No. 800,009. PATENTED SEPT. 19, 1905.

L. L. PARR.

BALING PRESS.

APPLICATION FILED AUG. 3, 1904.

4 SHEETS—SHEET 1.

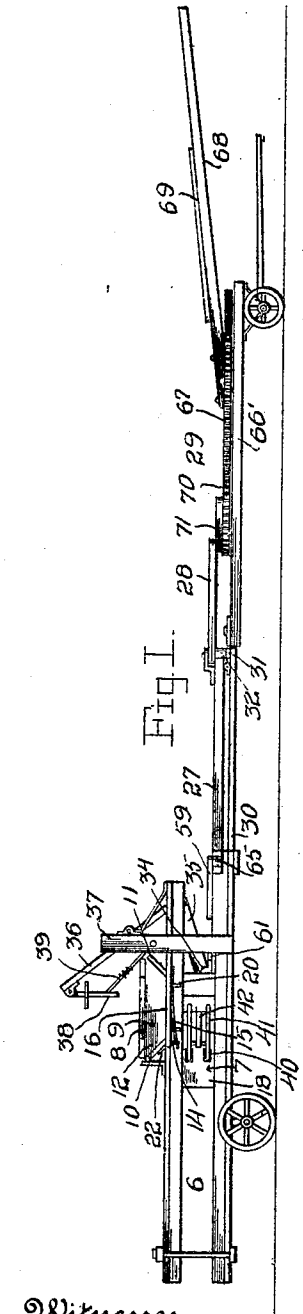


Fig. 1.

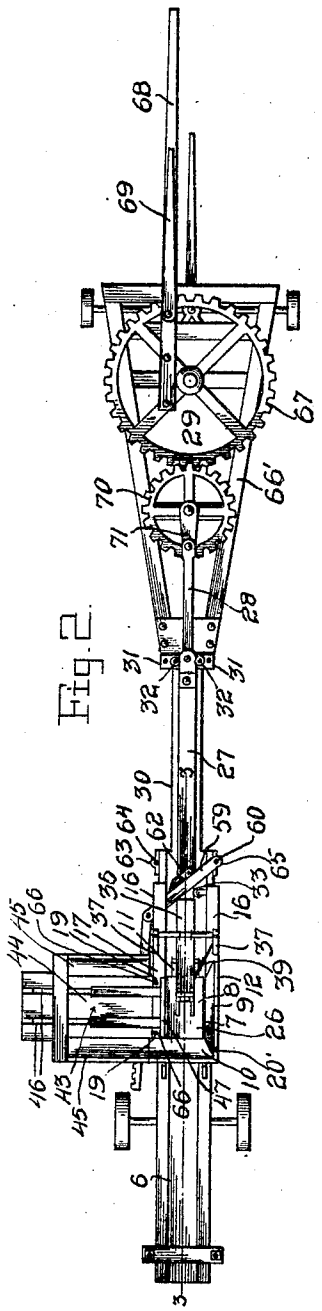


Fig. 2.

Witnesses
C. R. Reubenbach.
W. C. Keyes

Inventor
L. L. Parr
by
Brandenburg & Brandenburg
Attorneys

No. 800,009. PATENTED SEPT. 19, 1905.

L. L. PARR.

BALING PRESS.

APPLICATION FILED AUG. 3, 1904.

