

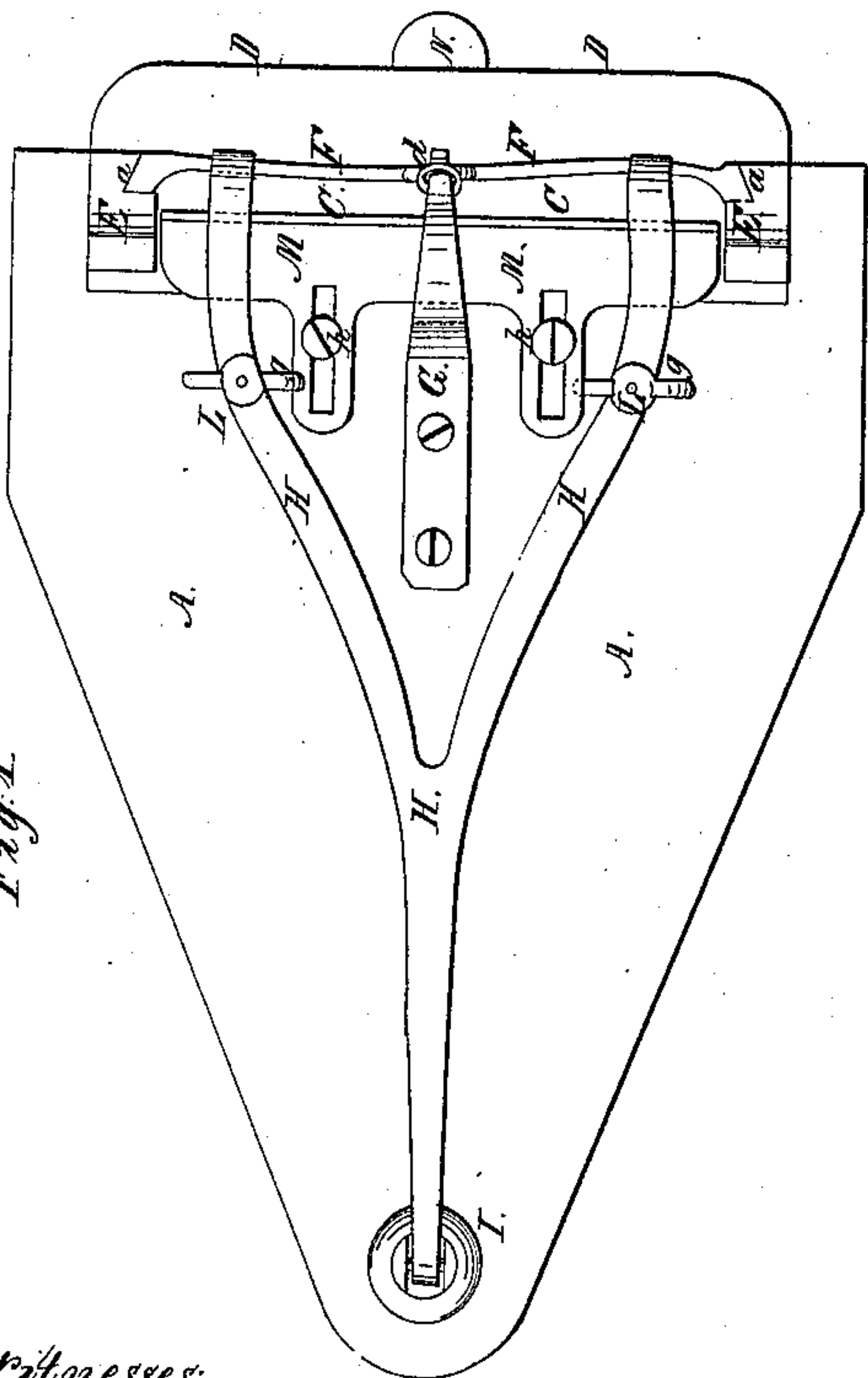
J. H. Walker,

Wyrer Machine,

N^o 34,537.

