Nov. 8, 1932. W. E. WUNDERLICH 1,887,226

BALING PRESS

Filed May 28, 1930 4 Sheets-Sheet 1

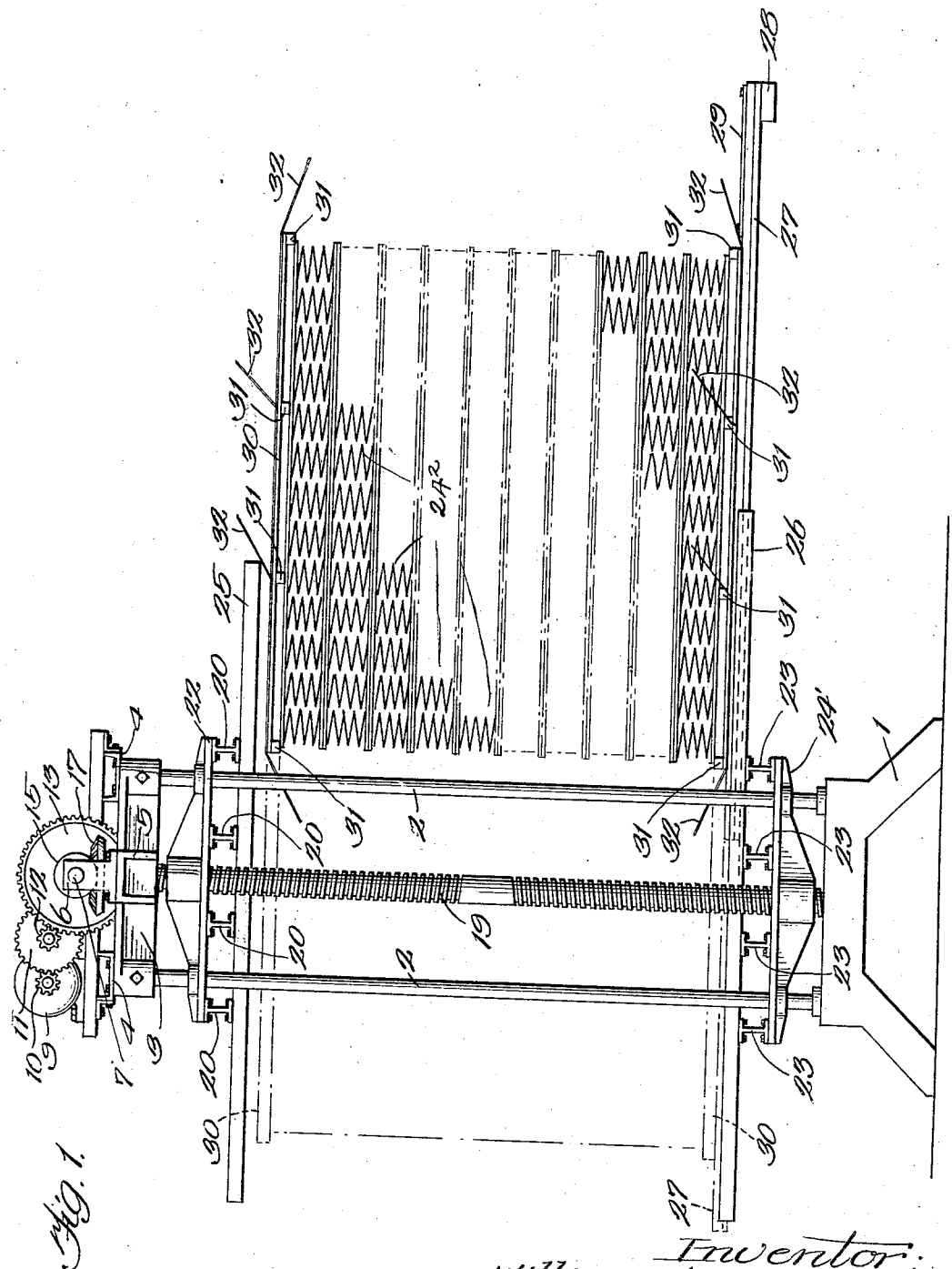


Fig. 1.

Inventor:
William E. Wunderlich
By G. L. Bragg Atty.

