

V. S. PLEASANT.

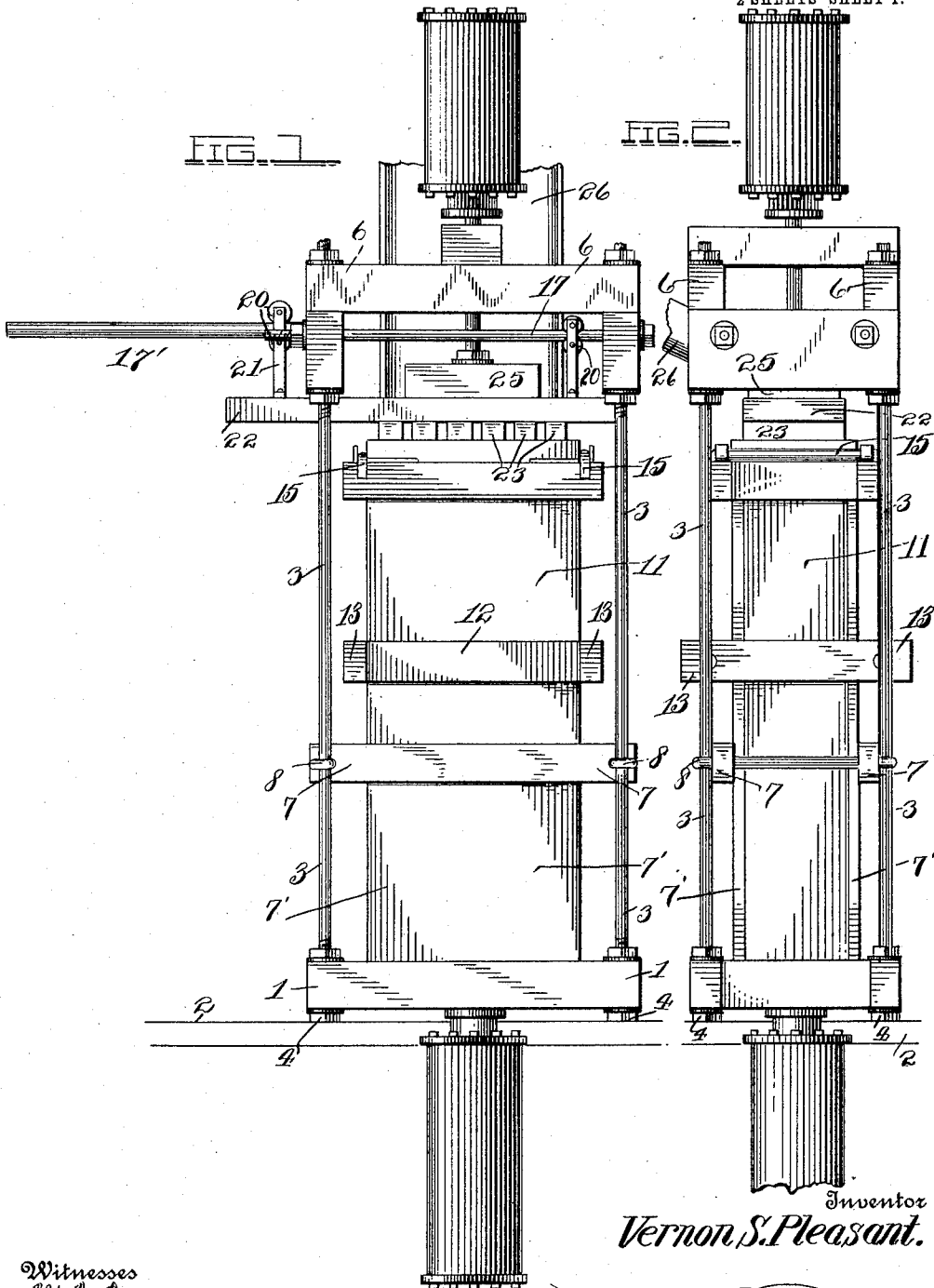
BALING PRESS.

APPLICATION FILED DEC. 15, 1910.

1,006,593.

Patented Oct. 24, 1911.

2 SHEETS-SHEET 1.



Witnesses
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F. A. Howard.

Inventor
Vernon S. Pleasant.

