. When the wheel E is secured in position, its under surface lies in close proximity to the upper surface of the beam C and said beam and the side bars of the supporting frame are provided with cut away portions in the upper edges thereof to permit pins *e* extending from the actuating wheel E to clear said beam and the side sills. Projecting laterally from the bar D and positioned intermediate the ends thereof is a projection D'. Pivotally connected to the forward end of the bar D is a link E', the outer end of which is pivotally connected to the outer end of a link E², the inner end of which is pivotally connected in any suitable manner to the transverse sill B at the front end of the supporting frame adjacent this connection with the beam C. When the bar D is in such a position that the plunger has been moved to its innermost position in the baling chamber, the links E' and E² will have been shifted until they are almost in alinement with each other, and when the bar D is in such a position that the plunger has been retracted, the links E' and E² will be folded.

Pivotally supported upon the beam C immediately in rear of the connection of the link E² with the supporting frame, is a member F which is provided with a slightly curved inner face and to the outer end of which is pivotally connected a link F', the other end of which is pivotally connected to a link E² adjacent its pivotal connection with the supporting frame. The member F is pivotally supported in a cut away portion formed in the upper surface of the beam C so that the top thereof will lie below the plane of the upper surface of said beam and will not interfere with the rotation of the actuating wheel.

When the bar D is in such position that the plunger has been retracted, the links E' and E² will occupy their folded position and the member F will lie upon the outer surface of the beam C. With the parts in this position, the projection D' will occupy such a position that the inner edge thereof will be positioned beyond the plane of rotation of the pins *e* depending from the actuating wheel. With the parts in this position, if the actuating wheel is turned in a clockwise direction, one of the actuating pins thereof will contact with the inner surface of the pivoted member F and shift the same laterally until the links E' and E² have been moved into substantial alinement. By this time the member F has been shifted a sufficient distance to permit the pin of the actuating wheel to clear the same. Immediately the pin of the actuating wheel clears the inner surface of the member F, it will engage the inner surface of the projection D' which extends from the bar D and upon further rotation of the actuating wheel, the bar will be returned to its normal position. Obviously this operation will be repeated when the other pin of the actuating wheel is brought into engagement respectively with the member F and the projection D' which extends from the bar D, so that there will be two positive actuations of the plunger in both directions for each rotation of the actuating wheel E. Depending from the rear end of the actuating bar D is a stop *d* which is adapted to contact with a leaf spring which is secured upon the rear end of the supporting frame to limit the forward movement of such bar. It will be obvious that by reason of the employment of such a stop and spring, the bar D will be cushioned as it approaches its extreme limit of forward movement.

Any suitable form of horse power may be used to rotate the actuating wheel E. In the form of the invention illustrated in the accompanying drawings, I have shown a horse power comprising a sweep G the inner end of which is adapted to be rigidly secured in suitable loops projecting from the upper surface of the actuating wheel and to

the other end of which is pivotally connected a whiffle tree G' to which is detachably secured a pair of thills H.

I designates a lead pole, the rear end of which is detachably connected in any suitable manner to the sweep G adjacent its connection with the actuating wheel and the outer end of which is provided with the usual snap hook for engagement with the bit ring of the horse. The lead pole I is made in two sections the adjacent ends of which are overlapped and adjustably connected in any suitable manner.

While I have illustrated in the drawings forming a part hereof a convenient embodiment of the invention, it will be obvious that many changes may be made in the form and construction therein shown without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:

1. In an operating mechanism for hay presses, a frame, a longitudinally extending bar mounted to reciprocate therein and provided with a projection extending therefrom, a toggle connection between said bar and frame, a member movably supported on said frame, a link connecting said movable member with one of the links of the toggle connection, and a rotatable actuating member mounted on said frame and adapted to successively engage said movable member and the projection extending from the bar.
2. In an operating mechanism for hay presses, a frame, a longitudinally extending bar mounted to reciprocate therein and provided with a projection extending therefrom, a pair of pivotally connected links connecting said bar and frame, a member pivotally supported on said frame, a link connecting said member with one of said pair of pivotally connected links, and a rotatable actuating member mounted on said frame and adapted to successively engage said pivoted member and the projection extending from said bar.
3. In an actuating mechanism for baling presses, a frame, a longitudinally extending bar mounted to reciprocate in said frame and provided with a projection extending therefrom, a link pivotally connected to said frame, a link pivotally connecting the end of said last mentioned link to said longitudinally extending bar, a member pivotally connected to the frame, a link pivotally connecting the free end of said pivoted member to the link, which is pivotally connected to said frame, and a rotatable actuating member mounted on said frame and adapted to successively engage said pivoted member and the projection extending from said bar.
4. In an operating mechanism for baling presses, a supporting frame comprising connected side sills and an intermediate sill extending longitudinally of the frame, a lon-

gitudinally extending bar mounted to re-
ciprocate in said frame at one side of said
intermediate sill and provided with a projec-
tion extending therefrom, a pair of pivotally
5 connected links connecting the front end of
said bar with said frame, a pivoted member
mounted on the intermediate sill of said
frame, a link connecting the outer end of
said pivoted member with one of said pair
10 of pivotally connected links, and a rotatable
actuating wheel mounted on the intermedi-
ate sill of said frame and provided with a
projection depending therefrom adapted to
successively engage said pivoted member
and the projection extending from the bar. 15

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

ABIJAH B. BENNETT.

Witnesses:

A. H. READ, Jr.,
J. A. HARRIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
