

C. T. MASON.
COTTON-PRESSES.

No. 185,250.

Patented Dec. 12, 1876.

Fig. 1.

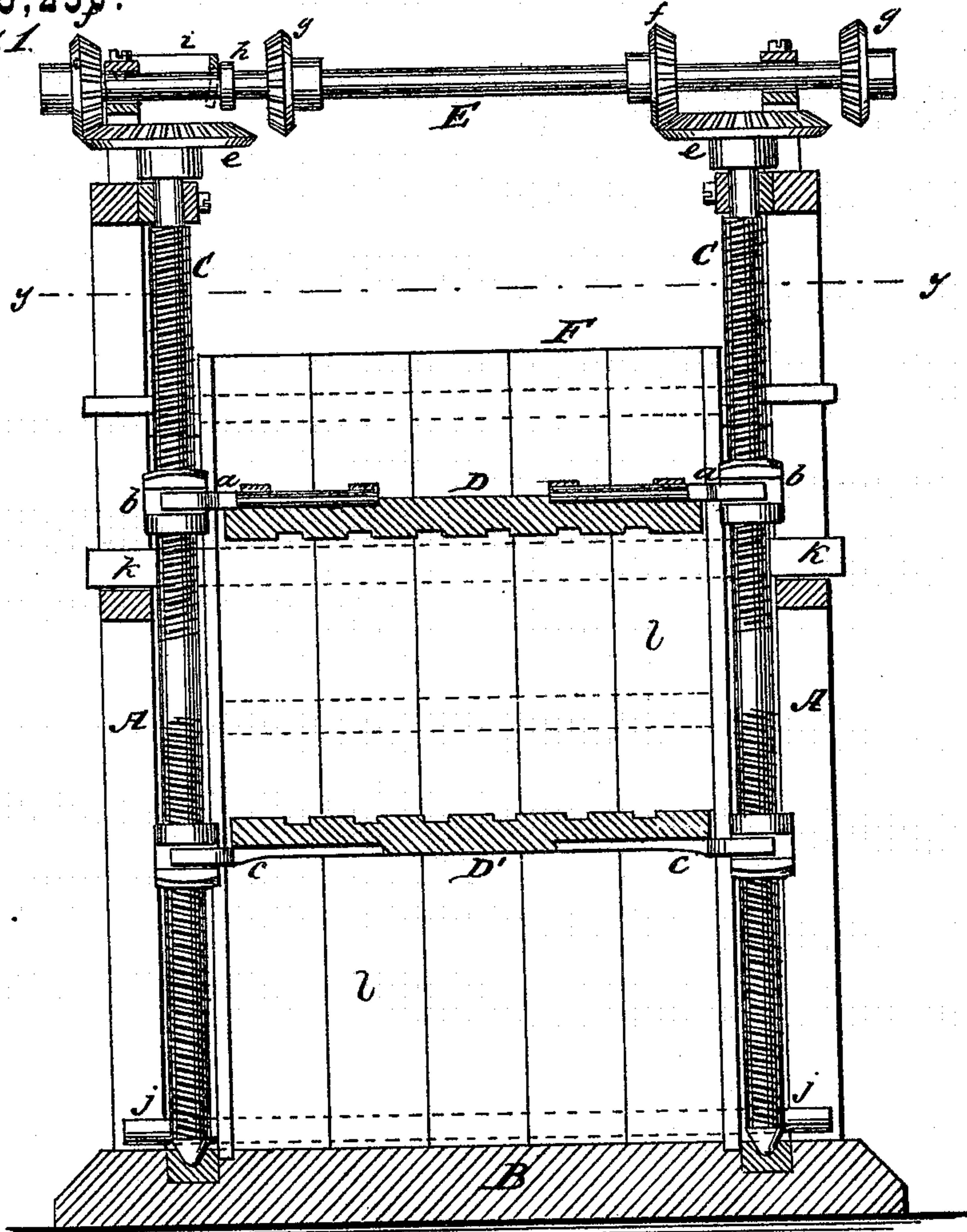
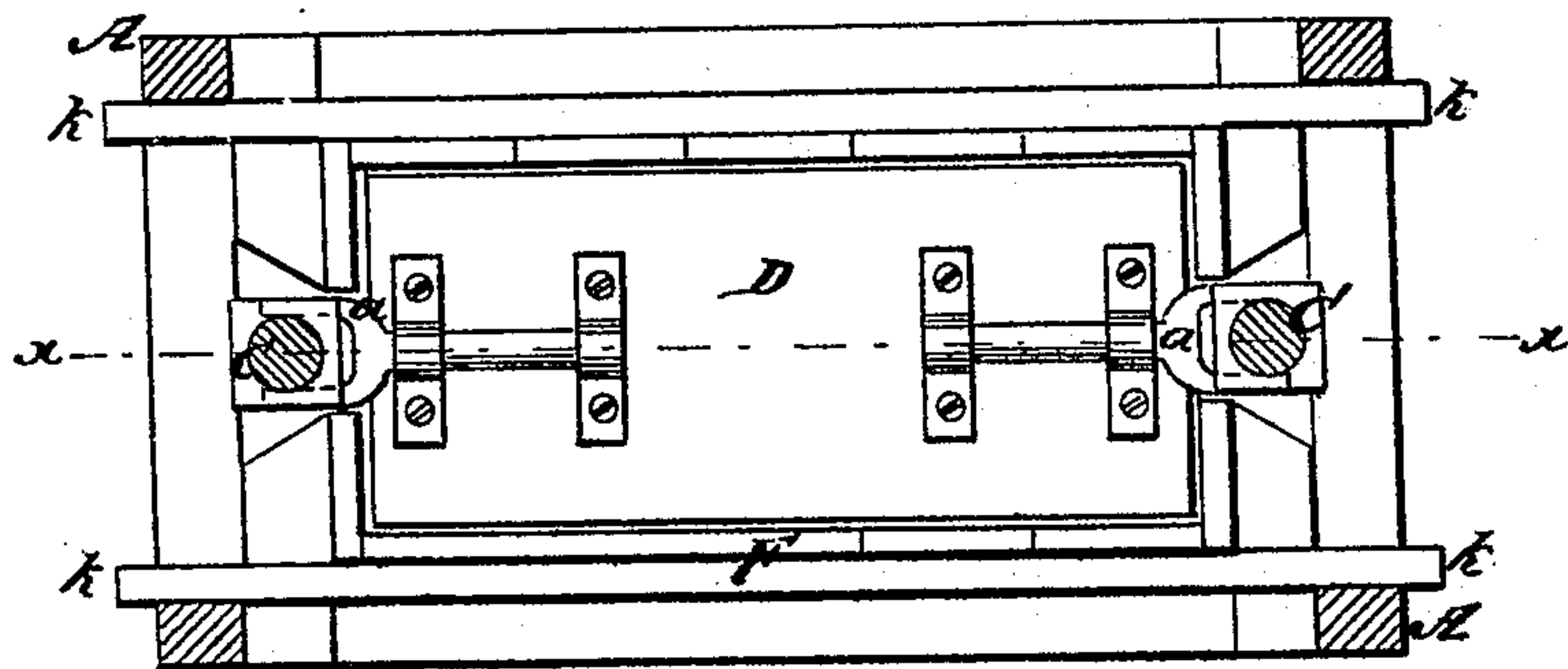