4 SHEETS—SHEET 2.

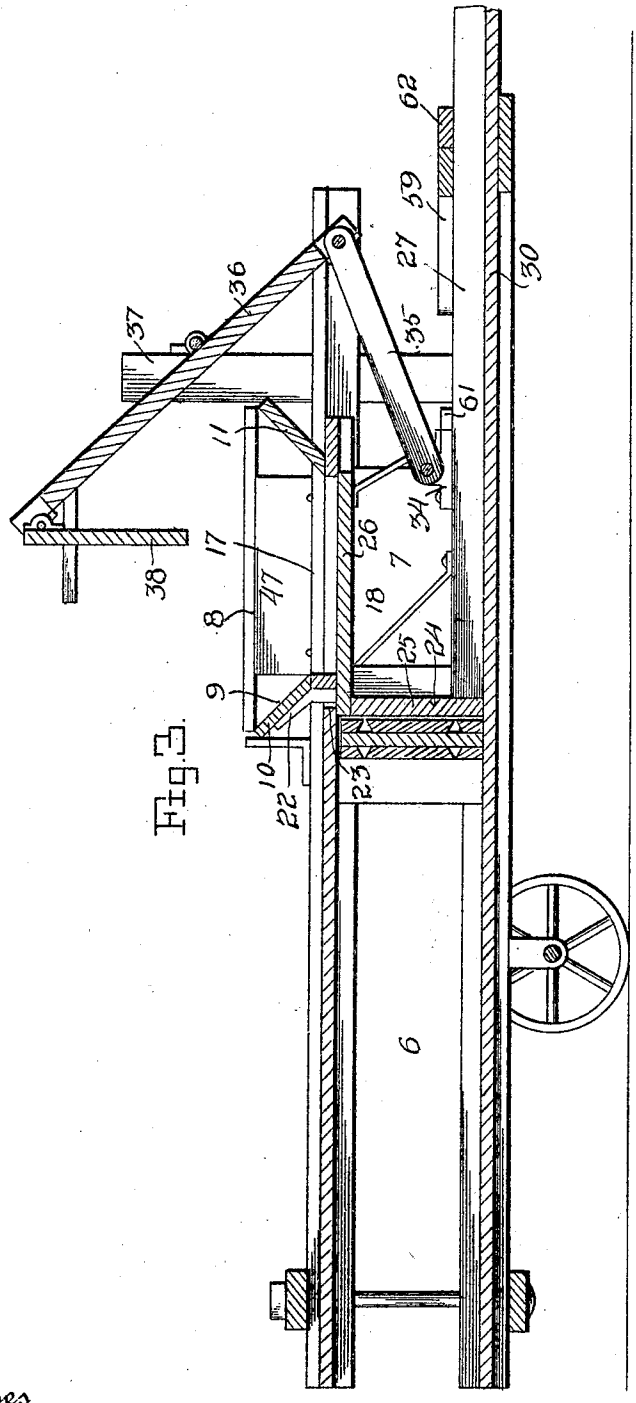


Fig. 2.

Witnesses
E. K. Reichenbach.
W. C. Keyes.

Inventor
L. L. Parr. by
Crandall & Crandall
Attorneys.

No. 800,009. PATENTED SEPT. 19, 1905.

L. L. PARR.

BALING PRESS.

APPLICATION FILED AUG. 3, 1904.

4 SHEETS—SHEET 3.

Fig. 5.

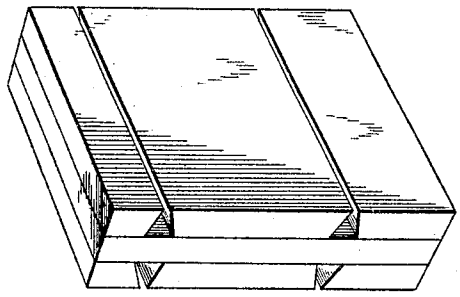
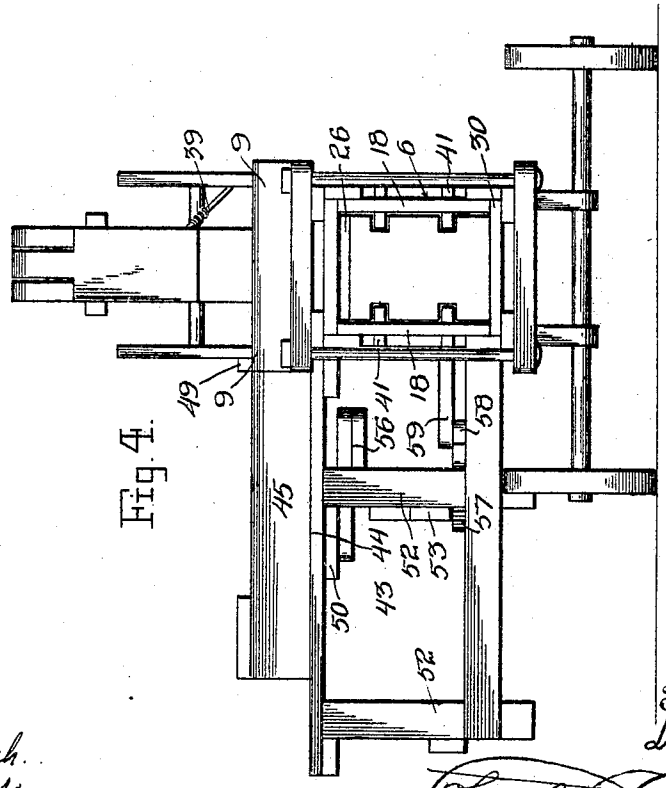