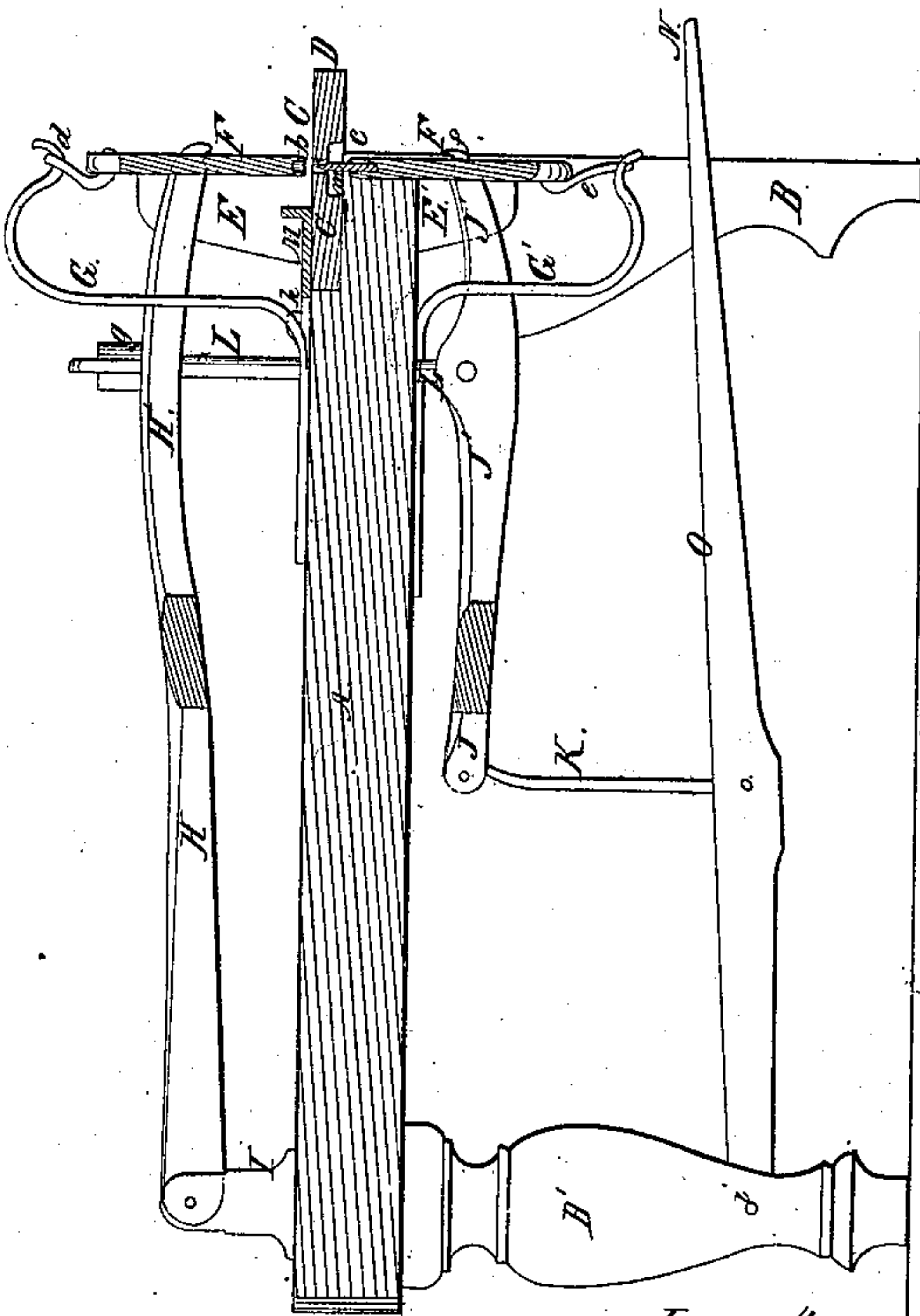
Patented Feb. 25, 1862.

