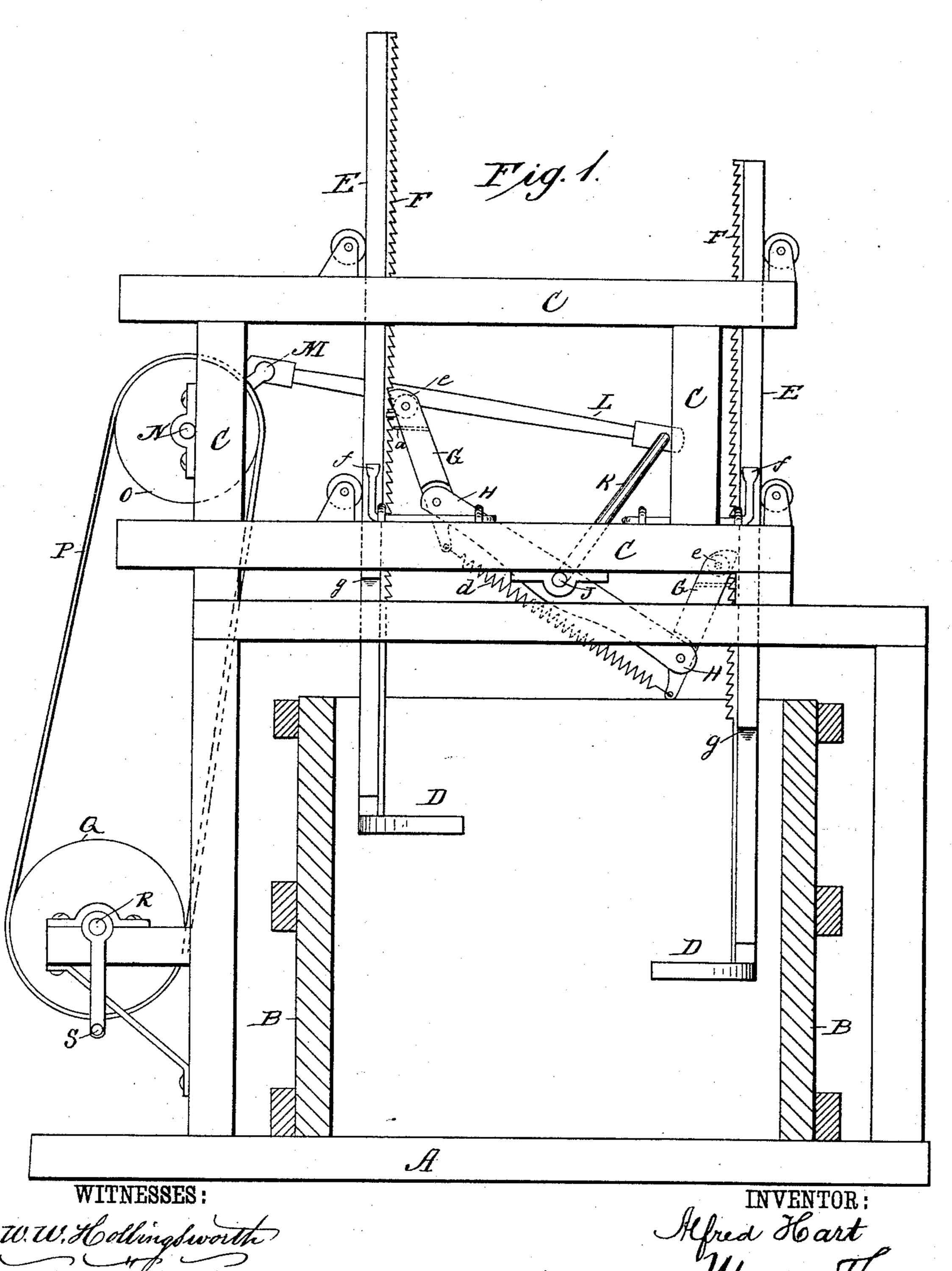
A. HART.

COTTON PACKER.

No. 327,259.

