

No. 713,791.

Patented Nov. 18, 1902.

C. ORMAN.
BALING PRESS.

(Application filed Mar. 26, 1902.)

(No Model.)

Fig. 1.

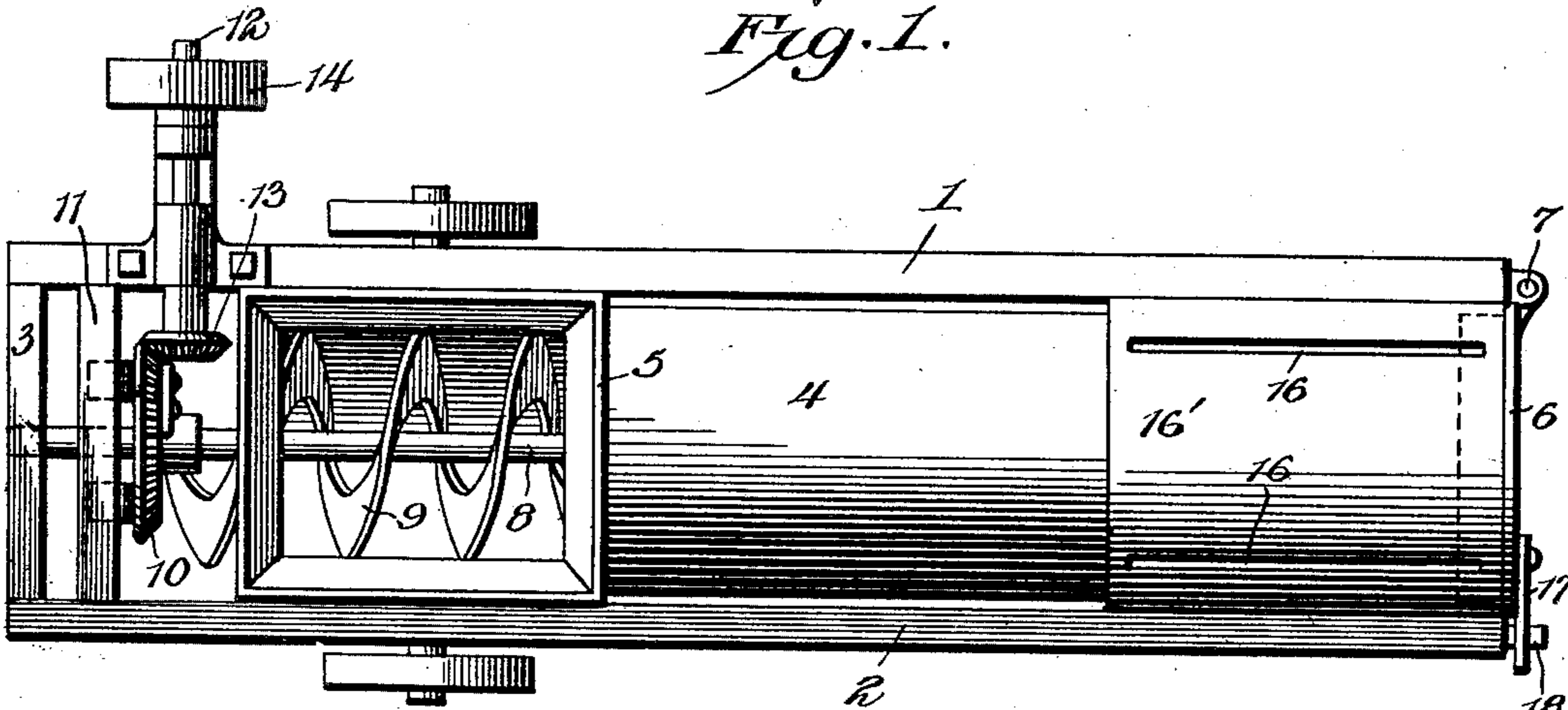


Fig. 2.

