

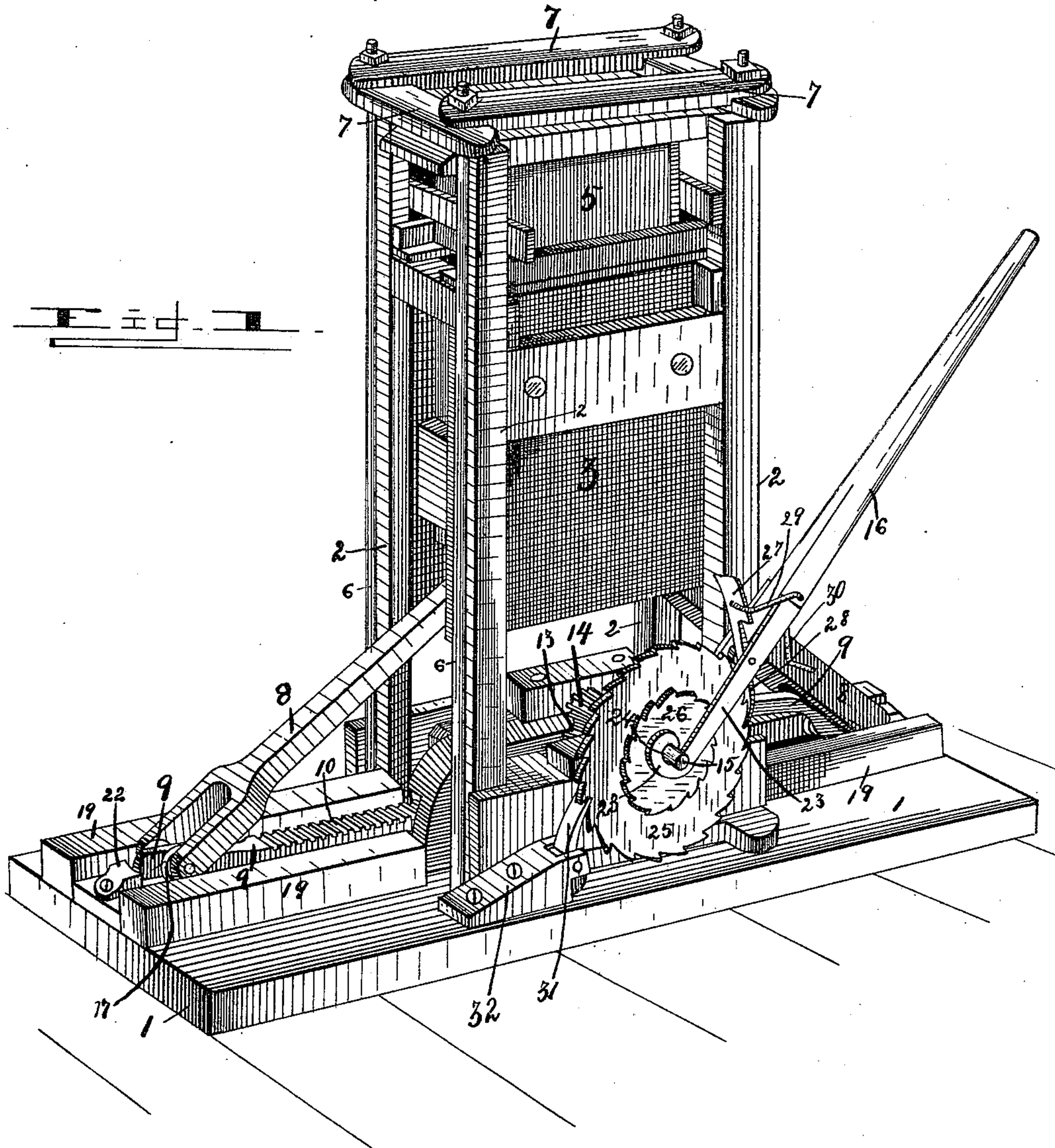
(No Model.)

2 Sheets—Sheet 1.

J. W. GREGORY.
COTTON PRESS.

No. 438,762.

Patented Oct. 21, 1890.



Witnesses

P. G. Brooks.

H. F. Riley

By his Attorneys,

C. A. Snow & Co.

Inventor

John W. Gregory.