Fig. 1



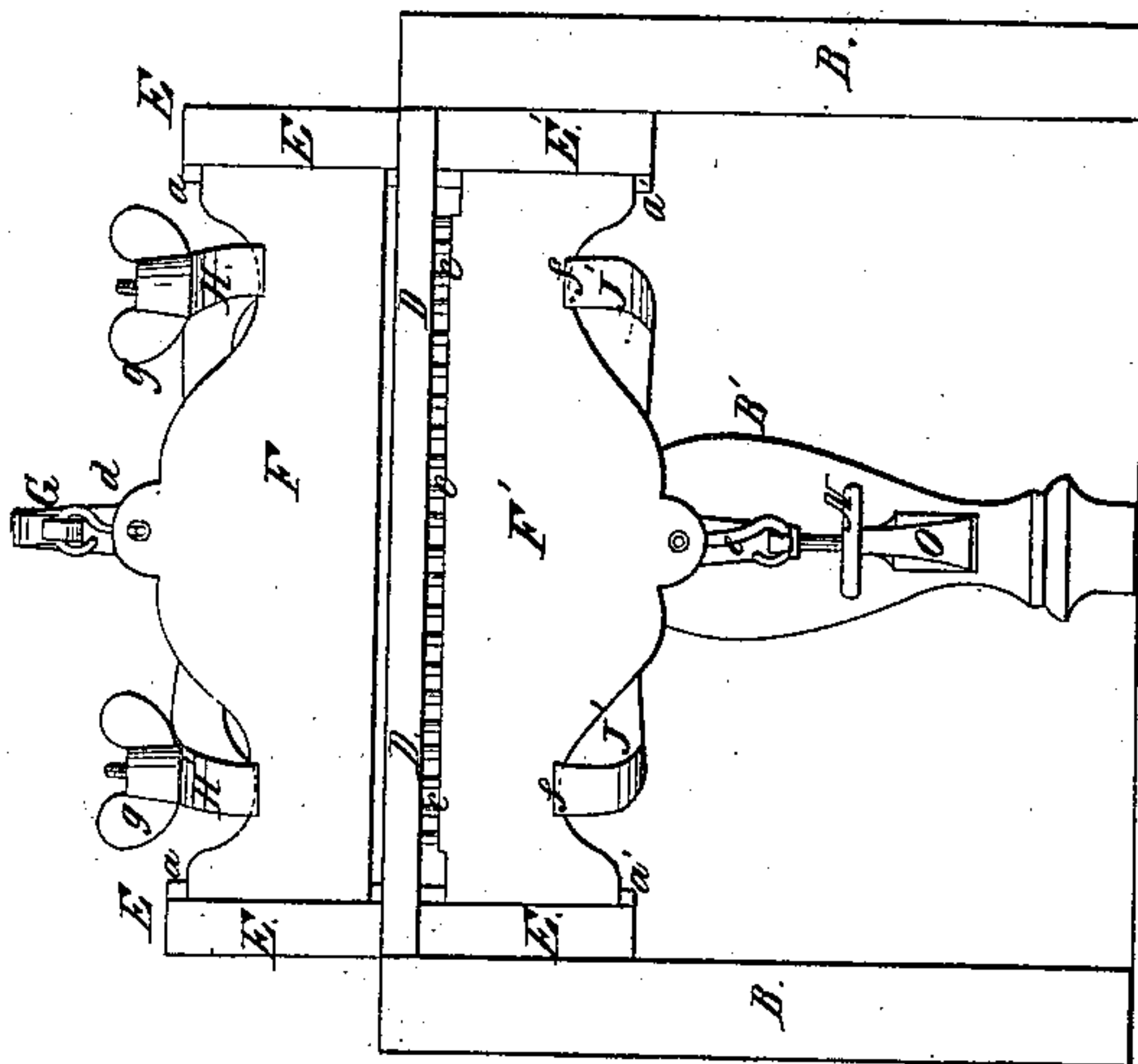
Witnesses:
John B. Jacobs
J. C. Robbing

Fig. 3



Inventor:
J. H. Walker
by J. H. Dodge
Att'y

Fig. 2



UNITED STATES PATENT OFFICE.

J. H. WALKER, OF WORCESTER, MASSACHUSETTS.

IMPROVED MACHINE FOR PRICKING LEATHER.

Specification forming part of Letters Patent No. 34,537, dated February 25, 1862.