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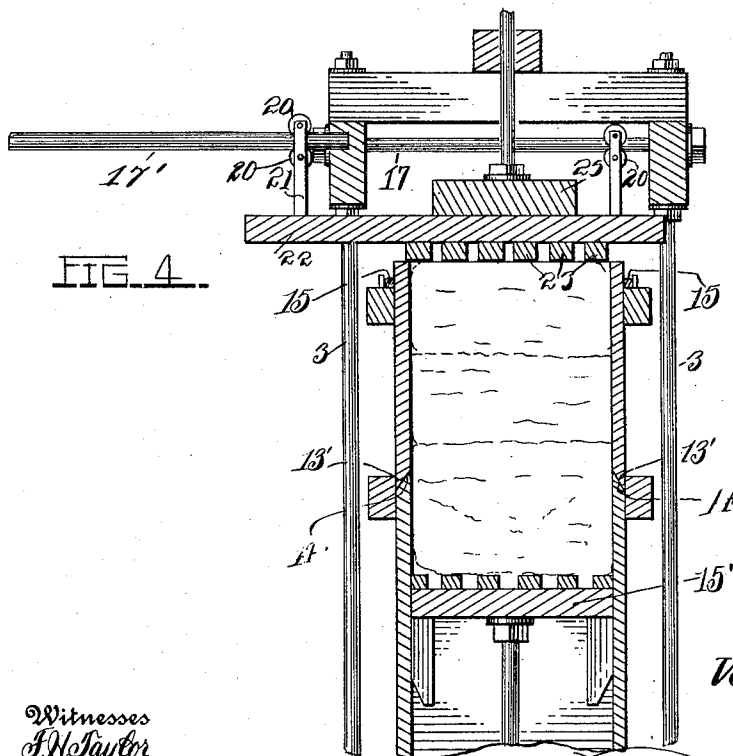
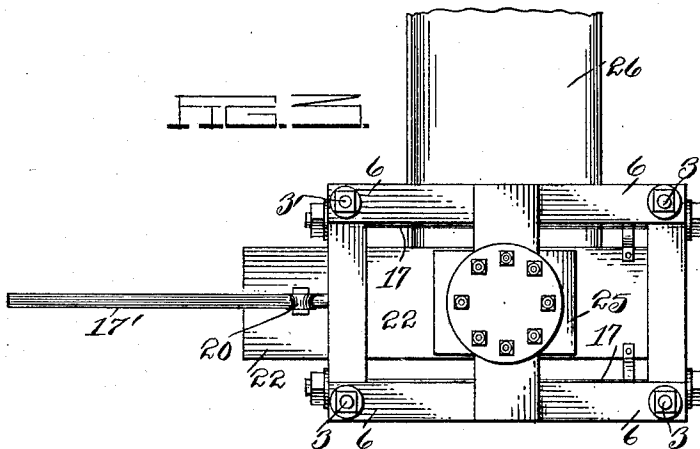
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UNITED STATES PATENT OFFICE.

VERNON S. PLEASANT, OF PARCHMAN, MISSISSIPPI.

BALING-PRESS.

1,006,593.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed December 15, 1910. Serial No. 597,499.

To all whom it may concern:

Be it known that I, VERNON S. PLEASANT, a citizen of the United States, residing at Parchman, in the county of Sunflower, State of Mississippi, 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.

My invention relates to improvements in cotton baling presses, and the object of the invention resides in the provision of a slidable platen arranged to operate in conjunction with a packing plunger and to deliver the compressed fiber into the body chamber of the press.

With this in view the invention consists primarily in a baling chamber open at both ends, a baling plunger adapted to reciprocate in one of said ends, a platen forming a slidable closure for the other of said ends, means for condensing or packing fiber on the top face of the platen and means for discharging said condensed fiber into the baling chamber.

The invention further consists in a certain construction, combination, and arrangement of parts as is hereinafter more fully described, specifically pointed out in the appended claims and illustrated in the accompanying drawings which show a preferred embodiment of the invention.

In these drawings which are attached to and form a part of this application, Figure 1 is a front elevation of the device applied to a single box baling press of the conventional type. Fig. 2 is a side elevation of the same. Fig. 3 is a top plan view, and Fig. 4 is a detail sectional elevation of the slidable platen and packing plunger.

Referring more particularly to these views, in which similar reference numerals designate corresponding parts throughout, 1 indicates the base frame of the baling chamber which as shown is supported by a floor or the like 2. This frame as shown comprises a rectangular base portion preferably formed of heavy timbers from which arise the four corner supports here designated as 3, these supports being secured in the base frame by bolts or the like 4. The upper ends of these corner supports, which as shown are preferably steel bars or rods are secured in a

second rectangular frame here designated as 6. If desired an intermediate bracing frame 7 may be secured above the base frame in the manner shown at 8 in the present drawings. Secured within the frames above mentioned are the side walls 7' of the rectangular baling chamber here designated as a whole by 11 the upper edges of said side walls being beveled. Spaced above the intermediate frame are the two transverse bars here designated as 12 said bars being secured to the side walls of the baling chamber in such a manner as to form triangular shaped channels 14 between their inner faces and the bevel edges of the side walls. As shown at 13 these bars extend outwardly beyond the front and rear faces of the baling chamber and pivoted in these extensions are the upper portions of the front and back walls of said chamber, the whole constituting a construction for removing the bale. The lower edges of the side members are beveled as at 13' and as shown, fit into triangular shaped channels 14 above mentioned. Tie-rods here designated as 15 serve to secure the front and rear faces of the upper baling chamber together.

