

W. H. WALKER.
Cotton-Presses.

Patented July 21, 1874.

No. 153,289.

Fig. 1.

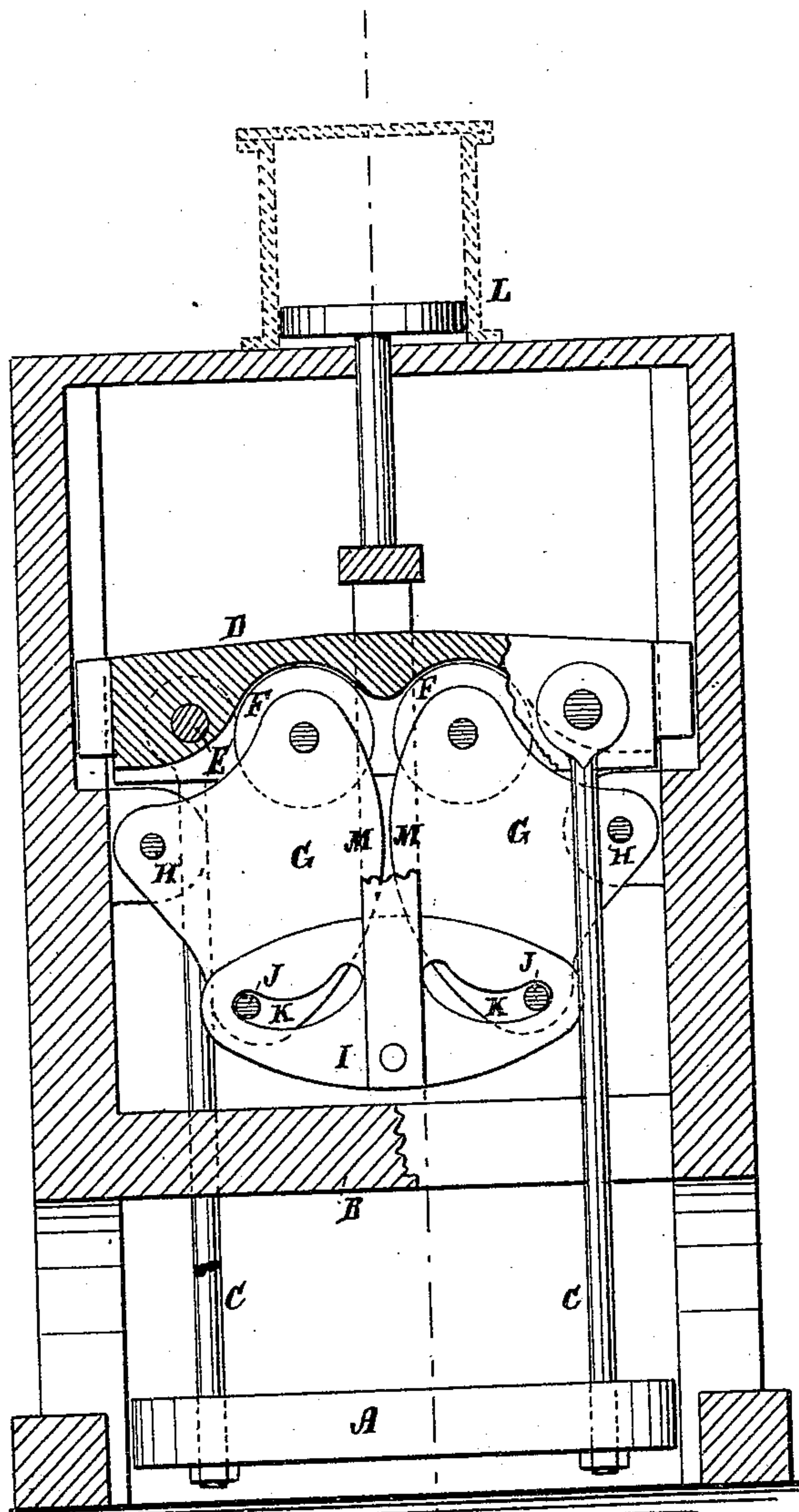
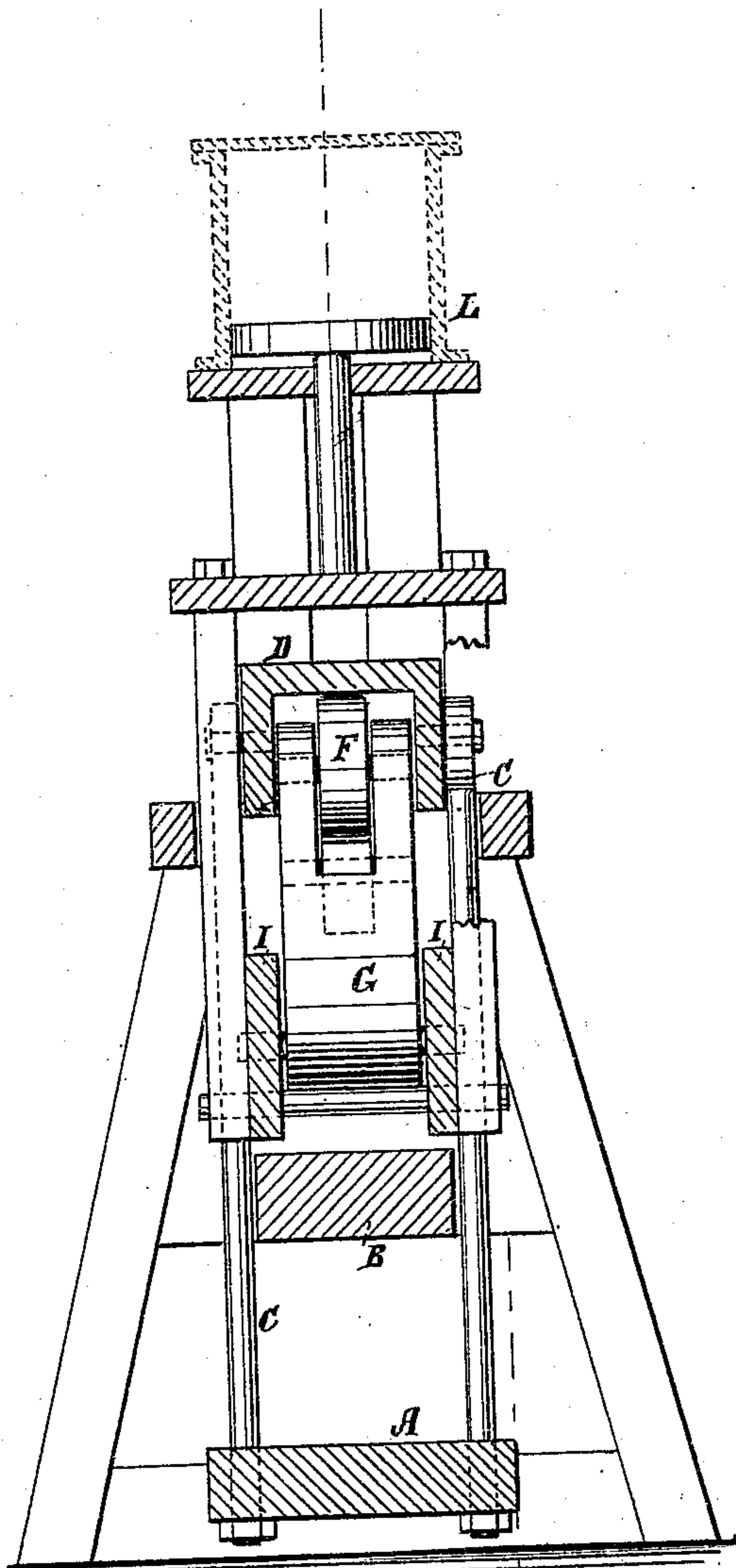


