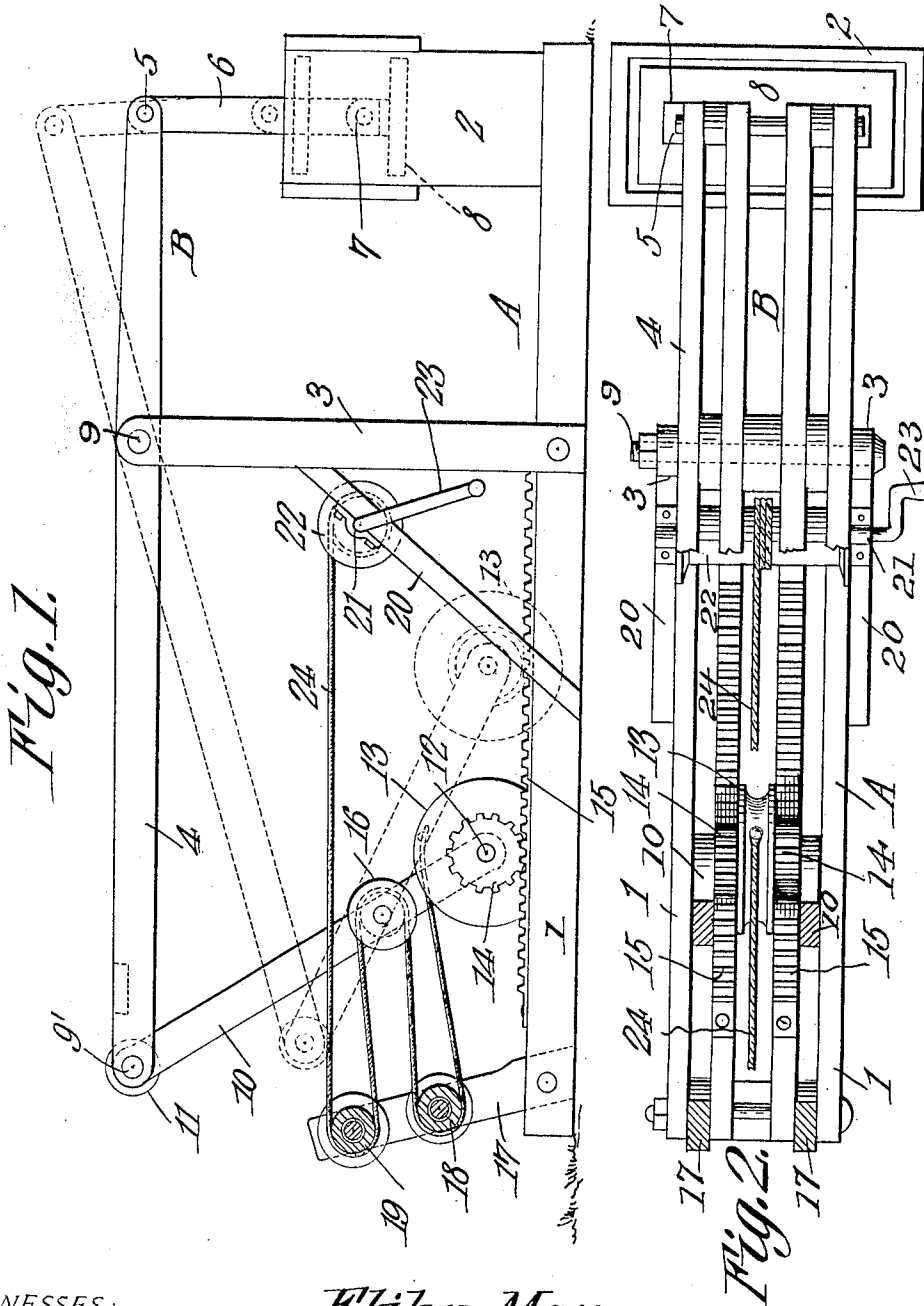


No. 857,086.

PATENTED JUNE 18, 1907.

E. MAY.
BALING PRESS.

APPLICATION FILED JAN. 26, 1907.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ELIHU MAY, OF MAGEE, MISSISSIPPI.

BALING-PRESS.

No. 857,086.

Specification of Letters Patent.

Patented June 18, 1907.

Application filed January 26, 1907. Serial No. 354,283.

To all whom it may concern:

Be it known that I, ELIHU MAY, a citizen of the United States, residing at Magee, in the county of Simpson and State of Mississippi, have invented a new and useful Baling-Press, of which the following is a specification.

This invention relates to baling presses and its object is to provide a press of simple, durable and compact construction particularly designed to be operated manually.