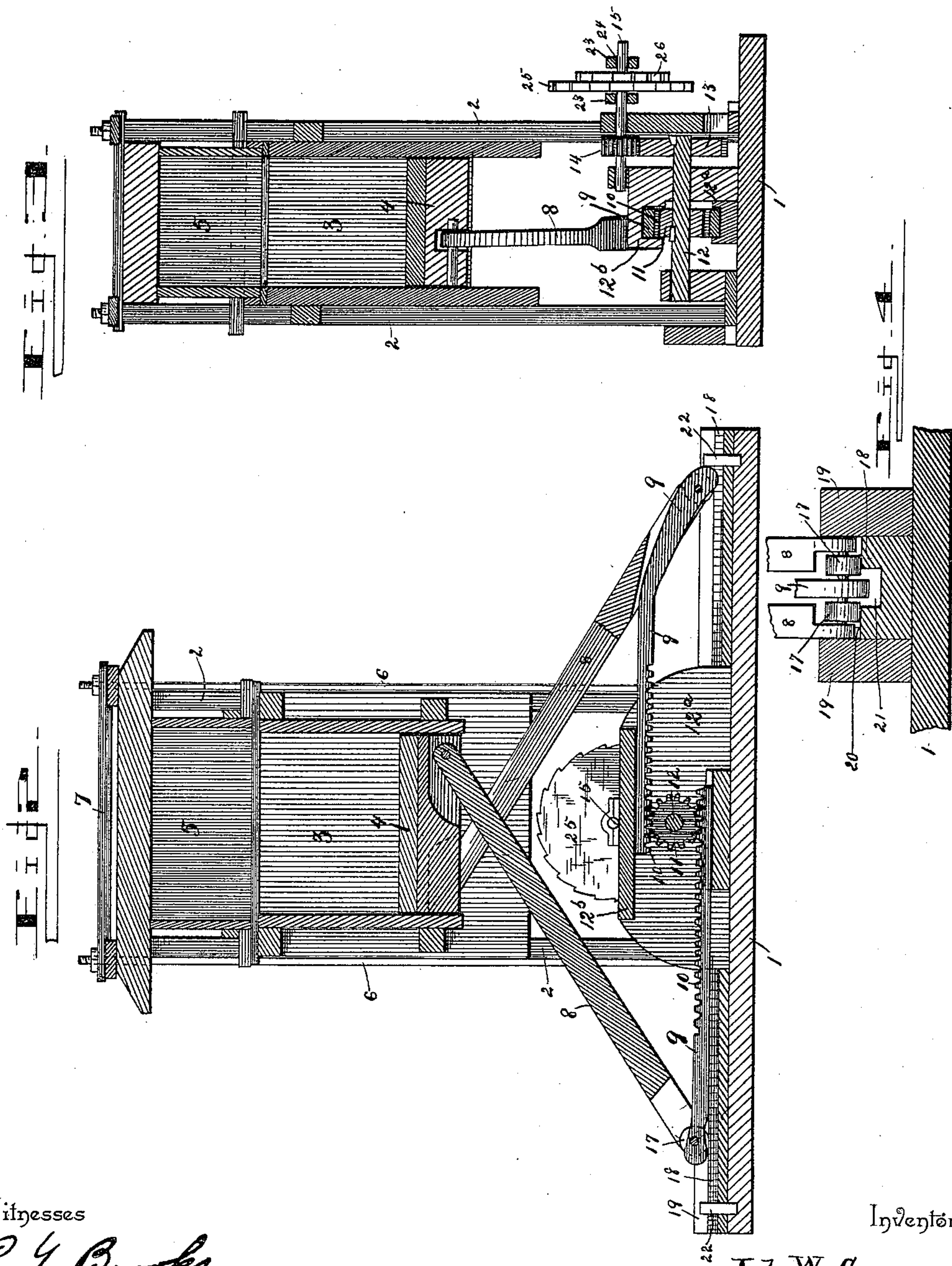
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UNITED STATES PATENT OFFICE.

JOHN W. GREGORY, OF MILLVILLE, TENNESSEE, ASSIGNOR OF ONE-HALF TO
MATTIE F. STORY, OF SAME PLACE.

COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 438,762, dated October 21, 1890.

Application filed May 2, 1890. Serial No. 350,327. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. GREGORY, a citizen of the United States, residing at Millville, in the county of Lincoln and State of Tennessee, have invented a new and useful Cotton-Press, of which the following is a specification.

The invention relates to improvements in cotton-presses.

The object of the present invention is to simplify and improve the construction of cotton-presses and enable a great amount of force to be applied to the presser-block.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a cotton-press constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view partly in elevation. Fig. 3 is a central vertical transverse sectional view. Fig. 4 is a detail sectional view of the track.

Referring to the accompanying drawings, 1 designates a platform having rising vertically therefrom four standards 2, provided intermediate of their ends with a press box or chamber 3, in which is arranged a press-block 4, and at the top of the standards is a baling-chamber 5. The standards are braced by vertical rods 6, having their lower ends secured to the platform and their upper ends connected by cross-pieces 7, that are also secured to the vertical standards. The press-block 4 is operated by and has secured to it crossed levers 8, having their upper ends pivoted to opposite ends of the block 4, and having their lower ends similarly connected to sliding rack-bars 9, which are arranged in the same vertical plane and are provided upon their opposed faces with teeth 10, that are arranged to be engaged by a pinion 11, mounted upon a shaft 12 and interposed between the sliding rack-bars, whereby when the shaft 12 is rotated the crossed levers 8 will be simultaneously drawn together to elevate the press-block and compress the cotton or separated to lower the press-block and prepare the press

for the reception of a new supply of material. The shaft 12 is mounted in suitable bearings and has the pinion 11 arranged intermediate of its ends, and at one end is secured a cog-wheel 13, that receives motion from a pinion 14, mounted upon a shaft 15, operated by a sweep 16. One of the bearings (marked 12^a) of the shaft 12 has at its top a horizontal L-shaped flange 12^b, forming a groove, in which reciprocates the upper rack-bar 9, which is prevented from rising by the flange. The lower ends of the crossed levers are bifurcated and are provided with rollers 17, that are mounted upon tracks 18, provided at the side edges with vertical longitudinal flanges 19, arranged to engage the sides of the toggle-levers and prevent lateral motion of the latter, the rollers bearing upon the level track portion 20, and the said track is provided with a longitudinal groove 21, which is centrally arranged to provide a way for the ends of the sliding rack-bars that extend below the crossed levers. The upper end of the toggle-lever is pivoted to the farther end of the press-block, and by this arrangement the lever can exert a continual force upon the press-block until after its lower end has passed the center of the press-frame, which is a great advantage, and the track is provided near its ends with stops 22, that limit the outward movement of the crossed levers and prevent the rack-bars becoming disengaged from the pinion 11. The sweep 16 is provided with a pair of plates 23, having eyes 24, loosely mounted upon the outer ends of the shaft 15, and arranged between the plates 23 are ratchet-wheels 25 and 26, that are rigidly mounted upon the shaft 15 and are adapted to be engaged by pivoted pawls 27 and 28. The ratchet-wheels 25 and 26 are shouldered in opposite directions and are adapted to be engaged by their respective pawls to raise and lower the press-block, and above the pawls are hooks 29 and 30, which are formed integral with each other and are pivoted to the sweep and adapted to hold one of the pawls out of engagement when the other is arranged to engage a ratchet-wheel, and the press-block is maintained at any desired position independent of the action of the pivoted pawls 27 and 28 by a pawl

31, pivotally mounted in a bracket 32 and arranged to engage the teeth of the ratchet-wheel 25.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be understood.

What I claim is—

In a cotton-press, the combination of the frame, the press-block, the levers crossing each other and having their upper ends secured to the farther sides of the press-block and having their lower ends bifurcated, the track provided with vertical flanges 19 and having the longitudinal groove 21, the rack-bars pivoted to the levers, the rollers arranged

in the bifurcations of the levers and on each side of the rack-bars, the stops 22, arranged at the ends of the track and secured in the grooves, and the bearing-blocks 12^a, having an L-shaped flange 12^b, forming a groove in which the upper rack-bar reciprocates, to limit the movement of the levers, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN W. GREGORY.

Witnesses:

SIE CURTIS,
T. A. STORY.