Fig. 4.



Witnesses
C. K. Reichenbach.
W. C. Keyes

Inventor
L. L. Parr,
by
Attorneys

No. 800,009. PATENTED SEPT. 19, 1905.

L. L. PARR.

BALING PRESS.

APPLICATION FILED AUG. 3, 1904.

4 SHEETS—SHEET 4.

Fig. 7.

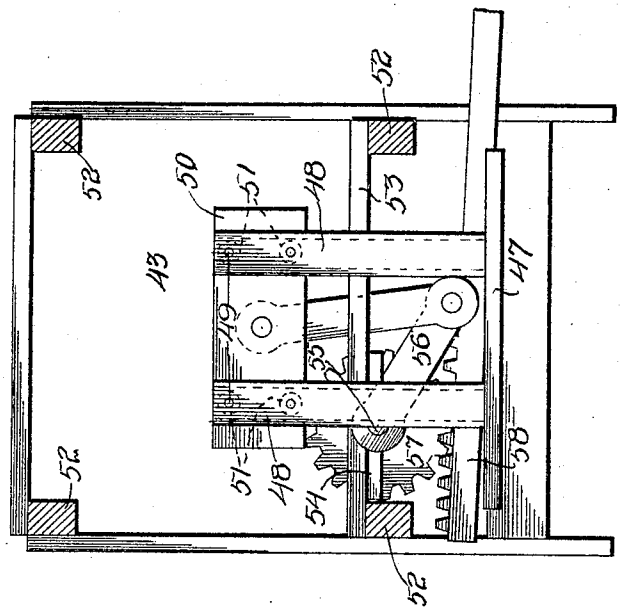
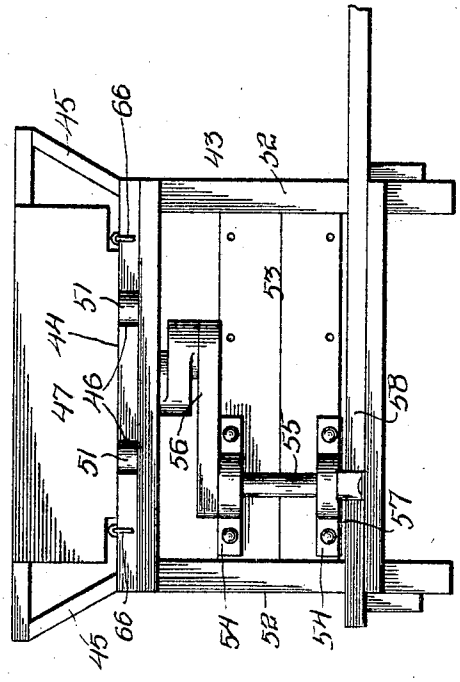


Fig. 8.



Witnesses
P. R. Reichenbach.
W. C. Keyes.

Inventor
L. L. Parr.
by
Chandlee & Chandlee
Attorneys.

UNITED STATES PATENT OFFICE.

LEE L. PARR, OF PAGOSA SPRINGS, COLORADO.

BALING-PRESS.

No. 800,009. Specification of Letters Patent. Patented Sept. 19, 1905.

