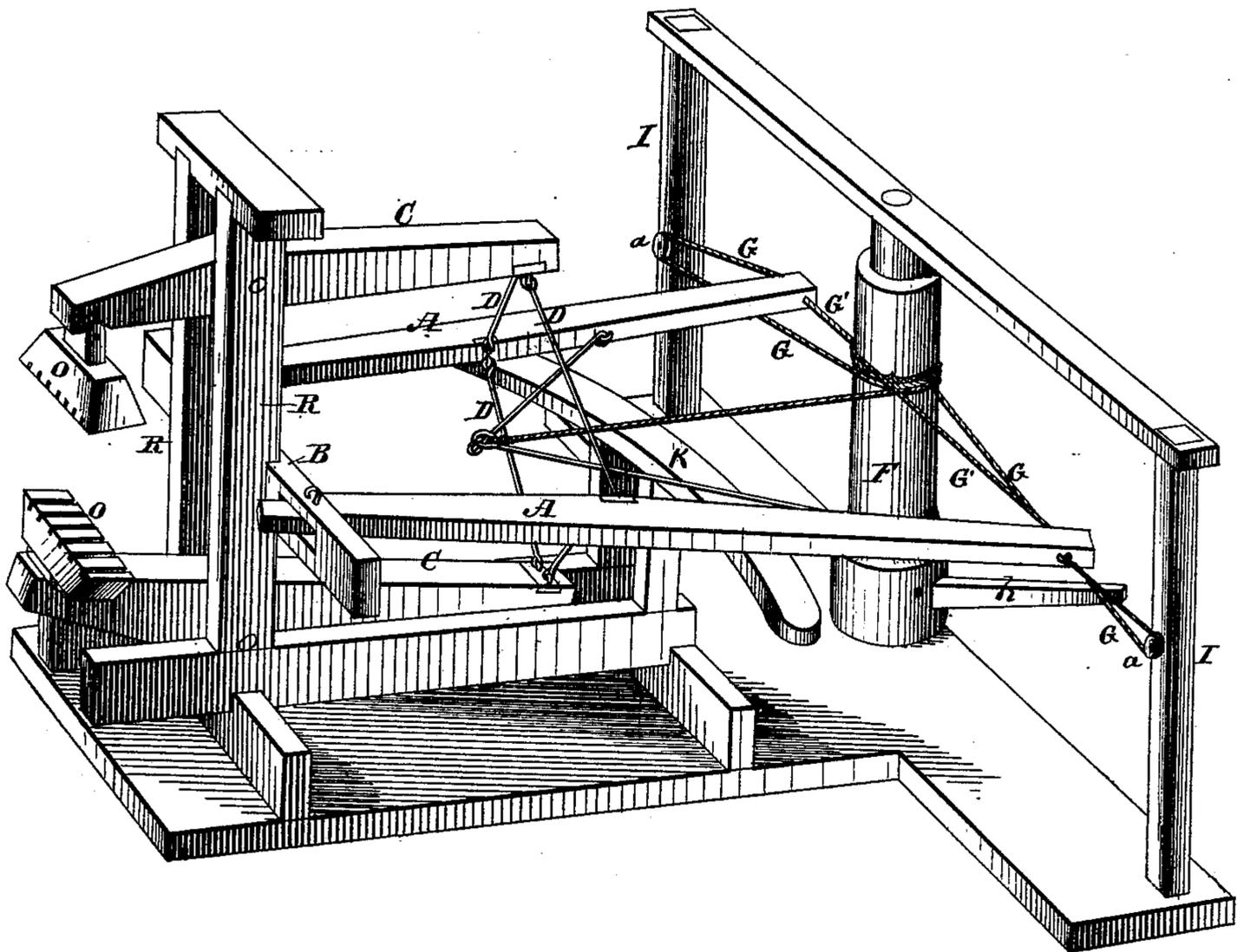


W. H. TATE & J. E. CURTIS.
Cotton-Press.

No. 204,395.

Patented May 28, 1878.



Attest.

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UNITED STATES PATENT OFFICE.

WILEY H. TATE AND JOHN E. CURTIS, OF JACKSONVILLE, ARKANSAS.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 204,395, dated May 28, 1878; application filed April 24, 1878.

To all whom it may concern:

Be it known that we, W. H. TATE and J. E. CURTIS, of Jacksonville, in the county of Lonoke and State of Arkansas, have invented a new and Improved Cotton-Press; and we do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement in the class of cotton-presses in which two followers act vertically and simultaneously, one upward and the other downward, and are operated by levers, with which toggle mechanism is connected.

The improvement relates to the particular construction and arrangement of parts whereby two horizontally-acting levers, connected with the follower-levers by toggles, are operated by a windlass and ropes, so located and connected with such horizontal levers that their free ends are caused to approach each other, or separated more widely, according as the windlass is turned in one direction or the other, as hereinafter described.

The accompanying drawing, forming part of this specification, represents a perspective view of our improved press.

The followers O O are hinged to vertically-acting levers C C, pivoted between the parallel uprights R R. These follower-levers C C are operated by toggles D D, which connect their rear ends with the horizontal levers A A, and the latter are, in turn, operated by means of a windlass, F, and ropes G G'. Said ropes are wound about the windlass F in opposite directions, one of them, G, passing over sheaves *a* on posts I, and both being attached at their ends to the levers A. These levers are supported at their middle on a horizontal arch-shaped bar, K, and their forward ends are pivoted to the cross-bar B, attached to uprights R.

The operation of the press is as follows: The press-box (not shown) being filled with cotton, the followers O O are caused to advance simultaneously and press the cotton from each end of the box; and, being pivoted, it is obvious they will be guided by the sides of the box, and will accommodate themselves

to the varying angles of the levers C C, as the pressing operation goes on.

The advance of the followers toward each other is caused by the free ends of levers C C being forced apart by toggles D D; and this operation is consequent upon the rotation of the windlass F, which winds the ropes G' around it, and thus draws together the free ends of levers A A.

To cause the followers to recede, and thus permit an additional quantity of cotton to be placed in the press-box, or the full bale to be banded and removed from the press-box, the windlass F is rotated in the contrary direction, which slackens ropes G' and winds ropes G thereon, thereby drawing the free ends of levers A A apart and causing the rear ends of follower-levers C C to approach each other, as will be readily understood.

In both movements of the followers the horizontal levers A A are supported upon arch-bar K, so that they may move steadily, and always in the same plane.

Any suitable mechanical motor may be employed to rotate the windlass; but I show it provided with a sweep, *h*, and arranged in such relation to the other parts of the press that a horse or other draft-animal may be utilized for the purpose.

In some cases we may employ but one follower and follower-lever, and then but one pair of toggles will be required.

What we claim is—

In combination with the horizontally-acting levers A A, the follower-levers C C, and connecting-toggle mechanism D, the vertical windlass F and ropes G G', and the pulleys *a*, located at points beyond the limits of movement of said levers A A, all as shown and described, whereby the followers are caused to approach or recede from each other, according as the windlass is turned in one direction or the other.

WILEY H. TATE.
JOHN E. CURTIS.

Witnesses:

S. C. KEMON,
CHAS. A. PETTIT.