Adapted to reciprocate in the lower baling chamber is the baling plunger proper here designated 15', said plunger being of the conventional type and operated by a hydraulic cylinder or any other suitable means. Extending longitudinally of the upper frame are the two guide rails or rods here designated as 17, said rods being preferably threaded on the ends and secured in the frame by means of bolts or the like. A third guide rail 17' is secured in front of the side frame members and extends outwardly therefrom, said rail forming a cantaliver extension. Mounted on these rails are the trolleys designated 20, the trolley consisting of an upper and lower wheel and the frame in which said wheels are journaled. Suspended from these trolleys by means of the rods 21 is the reciprocating platen designated as a whole by 22. It will be seen that this platen consists of a rectangular block or plate of wood or metal to the under surface of which are secured slats 23, the upper surface of said platen being smooth throughout. As clearly shown in Fig. 4 the upper surface of the platen closely approaches the lower edges of the said frame bars. Adapted to reciprocate above the platen body is

the steam packing plunger here designated 25, said plunger having a range of movement about equal to the height of the upper frame bars. A chute here shown conventionally at 26 conveys cotton to the upper part of the frame and discharges the same on the top surface of the platen, said discharge being made by means of a conveyer belt or by gravity as preferred.

10 The operation of the apparatus above described is as follows. The baling plunger being at the bottom portion of its stroke the platen is positioned to close the upper opening of the baling chamber and a quantity of cotton is delivered on to the top surface of the same by means of the chute. The steam packing plunger then moves downwardly and compresses said cotton against the upper face of said platen. As the plunger 20 moves upwardly the platen is made to move outwardly by some suitable mechanism not shown. It will be seen that in this outward movement the compressed cotton or other fiber will be scraped from the surface of the 25 platen by the end upper frame members and will thence be delivered into the baling chamber dropping onto the bottom thereof, which in the present instance consists of the baling plunger. This operation will be repeated until the baling chamber is approximately full. The platen is then left in this position closing the mouth of the baling chamber while the baling plunger proper ascends thus compressing the bale. 30 When compressed the bale is removed in the usual manner, and the operation above described is repeated.

What I claim is:—

1. In a cotton baling press, the combination with a vertically disposed box having its upper end open, and a baling plunger adapted to reciprocate in said box, of a platen slidable across the mouth of said box, a packing plunger adapted to reciprocate 45 above the upper surface of said platen, and means whereby cotton may be fed on to the upper surface of said platen.

2. In a cotton baling press, the combination with a vertically disposed baling box 50 having its upper end open, and a baling plunger adapted to reciprocate in said box, of a platen slidable across the mouth of said box, means for discharging cotton on to the top surface of said platen, means for compressing said cotton, and means whereby

the outward movement of said platen will cause said compressed cotton to drop into the baling box.

3. In a cotton baling press, the combination with a vertically disposed baling box 60 having its upper end open, and a baling plunger adapted to reciprocate in said box, of a platen slidable across the open end of said box, a packing plunger reciprocating above the upper surface of said platen, 65 means for feeding cotton to the upper surface of said platen, and means whereby the outward movement of said platen will cause said cotton to drop into said box.

4. In a cotton baling press, the combination with a vertically disposed baling box 70 having its upper end open, and a baling plunger adapted to reciprocate in said box, of a platen slidable across the upper end of said box, means for feeding cotton to the 75 upper surface of said platen, a packing plunger adapted to compress said cotton, and a scraper member disposed transversely to the line of motion of said platen and adapted to scrape said compressed cotton 80 into the baling box on the outward movement of said platen.

5. In a cotton baling press, the combination with a frame including upper and lower rectangular sections connected at the 85 corners by tie-rods, and a vertically disposed baling box secured within said frame, said box having its upper end open, of a baling plunger reciprocating in the lower end of said box, parallel rails secured in 90 said upper frame and spaced above the upper end of said box, another rail parallel to said first mentioned rails and secured in one of said frame members and extending outwardly therefrom, a platen slidable over 95 the upper end of said box and operating in the space between the upper edges of said box and the lower edges of said upper frame, trolleys operating on said rails, suspending means whereby said platen will be 100 hung from said trolleys, a packing plunger adapted to reciprocate above the upper surface of said platen, and means for feeding cotton onto the upper surface of said platen.

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

VERNON S. PLEASANT.

Witnesses:

W. F. MARSHALL,
C. H. NEYLAND.