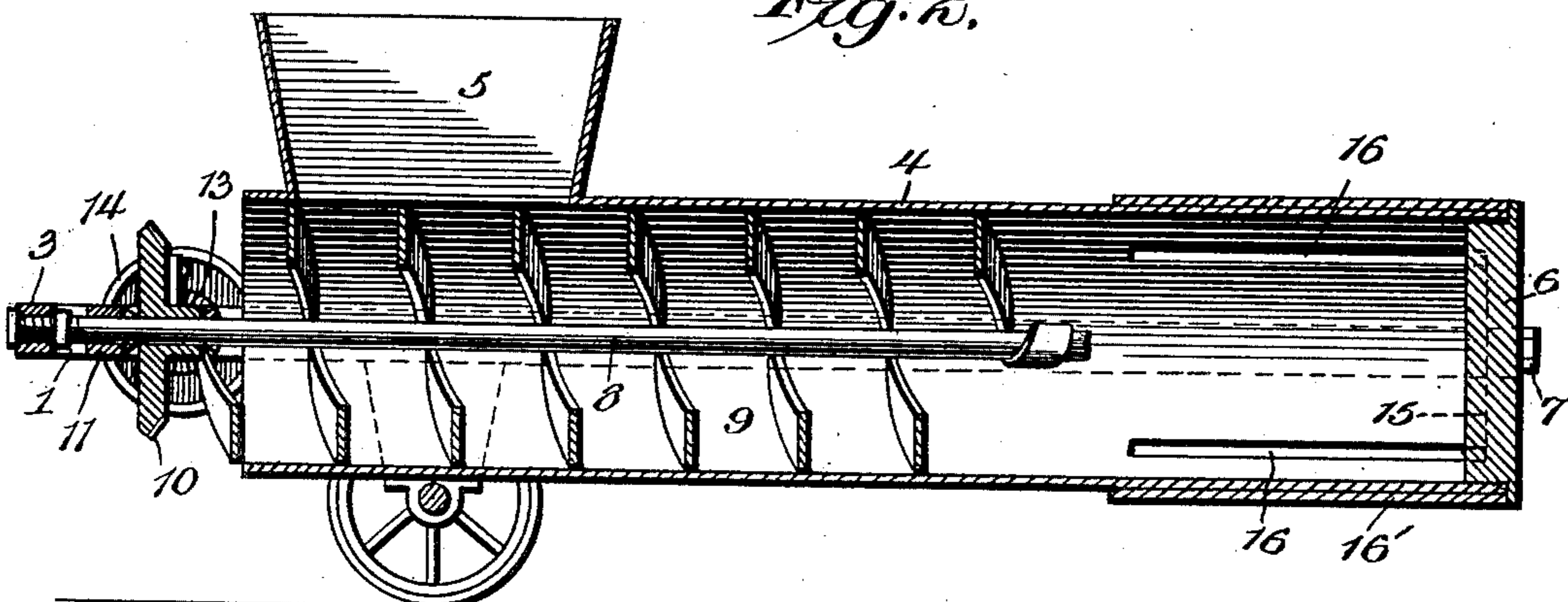


Fig. 3.