Application filed August 3, 1904. Serial No. 219,353.

To all whom it may concern:

Be it known that I, LEE L. PARR, a citizen of the United States, residing at Pagosa Springs, in the county of Archuleta, State of Colorado, have invented certain new and useful Improvements in Baling-Presses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to presses, and more particularly to baling-presses, and has for its object to provide a machine of this nature which will be arranged to automatically feed itself when in operation.

A further object is to provide a feeding-table, so arranged that it may be used at either side of the machine, as desired.

Other objects and advantages will be apparent from the following description, and it will be understood that modifications of the specific construction shown may be made and any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the complete press. Fig. 2 is a top plan view. Fig. 3 is a longitudinal section taken on line 3 3 of Fig. 2. Fig. 4 is a rear end view. Fig. 5 is a detail perspective view of one of the header-blocks. Fig. 6 is a front elevation of the feeding-table. Fig. 7 is a top plan view of the feeding-table, taken with the platform removed and showing the arms and follower-block in position.

Referring now to the drawings, the present invention comprises the usual chute 6, communicating with the baling-chamber 7, having the feed-opening 8 in its top. A hopper 9 surrounds the feed-opening, which in this instance includes end walls 10 and 11 and a side portion 12, the end wall 11 being secured to the top of the baling-chamber, while the end wall 10 is held in position by means of loops 14, which are engaged with the ends of strap-springs 15, secured to the under side of flanges 16, projecting beyond the sides of the baling-chamber, the wall 10 being thus movable upwardly against the action of the springs for a purpose to be presently described. These flanges 16 are in reality the outwardly-extending portions of sills 17, which are secured to the top of the sides 18 of the baling-chamber, and each of these sills is provided with a pair of perforations 19 for the reception of pins 20, carried by the side 12 of the hopper, this side of the hopper being thus arranged for disposal at either side of the baling-chamber, it being secured in position by means of a bolt 20′ passed through a perforation therein and a similar perforation in the end 10 of the hopper.

The wall 10 is provided with a rib 22 upon its outer face, which is engaged in a slot 23 in the end of the top of the baling-chute 7, this top extending over a portion of the baling-chamber to form a top therefor.

A plunger 24 is disposed for movement into and out of the baling-chamber and includes the usual head 25 and top piece 26, and this plunger is connected, by means of a plunger-rod 27 and link 28, to a horse-power 29, by means of which the follower and the plunger-rod may be reciprocated.

The press also includes a base-plate 30, which forms the bottom of the bale-chute 6 and the baling-chamber 7 and extends forwardly beneath the plunger-rod 27, the base-plate having pillow-blocks 31 thereon in which are mounted rollers 32, acting as supports for the plunger-rod. Other rollers 33 are disposed at opposite sides of the plunger-rod and act as guides therefor.

Mounted upon the upper face of the plunger-rod are spaced pillow-blocks 34, between which is pivoted the lower end of a link 35, the upper end of which is pivotally connected to the end of a feed-lever 36, which in turn is pivoted between a pair of uprights 37, which are secured to the base-plate 30, the feed-lever extending beyond the uprights and lying with its free end above the opening 8 of the baling-chamber.

Pivoted to the free end of the feed-lever 36 is a depending feeding-finger 38, which is maintained in a vertical position at all times by means of a spring-arm 39, pivoted thereto at one end and at its remaining end to one of the uprights 37, and it will thus be apparent that when the plunger is withdrawn from the baling-chamber the feeding-finger 38 will be moved thereinto through the opening 8, carrying with it any hay deposited in the hopper, the feeding-finger being moved upwardly out of the chamber when the plunger is moved thereinto to compress the hay.

The sides 18 of the baling-chamber are provided with openings 40 therethrough which receive the ends of latch-fingers 41, arranged to hold the header-blocks and to prevent the

return thereof into the baling-chamber, as will be readily understood, and these latch-fingers are held yieldably in operative position by means of strap-springs 42.