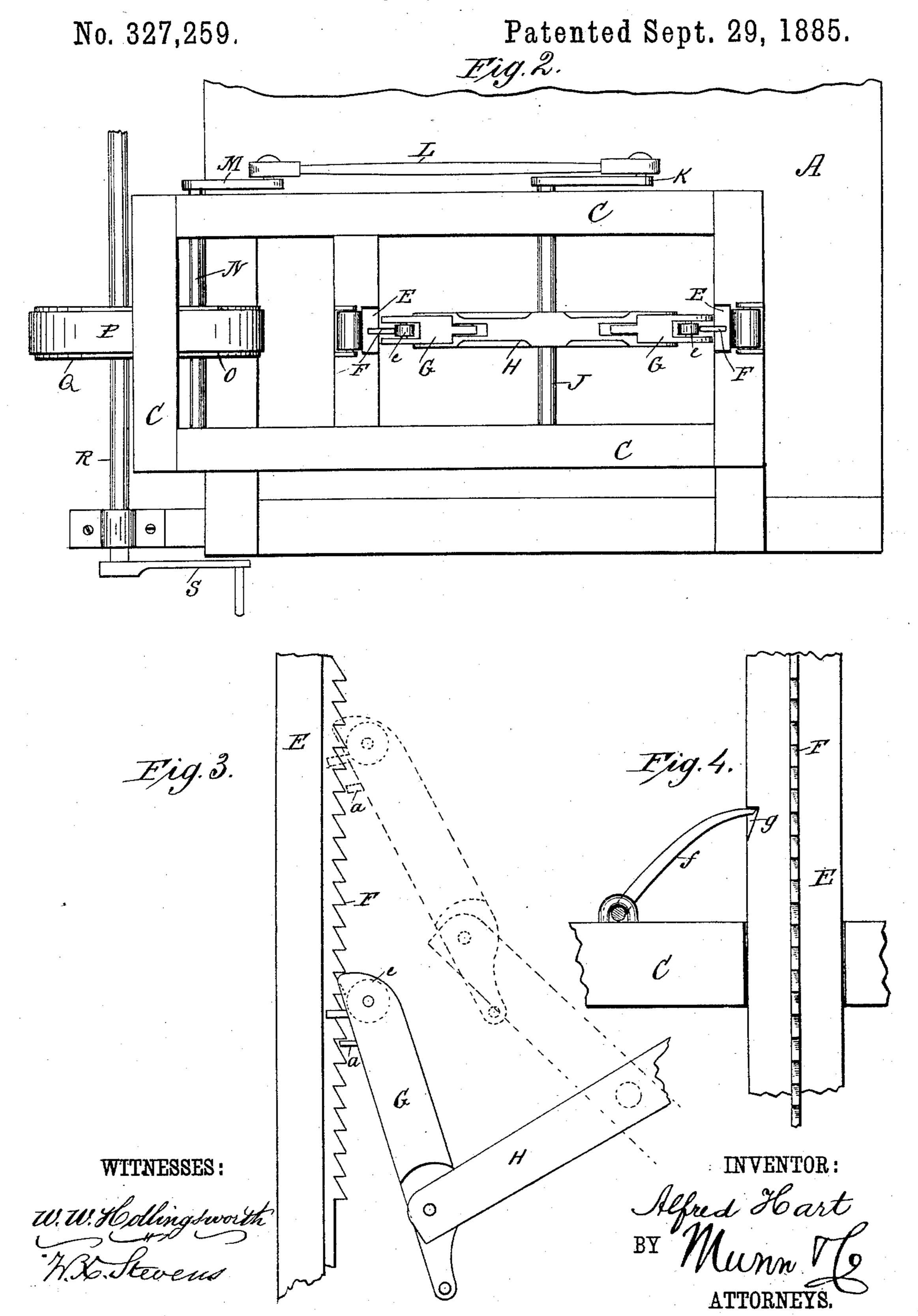
Patented Sept. 29, 1885.



N. PETERS, Photo-Lithographer, Washington, D. C.

A. HART.

COTTON PACKER.



United States Patent Office.

ALFRED HART, OF SAN MARCOS, TEXAS.

COTTON-PACKER.

SPECIFICATION forming part of Letters Patent No. 327,259, dated September 29, 1885.

Application filed July 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, Alfred Hart, a citizen of the United States, residing at San Marcos, in the county of Hays and State of Texas, have invented a new and useful Improvement in Cotton-Packers, of which the following is a description.