Another object is to provide means whereby lost motion of the operating parts is prevented and the power required for actuating the press is reduced to the minimum.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a side elevation of the apparatus one of the positions of the parts being disclosed by dotted lines; and Fig. 2 is a plan view of the apparatus one end portion thereof being shown in section.

Referring to the figures by characters of reference, A is a base made up of a plurality of connected longitudinally extending sills 1 upon one end of which is supported a casing 2 constituting the compressing chamber. Standards 3 are secured upon the outer faces of, and between, the sills 1 and these standards project between and at opposite sides of strips 4 constituting the walking beam B of the apparatus. These strips are connected at one end by a bolt 5 to which are pivotally connected links 6 extending upward from ears 7 on a plunger 8. This plunger is adapted to work within the compressing chamber. A pivot bolt 9 of sufficient strength is extended through the standards 3 and the strips 4 so as to constitute an efficient fulcrum for the walking beam.

Extending through that end of the strip 4 farthest removed from plunger 8 is a pivot bolt 9 on which are mounted hangers 10. A sheave 11 is also mounted on the bolt 9 at the center thereof and is for the purpose hereinafter set forth. Journaled within the lower end of the hangers 10 is a shaft 12 on which a drum 13 is rotatably mounted. Gears 14 are arranged at opposite sides of and rotate with this drum and mesh with rack bars 15 extending longitudinally along

the middle sills of the base. A sheave 16 is mounted between the hangers 10 close to the drum 13.

Secured upon the base A at that end thereof of opposite the casing 2 are standards 17 and mounted within these standards is a lower sheave 18 and an upper sheave 19. Braces 20 connect the sides of the base with the side standards 3 and journaled upon them is a shaft 21 having a drum 22 secured to it. A crank arm 23 is arranged at one end of the shaft so that the drum can be rotated manually. A cable 24 is secured at one end of this drum and then extends successively over the pulleys 19, 16 and 18, the other end of said cable being securely fastened to the drum 13.

When it is desired to use the apparatus herein described the lower ends of the hangers 10 are pushed forward toward the uprights 3, this movement being facilitated by the downward pressure of the overhanging portion of the walking beam 4. When moving to this position the gears 14 rotate the drum 13 and cause the cable 24 to wind upon the drum and to unwind from the drum 22. The material to be compressed or baled is then placed in the casing and beneath the plunger 8, after which the crank arm 23 is rotated so as to cause the cable 24 to wind on the drum 22. The cable will therefore be unwound from the drum 13 and will at the same time tend to pull the sheave 16 toward the sheaves 18 and 19. As a result the hangers 10 will be moved into upright positions and the plunger 8 forced downward into the casing 2. By providing gears 14 and rack bars 15 it becomes impossible for the drum 13 to rotate without causing a corresponding movement of the hangers 10. There is therefore no lost motion.

It will be seen that the apparatus is very simple, compact and durable in construction and by reason of the novel mechanism employed material can be efficiently baled without the utilization of any power other than the manually operated cranks.

What is claimed is:

1. In an apparatus of the character described the combination with a base, a casing thereon constituting a compressing chamber, and an upright; of a walking beam, a plunger connected thereto and movable within the chamber, a hanger pivotally connected to the walking beam, a drum rotatable therewith, means rotatable with the

drum for bearing upon and engaging the base, a flexible power transmitting device secured to and adapted to be wound upon the drum, a sheave upon the hanger, sheaves
5 fixedly supported above the base, all of said sheaves being engaged by the power transmitting device, and means for actuating said device to unwind it from and rotate the drum.

2. In a baling press the combination with
10 a base, a rack bar thereon, and a walking beam; of a hanger, a gear carried by the hanger and meshing with the rack bar, a drum rotatable with the gear, a flexible power transmitting device secured to and
15 adapted to be wound upon the drum, a sheave fixedly supported above the base, said device extending over the sheave, and means for actuating said device to unwind it from and rotate the drum.

20 3. In a baling press the combination with

a base having a rack bar thereon, a compressing chamber, a walking beam and a plunger connected to said beam; of a hanger pivotally connected to the beam, a gear rotatably
25 mounted thereon and engaging the rack bar, a drum rotatable with the gear, a standard, sheaves thereon, a sheave upon the hanger, a flexible power transmitting device extending over the sheaves and secured to and adapted to be wound upon the drum, and
30 means for actuating said device to unwind it from the drum and rotate the gear upon the rack.

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

ELIHU MAY.

Witnesses:

J. W. ALLEY,

EDWIN T. WADE.