Nov. 8, 1932. W. E. WUNDERLICH 1,887,226

BALING PRESS

Filed May 28, 1930 4 Sheets-Sheet 2

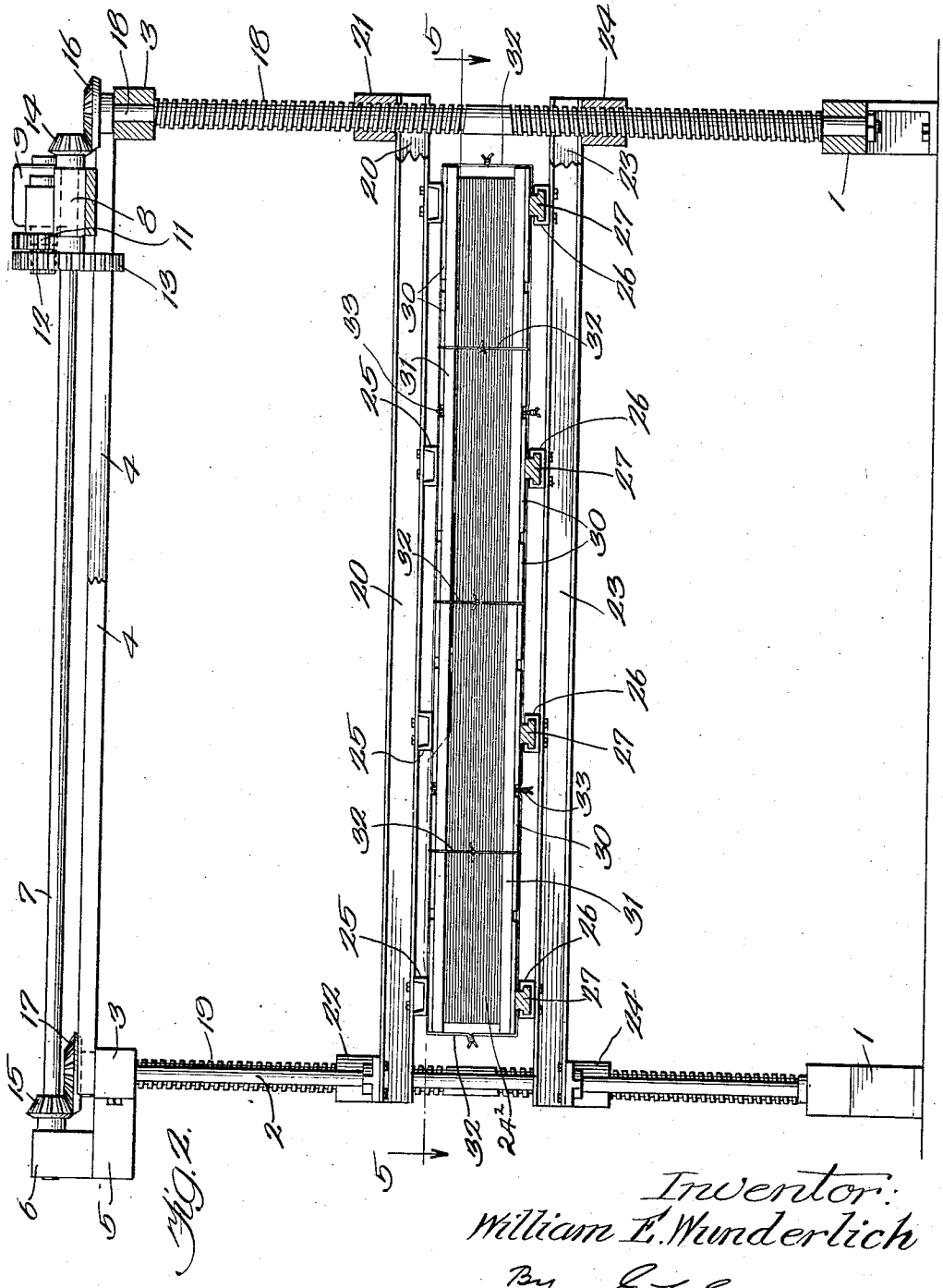


Fig. 2.