A feeding-table 43 is provided and consists of a platform 44, having upwardly-extending side walls 45 secured thereto and extending longitudinally of the platform, and parallel with the walls 45 are slots 46. Disposed transversely of the table, between the walls 45, is a follower-block 47, having rearwardly-extending arms 48 secured thereto, one of which lies above each of the slots 46, and secured to the arms 48 are the upper ends of pins 49, which extend downwardly through the slots and are secured at their lower ends to a transverse plate 50, the pins having rollers 51 revolubly disposed thereon within the slots. The table includes corner-uprights 52, and secured at their ends to the forward pair of these uprights are cross-pieces 53, to each of which is secured a bearing-block 54, having a shaft 55 journaled therein, and these bearing-blocks are shiftable from end to end of the cross-pieces for a purpose to be hereinafter described. The upper end of the shaft 55 is connected, by means of toggles 56, to the plate 50, so that as the shaft 55 is oscillated the follower-block 47 is moved longitudinally of the table 43. To oscillate the shaft 55, the latter is provided with a gear 57, which meshes with a transverse rack-bar 58, having a link 59 pivoted to one end thereof, the link having a depending pivot-pin 60 at its remaining end.

Secured to the plunger-rod 27 forwardly of the blocks 34 is a transverse lug 61, and spaced forwardly from this lug is a similar lug 62, which is also secured to the rod 27, but which extends at an angle thereto. Secured to one side of the base-plate 30 is a pillow-block 63, having a vertical bearing 64 therein, and this block lies at the forward limit of movement of the lug 61, and disposed at the opposite side of the base-plate is a similar pillow-block 65.

In the drawings the feeding-table 43 is shown in use and disposed at the side of the baling-chamber opposite to the side wall 12 of the hopper, the platform 44 lying with its forward edge against the outer edge of one of the sills 17 and having hooks 66, which are engaged in the perforations 19, the end wall 10 having one of its ends engaged over the platform and forming a continuation of one of the walls 45, the arrangement of this wall permitting of vertical upward movement thereof for the insertion of the platform therebeneath. In this position the rack-bar 58 extends parallel to the base-plate 30 and the link 59 lies transversely of the base-plate 30 and the plunger-rod between the lugs 61 and 62 and in the paths of movement thereof, the pivot-pin 60 being engaged in the bearings 64 of the pillow-blocks 63. It will thus be apparent that when the plunger-rod and follower are moved outwardly of the baling-chamber the lug 61 will engage the link 59 and will move it and the rack-bar 58 to revolve the pinion 57 and shaft 65 in one direction and move the follower-block to the rearward limit of its motion, when hay may be deposited upon the platform 44 in front of the follower-block. When the follower 24 and plunger-rod 27 are moved in the opposite direction to compress the hay within the baling-chamber and to raise the feeding-finger 38, as described above, the lug 62 comes into engagement with the link 59, the shaft 55 being revolved in the opposite direction to move the follower-block 47 in the direction of the baling-chamber and deposit the hay placed upon the platform 44 upon the top piece 26 of the plunger 24 and within the opening 8 of the baling-chamber. The press is thus automatically fed, and it is unnecessary for the operator thereof to place himself in a position which would endanger his safety through being struck by the feeding-finger 38 or the lever 36.

Should it be desired to use the feeding-table at the opposite side of the press, the position of the side wall 12 of the hopper may be shifted, as mentioned above, and the table disposed in position, as will be readily understood. The bearing-blocks 54 are shifted to the opposite ends of the cross-pieces 53, the rack-bar 58 being shifted end for end and the pivot-pin 60 being engaged in the bearing of the pillow-block 65.

The horse-power 29, above referred to, may be of any suitable type; but in the drawings it is illustrated as comprising a framework 66′, upon which is mounted a gear 67, having the draft-pole 68 secured thereto, the draft-pole having a lead-pole 69 secured thereto, as shown. The gear 67 is meshed with a pinion 70, having an eccentrically-mounted wrist-pin 71, to which the link 28 is connected.

