

B. G. MARTIN.
Cotton Presses.

No. 152,140.

Patented June 16, 1874.

Fig:1.

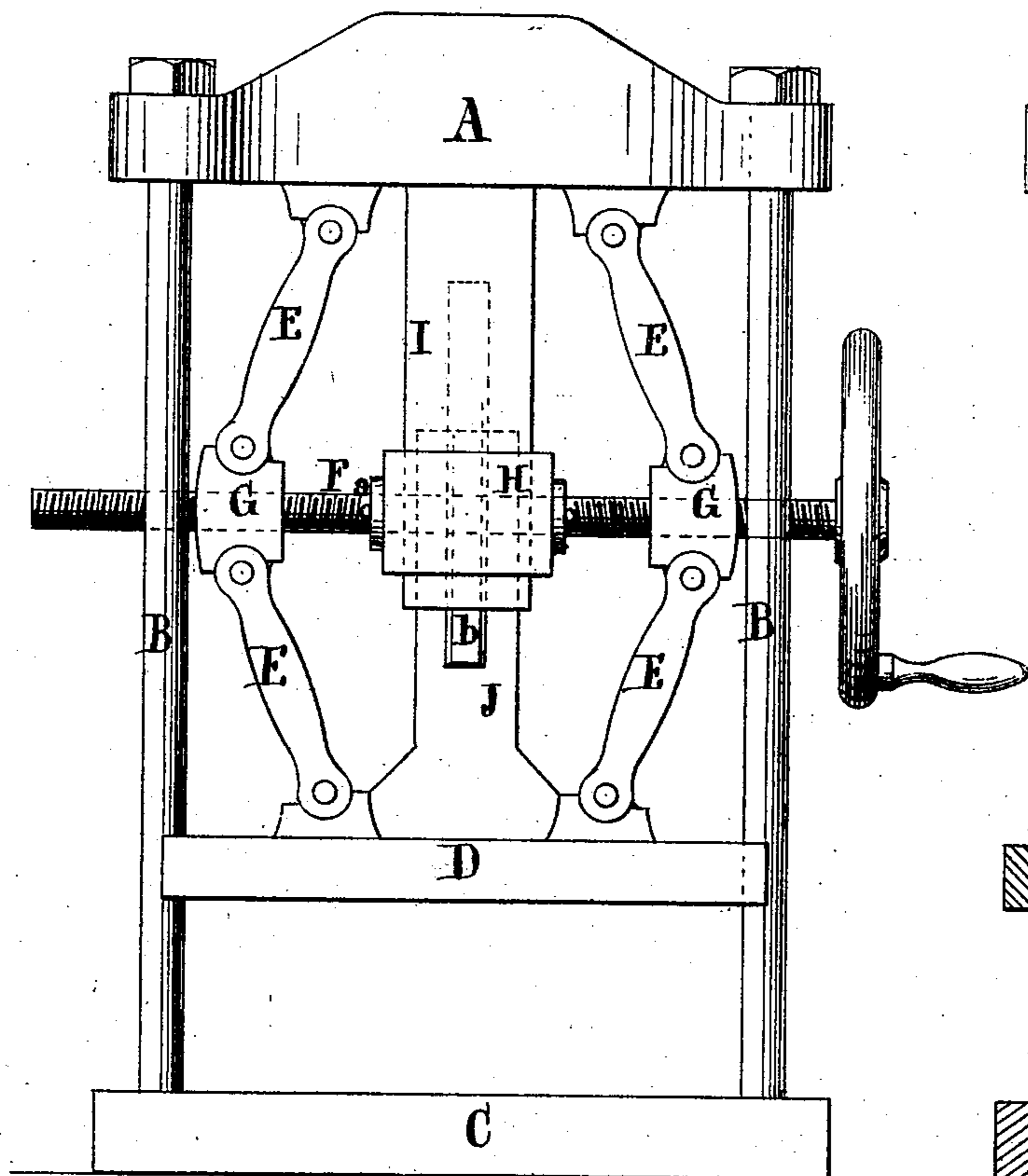


Fig:2.