Inventor:
William E. Wunderlich
By R. L. Bragg
Attorney

Nov. 8, 1932. W. E. WUNDERLICH 1,887,226

BALING PRESS

Filed May 28, 1930 4 Sheets-Sheet 3

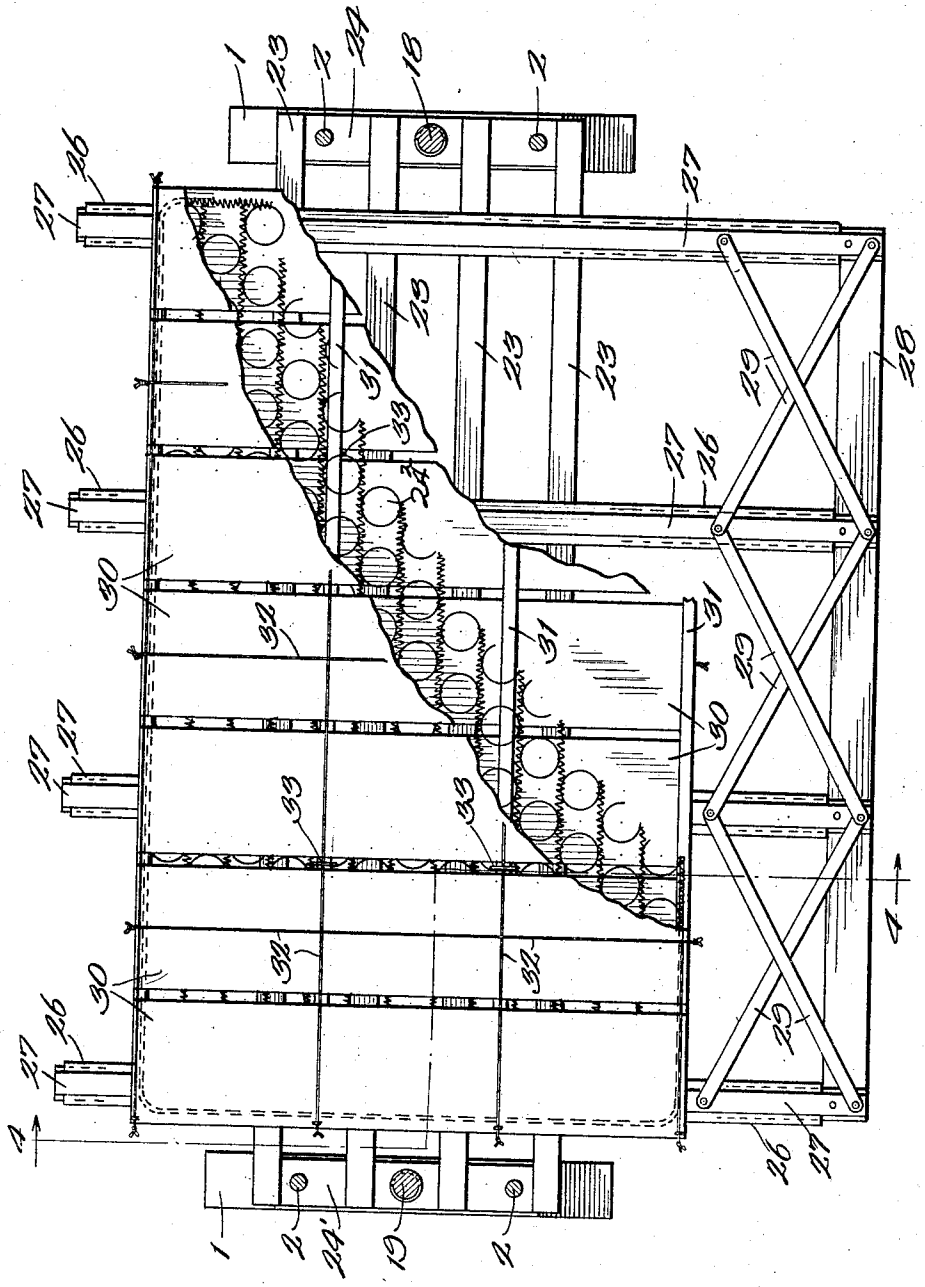


Fig. 3.