Fig. 2.



WITNESSES:

A Benneken & Co.
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM H. WALKER, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **153,289**, dated July 21, 1874; application filed July 3, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. WALKER, of Charleston, in the county of Charleston and State of South Carolina, have invented a new and Improved Cotton-Press, of which the following is a specification:

My invention consists of sector or segmental shaped wheels, arranged with the driving mechanism and the follower of a press for cotton, hay, or other substance, in a manner to transmit the power in a simple and efficient way, whether steam, hand, or other power be used.

Figure 1 is a sectional elevation taken on the line *x x*, Fig. 2; and Fig. 2 is a sectional elevation of Fig. 1, on the line *y y*.

Similar letters of reference indicate corresponding parts.

A is the follower, which, in this example, works up against the stationary press-head B, being connected by rods C with the cross-head D, which has the under side E cam-shaped, and resting on the friction-rollers F in the upper ends of the segmental or sector shaped wheels G, turning on the axes H, and having the power applied at the lower end for working them, which, in this example, consists of slotted heads I, connecting with the wheels by pins J in the slots K, the heads being worked by an engine, L, to the rod of which they are connected, and the slots being curved, so that the diminution of the throw of the head D, which takes place as the wheels F approach the vertical lines of the pivots H, is to some extent compensated by the pivots

J being forced up said curves. The cams E on the under side of the cross-head D also compensate for the effect of such movement of the wheels F.

Instead of the engine for working these wheels G, they may be toothed on the faces M, and gear with pinions a little below the horizontal plane of the axes, the pinions being geared one with the other, and one being provided with a ratchet-wheel and pawl-lever for turning it by hand.

By this arrangement of the segmental gears for applying the power, a large measure of leverage is gained, and at the same time the throw of the cross-head is equal to the stroke of the engine, and the proportion is about the same between the movements of the hand-lever and the follower when the ratchet-lever contrivance is used for working the press by hand.

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

1. The segmental wheels G, friction-wheels F, and cams E, combined with cross-head D, and the driving mechanism for operating a press, substantially as specified.

2. The segmental wheels G, connected to the cross-head I of the driving engine by pins J and curved slots K, substantially as specified.

WM. H. WALKER.

Witnesses:

SINKLER SIMONS,
THEODORE D. WARING.