To all whom it may concern:

Be it known that I, J. H. WALKER, of the city and county of Worcester, in the State of Massachusetts, have invented certain new and useful Improvements in Machines for Pricking Holes in the Leather from which the Legs of Boots are Formed; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a top or plan view of the machine. Fig. 2 represents a front view looking in the direction of arrow 1, Fig. 1. Fig. 3 represents a section on line A B, Fig. 1.

In the drawings, A represents the main table supported by two front legs B B and a rear one B'.

To the front of table A is fastened a metallic table C, the former being cut out to receive the leather, as indicated in the drawings, so that the top surfaces of both tables are flush with each other.

Table C projects out in front, as seen at D, and in addition thereto it has four guide-projections E E E' E', the two former on top and the two latter on the bottom, and which guide-projections are formed with dovetailed grooves *a a a' a'* to receive and guide the punching or pricking plates F F', whose ends are formed to fit the grooves *a a a' a'* in the guide-stands E E E' E'. The upper plate F is provided on its under edge with a series of holes *b*, while the lower plate F' is provided on its upper edge with a series of sharp points *c*, which work up through holes in the table C into the holes *b* in plate F.

Plate F is held up by a spring G, fastened to the top of table A and connected to plate F by a link *d*, while plate F' is held down by a similar spring G', fastened to the under side of table A and connected to plate F' by a link *e*.

A forked lever H is pivoted in a stand I, so that the front ends of its forks H' H' will rest on the upper edge of plate F, as indicated in the drawings, while a similar forked lever J (only shorter) is pivoted at its rear end to the upper end of rod K, so that the front ends of its forks J' J' will strike against the lower edge of plate F' when elevated, as seen at *f f*.

The forks of the two levers are connected by rods L L, which are hinged to the forks J' J' of lever J, and then pass up through holes

in table A and through holes in the forks H' H' of lever H, and are provided with screw-threads to receive nuts *g g*, whereby the distance of plates F F' from each other when at rest can be regulated at pleasure, since by unscrewing nuts *g g* spring G will elevate plate F, while spring G' will depress plate F'.

Table C has combined with it a gage M, which can be adjusted by means of set-screws *h h*.

The operation is as follows: The operator sets gage M the desired distance from the pricking-points *c* and then places the leather in against said gage and resting on table C, at the same time placing his foot on the front end N of foot-lever O and depresses the same, thereby causing lever O to vibrate downward on its hinge *i* in the table-leg B', whereby rod K, whose lower end is hinged thereto, is drawn down, together with the rear end of lever J. By this movement of the foot-lever O and forked lever J rods L L are depressed, together with the forks H' H' and plate F, on which they press, thus causing the lower edge of plate F to rest on and press firmly down the leather on table C, while by the same movements the front ends of forks J' J' of lever J are caused to vibrate upward, thus forcing up plate F', whereby its points *c* are caused to rise up through the holes in table C and pass through the leather while it is held with a firm and secure grasp between plate F and table C. Upon the removal of the foot from lever O springs G and G' withdraw plates F F' and the leather is removed, when the edge thereof will be found all nicely pricked ready for stitching. The under side of table C is grooved out, as seen at *m*, so as to permit plate F' to pass up by the lower surface of the table, whereby the awls or pricks *c* can be made quite short, and therefore less liable to break.

By the use of this machine any ordinary workman can prick the holes, after which the seams can be stitched by similar workmen, thus rendering the work when finished as neat as if done by the most skillful workmen, as such work has heretofore been accomplished, and far superior to the same kind of work done by the old modes.

The machine is simple in construction, and all of the movements, both to hold the leather and prick the same, are effected by a simple downward movement of the foot-lever O.

Having thus described my improvements, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the holding-plate F and pricking-plate F', with table C and its dovetailed guide stands or projections E E E' E', as and for the purposes set forth.

2. The combination and arrangement of plates F F' and tables A C, with forked levers H J and springs G G', substantially as set forth.

3. The combination, in the same machine, of a perforated stationary table having a hold-

ing-plate above and a pricking-plate below, with mechanism so combined with said plates that leather placed on the table and under the holding-plate can be held by the upper plate while it is pricked by the points or awls in the lower plate by simply depressing a foot-lever, substantially as set forth.

In witness whereof I have hereunto subscribed my name.

J. H. WALKER.

In presence of—

W. W. RICE,

S. L. NELSON.