Inventor:
William E. Wunderlich
By L. L. Gregg Atty.

Nov. 8, 1932. W. E. WUNDERLICH 1,887,226

BALING PRESS

Filed May 28, 1930 4 Sheets-Sheet 4

Fig. 4.

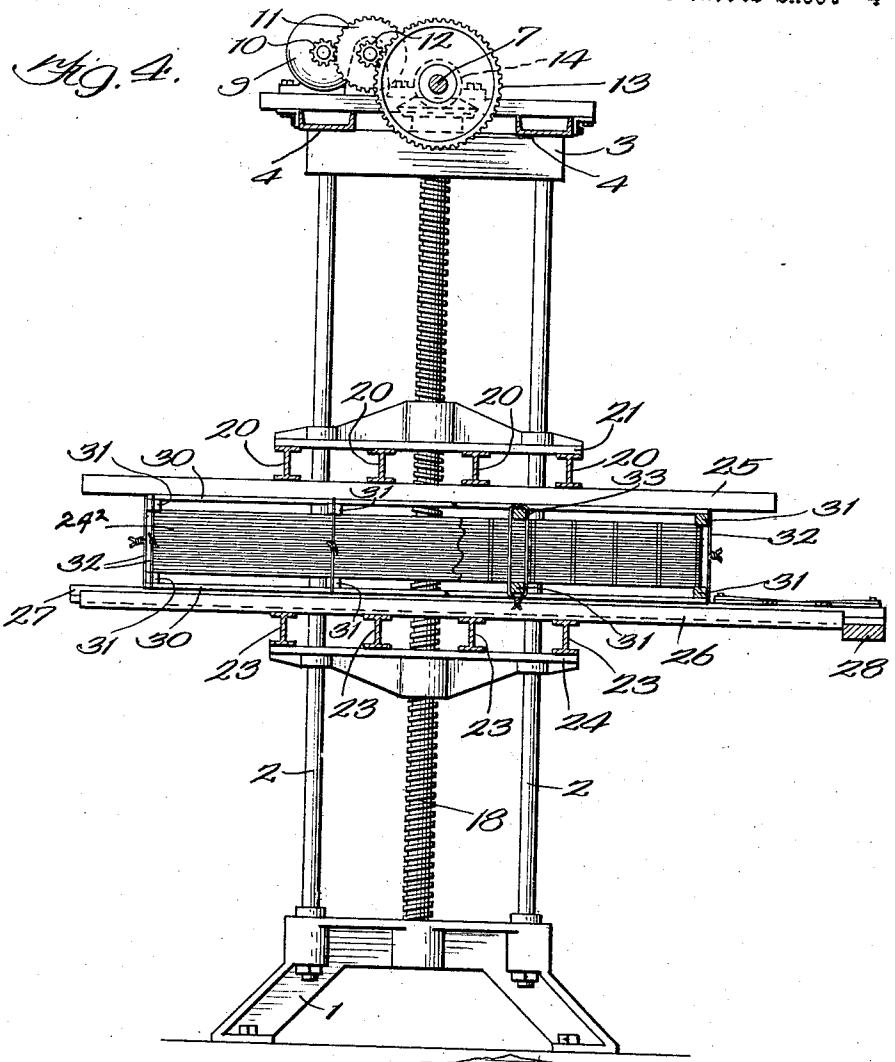
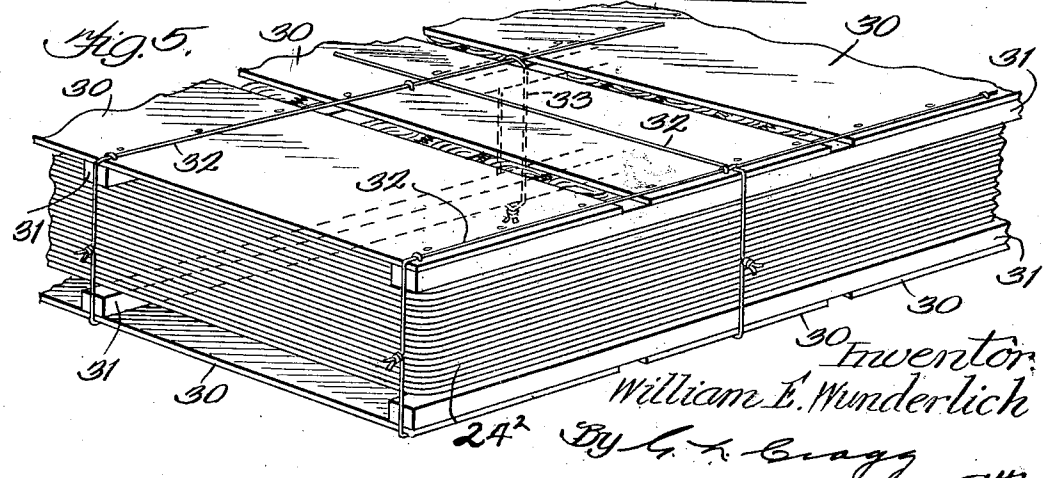