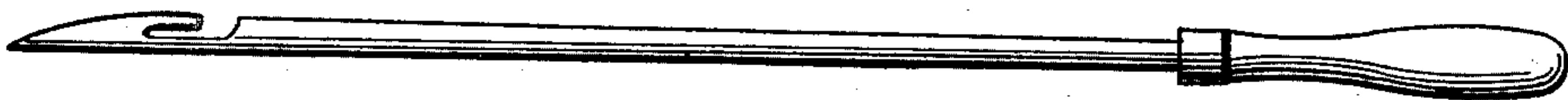
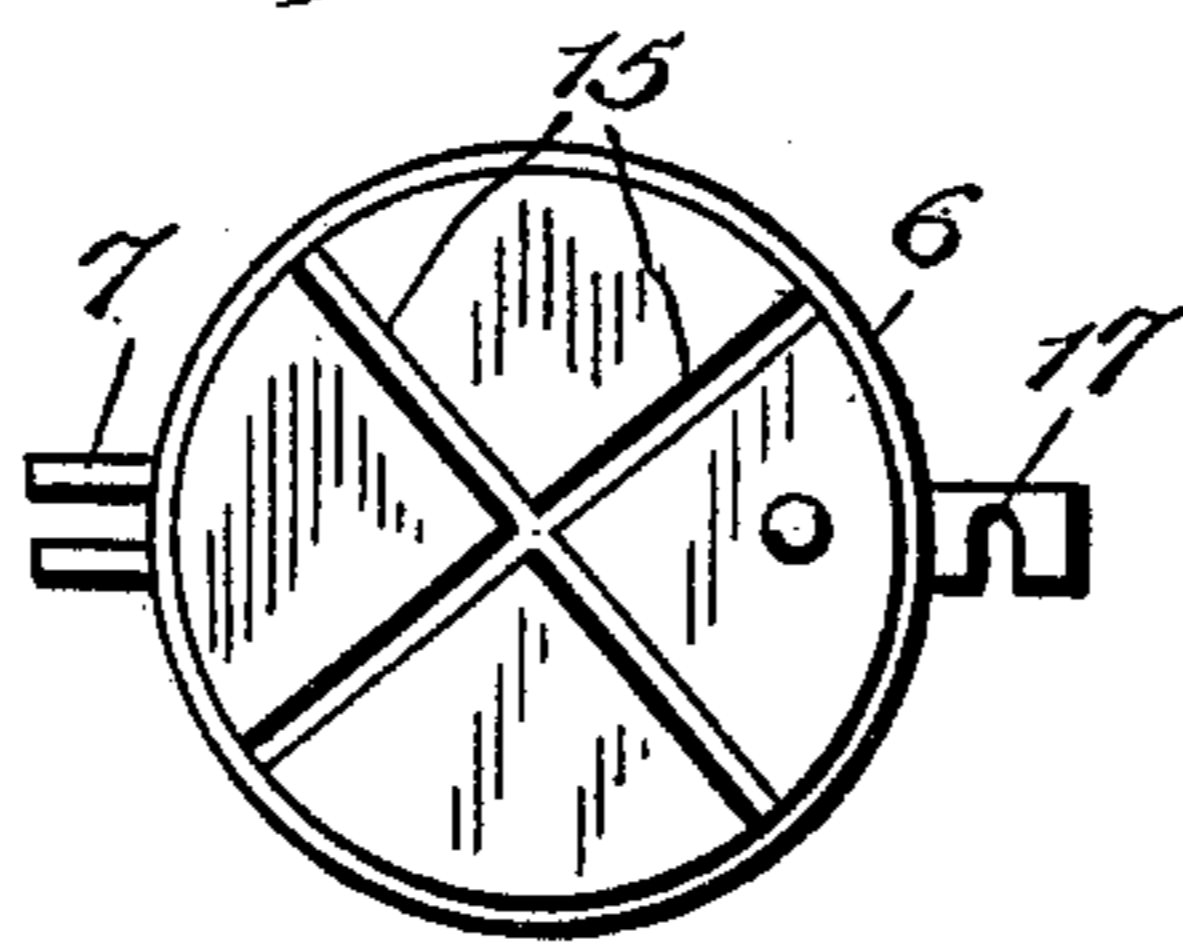


Fig. 4.



Witnesses
F. E. Raff,
Henry T. Bright

Inventor
Charles Orman
by Frank Appelman
Attorney

UNITED STATES PATENT OFFICE.

CHARLES ORMAN, OF NEW HARMONY, INDIANA, ASSIGNOR OF ONE-HALF
TO EZRA STEPHENS, OF NEW HARMONY, INDIANA.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 713,791, dated November 18, 1902.