The header-block above referred to is provided with transverse slots in its side faces adjacent to its upper and lower ends, the inner portions of these slots being broadened, this arrangement permitting of the insertion of the tie-wires in the broadened portions of the slots and afterward drawing them out through the narrow portions thereof to inclose the bale.

The press is provided with suitable wheels and draft appliances, as shown, to facilitate transportation from place to place.

What is claimed is—

1. The combination with a baling-press including a baling-chamber, a hopper arranged to discharge into the chamber, said hopper including a wall shiftable to opposite sides of the hopper, and a feeding mechanism, of an auxiliary feeding mechanism adapted for connection with the baling-press at either side of the hopper, said feeding mechanism being arranged to deposit matter to be baled within the hopper, and means connected with the

auxiliary feeding mechanism and with the baling-press for operation of said mechanism when the press is operated.

2. The combination with a baling-press including a baling-chamber, a feeding mechanism and a hopper arranged to discharge into the baling-chamber, said hopper including a wall adapted for interchangeable attachment at opposite sides of the hopper, and a wall arranged for vertical movement, of an auxiliary feeding mechanism comprising a platform adapted for attachment to the press at either side of the hopper, said platform being adapted to extend beneath the vertically-movable wall of the hopper and being adapted for the reception of matter to be baled, a follower-block mounted upon the platform for movement to transfer matter from the platform to the hopper, and connections between the follower-block and the press for operation of said follower-block when the press is operated.

3. The combination with a baling-press comprising a frame, a baling-chamber located within the frame and opening through the top thereof, outwardly-extending flanges carried by the frame at opposite sides of the opening of the baling-chamber, said flanges having perforations therein, a wall, pins carried by the wall and removably engaged in the perforations of one of the flanges, said pins being adapted for engagement in the perforations of the two flanges interchangeably, strap-springs secured at one end to the under face of the flanges, a vertically-movable wall disposed transversely of the frame and having a projection extending downwardly into the baling-chamber, said wall having loops engaged with the free ends of the strap-springs, said springs being adapted to hold the last-named wall at the downward limit of its movement, means for holding said wall against movement transversely of the frame, a feeding mechanism arranged to transfer matter from the hopper to the baling-chamber, a plunger movably mounted in the baling-chamber, and means for operating the plunger and feeding mechanism, of an auxiliary feeding mechanism comprising a platform, hooks carried by the platform and removably engaged in the perforations of one of the sills, said hooks being adapted for engagement in the perforations of the sills interchangeably, said platform being adapted for the reception of matter to be baled, means for moving such matter from the platform to the hopper, said platform extending beneath a portion of the vertically-movable wall, and means for operating the auxiliary feeding means.

4. The combination with a baling-press including a plunger-rod, a baling-chamber, a plunger, and feeding mechanism, of spaced blocks secured to the plunger-rod, an arm pivotally connected with the press and lying between the blocks for engagement alternately thereby as the plunger-rod is reciprocated, to move the arm, and an auxiliary feeding mechanism connected with the arm for operation thereby, when the latter is moved.

5. A feeding mechanism for baling-presses comprising a platform adapted for attachment to a press in position to discharge into the hopper of the latter, said platform having guides therein, a follower-block mounted upon the platform and movable thereover to transfer matter from the platform to the hopper of the press to which it is attached, a rock-shaft located beneath the platform, connections between the shaft and the follower for movement of the latter when the shaft is rocked, and means for rocking the shaft, said means being adapted for connection with a baling-press for operation thereby.

6. An attachment for baling-presses comprising a platform, supports for the platform, press-engaging hooks carried by the platform, said platform being adapted for connection with a press, for the passage of matter from the platform to the hopper of the press, members secured to certain of the supports of the platform, pillow-blocks connected with the press and shiftable horizontally, a shaft revolubly mounted in the pillow-blocks, means for oscillating the shaft, a follower mounted upon the platform for movement thereover and connections between the shaft and the follower for reciprocation of the latter when the shaft is oscillated.

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

LEE L. PARR.

Witnesses:
JOHN H. JOHNSON,
BELLE FULCHER.