Fig. 5.



Inventor:
William E. Wunderlich
By G. F. Bragg
Atty.

Patented Nov. 8, 1932 1,887,226

UNITED STATES PATENT OFFICE

WILLIAM E. WUNDERLICH, OF MUNCIE, INDIANA, ASSIGNOR TO THE MOORE COMPANY, OF MUNCIE, INDIANA, A CORPORATION OF INDIANA

BALING PRESS

Application filed May 28, 1930. Serial No. 456,562.

My invention relates to baling presses and has a number of objects and advantages in view.

One feature of my invention resides in providing a baling press with a load receiving bed or loading platform which is laterally shiftable or adjustable so that it may be placed in a convenient position, upon one side of the pressing mechanism, for loading and unloading and when loaded may be readily shifted from its offset position to a position in which the load thereon may be compressed.

Another feature of my invention resides in the provision of mechanism for raising and lowering the load receiving bed or platform of the press to compress the load on the platform against an abutment which is preferably coextensive with the load that is to be baled. This abutment and the loading bed or platform are thus parts of clamping jaws which, together, exert the baling pressure. In order to expedite the operation both of these clamping jaws are moved each toward the other in the baling process and each away from the other after the baling.

A baling press constructed in accordance with my invention is one whose loading bed or platform is made readily accessible both by lowering the same and moving it laterally of the clamping mechanism in which position the load may be readily placed upon or taken from the press.

I will explain my invention more fully by reference to the accompanying drawings in which Fig. 1 is an end view of a baling press constructed in accordance with the preferred embodiment of the invention, the clamping jaws of the press being separated approximately to the fullest extent for the purpose of receiving therebetween the matter which is to be baled; Fig. 2 is a side view of the press shown in Fig. 1 the clamping jaws, however, being mutually approached to a position in which the unbaled load shown in Fig. 1 is compacted in readiness to be tied into a bale, such tying being illustrated; Fig. 3 is a sectional view on line 3—3 of Fig. 2; Fig. 4 is a sectional view on line 4—4 of Fig. 3; and Fig. 5 is a perspective view of one form of bale which may be produced with the illustrated press.

The press illustrated is inclusive of two end frames each comprising a pedestal 1, upright guide rods 2 carried by the pedestal and a yoke 3 joining the upper ends of said rods. The two pedestals 1 are mounted upon a common base or the floor. The two yokes 3 are joined by horizontal struts 4. A bracket structure 5 is carried by one of the yokes 3 and carries a bearing, at 6, for one end of a horizontal shaft 7. The other end of this horizontal shaft is journaled in a bearing 8 which is carried by the struts 4. An electric motor 9 drives gearing which is inclusive of a spur pinion 10 upon the motor shaft, a spur gear 11 in mesh with said pinion, a spur pinion 12 fixed with relation to and coaxial with the gear 11, a spur gear 13 in mesh with the pinion 12, a bevel pinion 14 fixed with respect to and coaxial with the spur gear 13 and provided upon one end of the shaft 7, a bevel pinion 15 upon the other end of said shaft and the bevel gears 16 and 17 respectively in mesh with the bevel pinions 14 and 15. The bevel gears 16 and 17 are fixed upon the upper ends of the upright shafts 18 and 19 which are journaled, at their upper ends, in the yokes 3. The lower ends of the latter shafts are journaled in the pedestals 1. The upper halves of these two shafts are threaded in one direction and their lower halves in an opposite direction.