Application filed March 26, 1902. Serial No. 100,113. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ORMAN, a citizen of the United States of America, residing at New Harmony, in the county of Posey and State of Indiana, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification.

This invention relates to certain new and useful improvements in presses, and particularly to that class known as "hay and straw baling presses."

The object of the invention is to produce a press that can be attached to a threshing-machine for the purpose of baling straw as it comes from the separator.

Furthermore, the object of the invention is to produce a press that can be used for baling hay, straw, and cotton operated by any desired power.

Furthermore, the object of the invention is to produce a press which will possess advantages in points of simplicity, efficiency, and durability, proving at the same time comparatively inexpensive to produce and sustain.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a plan view in perspective of a baling-press embodying the invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is an illustration of a threading-needle.

In the drawings, 1 and 2 indicate the longitudinally-disposed side frame-sections, connected at one end by the beam 3. The cylinder 4, preferably of metal, is supported by the frame and is provided with a hopper 5 for the reception of the material. The outer end of the cylinder is closed by a door 6, which is supported on a pintle-hinge 7, projecting from the side of the frame-piece. A rod 8 is secured through the end beam and extends through the hopper and part way through the cylinder, there being a compression-chamber between the end of the rod and the closed end of said cylinder. A spiral screw 9 is inserted at one end to the bevel gear-wheel 10, and the gear-wheel and screw are mounted to rotate on the rod 8. A bearing-block 11 is fixed between the side pieces of the frame, and anti-

friction-rollers carried by the bearing-block engage the outer face of the gear-wheel and sustain the strain when material is being pressed in the chamber at the outer end of the cylinder. A transverse shaft 12 carries a pinion 13, meshing with the gear-wheel, and a pulley 14 on the outer end of the transverse shaft is connected with any suitable source of power. The inner face of the door is provided with cross-grooves 15, in which the binding agent is embedded before the material is pressed against the door. The outer end of the cylinder is slotted, as shown at 16, for the reception of the binding agent, which is passed around the bale before it is removed from the cylinder. The outer end of the cylinder is provided with a strengthening-band 16' in order that said cylinder may withstand the strain incident to its use. The door is held closed by the hinge and by the arm 17, which extends over and engages the hook 18, which projects from a side piece of the frame.

With the parts constructed and arranged as above described the operation, briefly stated, is as follows: Motion being imparted to the pulley, the material is fed into the cylinder through the feed-hopper 5, where it is immediately taken up by the spiral screw and forced toward the discharge end of the cylinder, being gradually compressed as it nears the discharging end, and as soon as the compressed material becomes the size and density desired the binding agent, which has been placed into proper position, embedded in the grooves on the door and in the sides of the cylinder, is securely fastened around the bale, after which the door is opened and the bale removed.

The construction, operation, and advantages will, it is thought, be understood from the foregoing description, it being noted that various changes may be made in the proportions and details of construction for successfully carrying the invention into practice.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a baling-press, a cylinder having slots at its end, a band on the end of the cylinder having slots registering with the slots in the cylinder, a door closing the end of the cylin-

der, a rod extending part way through the cylinder, a screw rotated on said rod, a bevel gear-wheel to which the screw is secured, and means for rotating the screw as and for the purpose described.

2. In a baling-press, a cylinder having slots at its end, a band on the outer end of the cylinder having slots registering with the slots in the cylinder, a door closing the end of the cylinder, a rod extending part way through the cylinder, a screw rotated on said rod, a gear-wheel for rotating said screw, a bearing-

block, rollers journaled in the bearing-block and engaging the outer face of the gear-wheel for relieving the said wheel of the pressure produced when material is being compressed.

In testimony whereof I affix my signature, in the presence of two witnesses, this 17th day of March, 1902.

CHARLES ORMAN.

Witnesses:

ISAAC V. COWGILL,
WILLIAM WADE.