This invention relates to that class of cottonpackers which receive cotton from the conto denser after ginning and pack it in a box preparatory to being pressed and tied into a bale; and its object is to provide means whereby the cotton may be packed in the box automatically.

To this end my invention consists in the construction and combination of parts forming a cotton - packer, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

o Figure 1 is an end elevation, part in section, of a machine according to my invention. Fig. 2 is a plan view of the same. Figs. 3 and 4 are detail views enlarged.

A represents the floor upon which the pack-

25 ing-box B rests while being filled.

C is the superstructure or frame-work of the machine, secured to and rising above the floor to support the moving parts.

D D are the tamps, of any suitable form, provided with rods E, which extend vertically above the box B into grooves in the frame in which the tamps work.

F F are toothed racks fixed to the inner faces of the rods E, to be engaged by fingers a35 of the spring-pawls G, which are pivoted to the ends of arms H. These arms are rigidly fixed on a rock-shaft, J, which is journaled in the frame C and provided with an arm, K, which is connected by a rod, L, with a crank, 40 M, on a shaft, N, which is journaled in the frame C, and provided with pulley O to be revolved by a belt, P, from a pulley, Q, on a counter-shaft, R. This shaft may be revolved by any suitable means, such as the hand-crank 45 S, or by a mechanical motor. Continuous rotary motion of the shaft N reciprocates the rock-shaft J and the arms H through a vertical angle of about sixty degrees. The teeth of the racks F face or hook downward, so that 50 the fingers a engage them only while going upward, and drag over them in going down-

ward. By this means the tamps are lifted at each rise of the arms H. The fingers a project from the front side of the pawls at some distance from the ends thereof, and a roller, e, 55 is mounted in the pawl ahead of the finger. The finger and roller are so proportioned that when the pawl is at the lower extremity of its arc of motion the finger will engage a tooth of the rack, the pawl being constantly forced 60 outward by any suitable spring, such as the spring d; but when the pawl arrives near the upper extremity of its arc of motion the arm H, lifting upon the rear end of the pawl, throws the roller against a tooth of the rack as a ful- 65 crum, whereby the finger is pried out of engagement with the tooth, leaving the tamp to fall freely upon the cotton. This operation being repeated by the reciprocation of the rock-shaft, while cotton is continually accum- 70 ulating, the tamps falling upon it are raised higher at each motion until the box is full, when the tamps will be raised so high as to be caught by detents f, which are pivoted to the frame, entering notches g in the tamp-rods. 75 By this means the tamps are held out of the box so that it may be removed and replaced by an empty box while the machinery, except the tamps, continues in motion. Then by disengaging the detents f the tamps will be freed 80 to drop upon the bottom of the box or upon any cotton therein. The detents f drag upon the smooth sides of the tamp-rods until the tamps are raised so high as to bring one of the notches g into engagement with the detent. 85 Then the tamp is held suspended, as before stated.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a cotton-baling box, 90 a frame supporting it, one or more tamps provided with rods fitted to slide down into the box from an upper portion of the frame, a toothed rack on each rod, a rock-shaft journaled in the frame over the center of the box, 95 one or more arms secured to the rock-shaft over the box, a spring-pawl attached to the free end of each of the said arms, a roller in the end of each pawl, and a finger on the side of the latter adapted to engage the said toothed rack, substantially as shown and described.

2. The combination of a cotton-tamp hav-

ing a rod and a toothed rack thereon, an arm mounted to reciprocate vertically, a pawl in the arm, a pulley in the free end of the pawl, and a finger projecting from one side of the pawl, the pulley and finger being located relatively to one another and to the pawl and its carrying-arm, substantially as shown and described, whereby the finger will engage a tooth of the said rack at the lower end of its arc of motion, and will be pried out of said engagement at the upper end of the same.

3. The combination of a cotton-tamp hav-

ing a vertical rod smooth along its side and notched near the lower end of the said smooth side, a detent pivoted to a fixed portion of the 15 machine to drag its free end upon the said smooth portion of the rod and to engage the said notch, and means for intermittently raising the said rod, substantially as shown and described.

ALFRED HART.

Witnesses:

C. S. Cock, Victor Julian.