The upper clamping jaw or abutment 20 includes a plurality of I beams which are assembled at their ends by the yokes 21, 22 that are threaded upon the upper halves of the upright shafts 18 and 19 and slide upon the upright guide rods 2. The bottom faces of said I beams have channel beams 25 bolted thereto and transversely thereof. These channel beams directly engage the top side of the press load.

The lower clamping jaw 23 likewise includes a plurality of I beams which are assembled at their ends by the yokes 24, 24′ that are threaded upon the lower halves of the upright shafts 18 and 19 and slide upon the upright guide rods 2. The top faces of said I beams have channel beams 26 bolted

thereto and transversely thereof. These channel beams receive the stringers 27 that are in dovetailed connection therewith. These stringers directly engage the bottom side of the press load and constitute a loading platform that is in the form of a laterally extensible or adjustable section of the lower clamping jaw or the load receiving bed or platform proper that is laterally adjustable of the press. When the press is adjusted for loading and unloading the stringers are moved laterally of the press and out of line with the press frame work, and particularly the upright guide rods 2 of this frame work. When the press is adjusted for loading, the lower clamping jaw is lowermost and the upper clamping jaw is uppermost. After the load has been deposited upon the platform 27 of the press this platform is moved into the space surrounded by the press frame work. Whereafter the shafts 18 and 19 are turned to elevate the lower clamping jaw and lower the upper clamping jaw sufficiently to exert the desired baling pressure, Fig. 2 illustrating the clamping jaws in a mutually approached relation. After the bale has been suitably tied, the clamping jaws are slightly separated from the position shown in Fig. 2, whereafter the platform 27 which is now about waist high is again laterally withdrawn from the space surrounded by the frame work of the press, in which position the baled load may readily be removed. Said platform is desirably inclusive of the yoke bar 28 which is grasped and manipulated to adjust said platform. Said platform is also inclusive of the diagonal braces 29.

The load 24^2 illustrated is inclusive of a plurality of bed springs which are piled upon the lowered platform 27. The springs are sandwiched between top and bottom sides of a crate, these crate sides being composed of spaced apart boards 30 which are joined by cleats 31. Wire bands 32 are bound around the bale and loops 33 are passed through the bale and around some of the cleats. The bale is thus bound while the clamping jaws are together, an operation which is permitted by the skeleton formation of the clamping jaws and loading platform.

Changes may be made without departing from the invention.

Having thus described my invention, I claim:

1. A baling press embodying two relatively movable clamping jaws each jaw including a plurality of spaced apart longitudinal beams assembled at their ends by a yoke, the faces of the beams of each jaw opposed to the faces of the beams of the other jaw having secured thereto transversely thereof a plurality of spaced apart transverse beams, said transverse beams being substantially longer than the distance between the two most widely separated longitudinal beams of each jaw and projecting beyond the longitudinal beams at each side of the press, and a single rotatable screw shaft passing through each yoke at each end of the press.

2. A baling press embodying two relatively movable clamping jaws each jaw including a plurality of spaced apart longitudinal beams assembled at their ends by a yoke, the faces of the beams of each jaw opposed to the faces of the beams of the other jaw having secured thereto transversely thereof a plurality of spaced apart transverse beams, said transverse beams being substantially longer than the distance between the two most widely separated longitudinal beams of each jaw and projecting beyond the longitudinal beams at each side of the press, and a single rotatable screw shaft passing through each yoke at each end of the press, wherein the transverse beams secured to the lower jaw are of channel formation and have their channels facing upwardly to receive stringers in dovetailed connection therewith, said stringers being movable in said channels laterally of the press and being connected together to constitute a loading platform for said press.

3. A baling press embodying two relatively movable clamping jaws, one of said jaws including a plurality of spaced apart beams, said beams being of channel formation and having their channels facing upwardly, stringers in dovetailed connection with said channels and movable in said channels, said stringers being connected together to constitute a loading platform for said press movable toward and away from the press.

In witness whereof, I hereunto subscribe my name.

WILLIAM E. WUNDERLICH.