Fig. 2.



WITNESSES:

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CHARLES T. MASON, OF SUMTER, SOUTH CAROLINA.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 185,250, dated December 12, 1876; application filed November 11, 1876.

To all whom it may concern:

Be it known that I, CHARLES T. MASON, of Sumter, in the county of Sumter and State of South Carolina, have invented a new and Improved Cotton-Press, of which the following is a specification:

Figure 1 is a central vertical section on line *xx* in Fig. 2. Fig. 2 is a horizontal section on line *yy* in Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention consists in the arrangement, in a suitable frame, of two screws, each provided with a right and left hand thread, and two followers or platens, between which the cotton is pressed, supported upon and moved in opposite directions by the said screws; the object being to throw the entire pressure of the followers on the compressing-screws and thus obviate the necessity of making heavy and expensive press-frames, and also to increase the rapidity with which the press may be operated.

Referring to the drawing, A is the frame of the press, supported by the base-piece B, and C C are screws journaled in the frame A, and provided with steps in the base-piece B. The screws C C are threaded from their centers to their ends, the upper end having a right-hand screw-thread, and the lower end a left-hand screw-thread. D is the upper follower or platen, which is pivoted at each end on the rounded shanks of the clutches *a*, that embrace the nuts *b*, placed upon the upper portion of the screws C. D is the lower follower or platen, which is rigidly attached to clutches *c*, that embrace the nuts *d* on the lower portion of the screws C. The upper end of each screw is provided with bevel-wheels *e*, and the shaft E, carrying the bevel-pinions *ff* and *g g*, is journaled in the upper part of the frame A, and is capable of sliding, so as to bring either the pinions *ff* or *g g* into engagement with the wheels *e*. By this means the motion of the screw is reversed. A collar, *h*, is placed on the shaft E, and a clutch, *i*, hinged to the journal-box of the said shaft,

is capable of being placed on either side of the collar, thus holding either set of pinions in gear, as may be required. F is a casing, constructed of plank, and provided with movable side pieces *l*, hinged at *j*, and held in place at their upper edges by a movable cross-bar, *k*, which extends across the frame A, between it and the casing F.

Cotton to be pressed is placed between the platens D D' while they are separated as far as possible. The movable part of the casing F is closed and barred, and the screws C are rotated in the direction that causes the platens D D' to approach each other and compress the inclosed bale of cotton. The platen D being pivoted obviates any cramping and binding that might occur were it rigidly fixed to its clutches. It also permits the easy introduction of the cotton and removal of the bale. The bale, when compressed and tied, is released by reversing the motion of the screw, and opening the hinged part of the casing F.

It is obvious that as the entire strain of the press is exerted longitudinally on the screws, the frame of the press may be made lighter and less expensive than those of ordinary construction. The platens also, being made to approach each other by the right-and-left-hand screws, compress the cotton with greater rapidity than the single screws in the ordinary presses.

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

1. The screws C, each provided with a right and left hand thread, in combination with the pivoted platen D, the rigid platen D', casing F, and frame A, substantially as herein shown and described.

2. The hinged part *l* of the casing F, in combination with the frame A and cross-bar *k*, substantially as shown and described.

CHARLES T. MASON.

Witnesses:

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