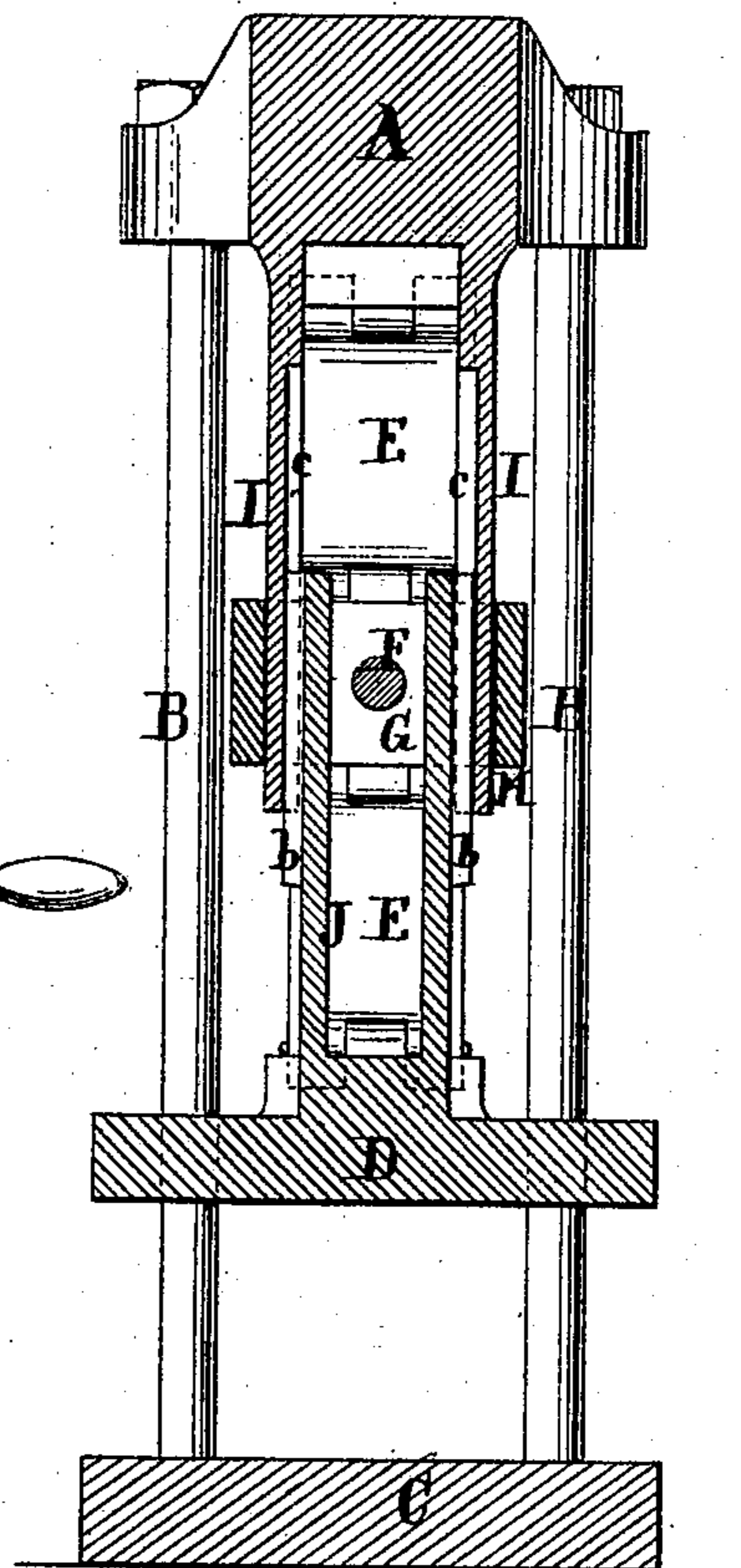
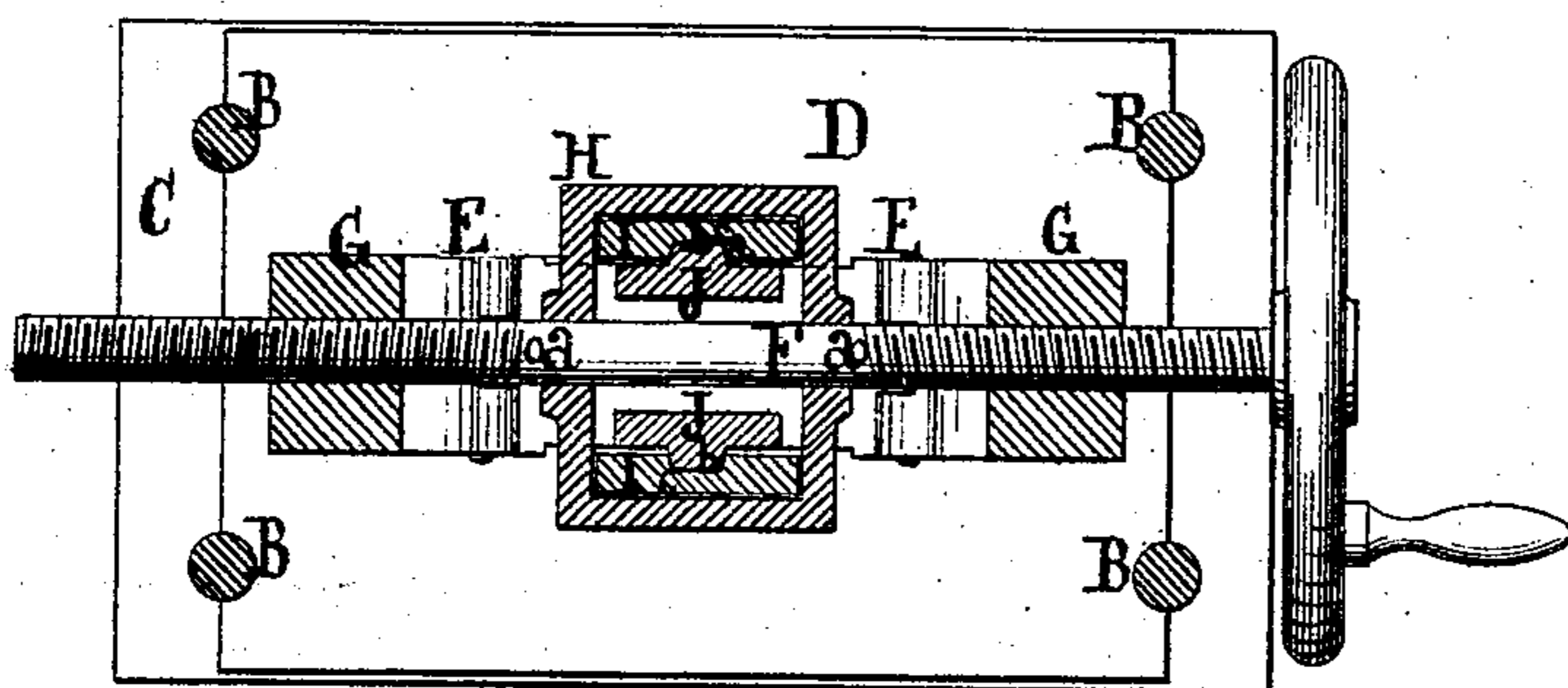


Fig:3.



Witnesses:

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UNITED STATES PATENT OFFICE.

BENJAMIN G. MARTIN, OF NEW YORK, N. Y.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **152,140**, dated June 16, 1874; application filed May 27, 1874.

To all whom it may concern:

Be it known that I, BENJAMIN G. MARTIN, of the city, county, and State of New York, have invented a new and useful Improvement in Presses; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a front view of this invention. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a horizontal section of the same.

Similar letters indicate corresponding parts.

This invention relates to that class of presses in which a standard rises from the follower and extends up through the head-block, said follower being raised or depressed by the action of right-and-left-hand screws and toggle-levers. This invention consists in a sleeve, which is guided on brackets extending from the head-block of a press, and which forms the support for a right-and-left-hand screw, that acts by means of toggle-levers upon the follower of the press, and is provided with stops contiguous to the faces of said sleeve, in such a manner that the right-and-left-hand screw is prevented from getting out of position in any direction, and its full effect upon the toggle-levers, and the follower is preserved. From the follower rises a divided standard, which is provided with tongues to fit into grooves in the inner faces of the brackets which form the guides for the screw-supporting sleeve, in such a manner that by means of said standard the follower is compelled to preserve its proper relation toward the right-and-left-hand screw and the toggle-levers.

In the drawing, the letter A designates the head-block of my press, which connects by uprights B B with the foot-block C. Between the uprights B is placed the follower D, which may be provided with cavities to fit the uprights, as shown in Fig. 3, or which may move up and down between said uprights without coming in contact with them. The follower D connects, by means of toggle-levers E E, with the head-block A, and said toggle-levers are actuated by a right-and-left-hand screw, F,

which is tapped into nuts G G, as usual, to which the toggle-levers are attached, as shown in Fig. 1. The screw F is supported in the middle by a sleeve, H, which is fitted on brackets I, extending down from the head-block A, and on said screw are provided collars or stops *a*, contiguous to the outer surfaces of the sleeve, so that by means of said sleeve and its rigid guide-brackets the screw is effectually prevented from being thrown out of position in any direction, and the proper relation of the screw, the toggle-levers, and the follower toward each other is preserved, even if the material to be pressed should not be evenly distributed under the follower.

It will be noticed that the body of the screw F fits the hole in the sleeve H nicely, and consequently the sleeve, which is securely guided on the bracket I, retains the screw in position against any strain to which the same may be exposed, while the stops *a* prevent the screw from moving endwise.

From the follower D rises a standard, J, which fits between the brackets I, and is provided with a slot to make room for the body of the screw F. On the outer surfaces of the standard J are formed tongues *b*, which fit in grooves *c* in the inner surfaces of the brackets I, so that by the combined action of said brackets and of the standard the follower is securely retained in position, and the proper relation between the screw F, the toggle-levers E E, and the follower will be preserved, whether said follower is guided on the uprights B or whether it works freely up and down between them. The screw F can be operated by hand or by any other suitable power.

If desired, the toggle-levers E E may be pivoted at their lower ends to an intermediate frame, through which extends the standard J, which rises from the follower, and by providing ratchet-teeth in the sides of this standard and applying pawls to the intermediate frame an additional motion may be given to the follower, as described in my Patent No. 134,910, dated January 14, 1873.

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

1. In combination with a right-and-left-hand screw, F, and toggle-levers E E, a sleeve, H,

constructed to move on brackets I, extending from the head-block A of a press, said sleeve serving to steady the right-and-left-hand screw and form a bearing therefor, substantially as described.

2. The collars or stops *a*, arranged upon or contiguous to the sleeve H, in combination with the brackets I, right-and-left-hand screw F, toggles E, and head-block and follower of a press, substantially as described.

3. The combination of a standard, J, rising

from the follower D, and sliding within brackets I, extending from the head-block A, and with a sleeve, H, right-and-left-hand screw F, and toggle-levers E E, all constructed and operating substantially in the manner shown and described.

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Witnesses:

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