

No. 631,772.

Patented Aug. 29, 1899.

E. J. BEIN.

BILL FILE.

(Application filed July 6, 1897.)

(No Model.)

2 Sheets—Sheet 1.

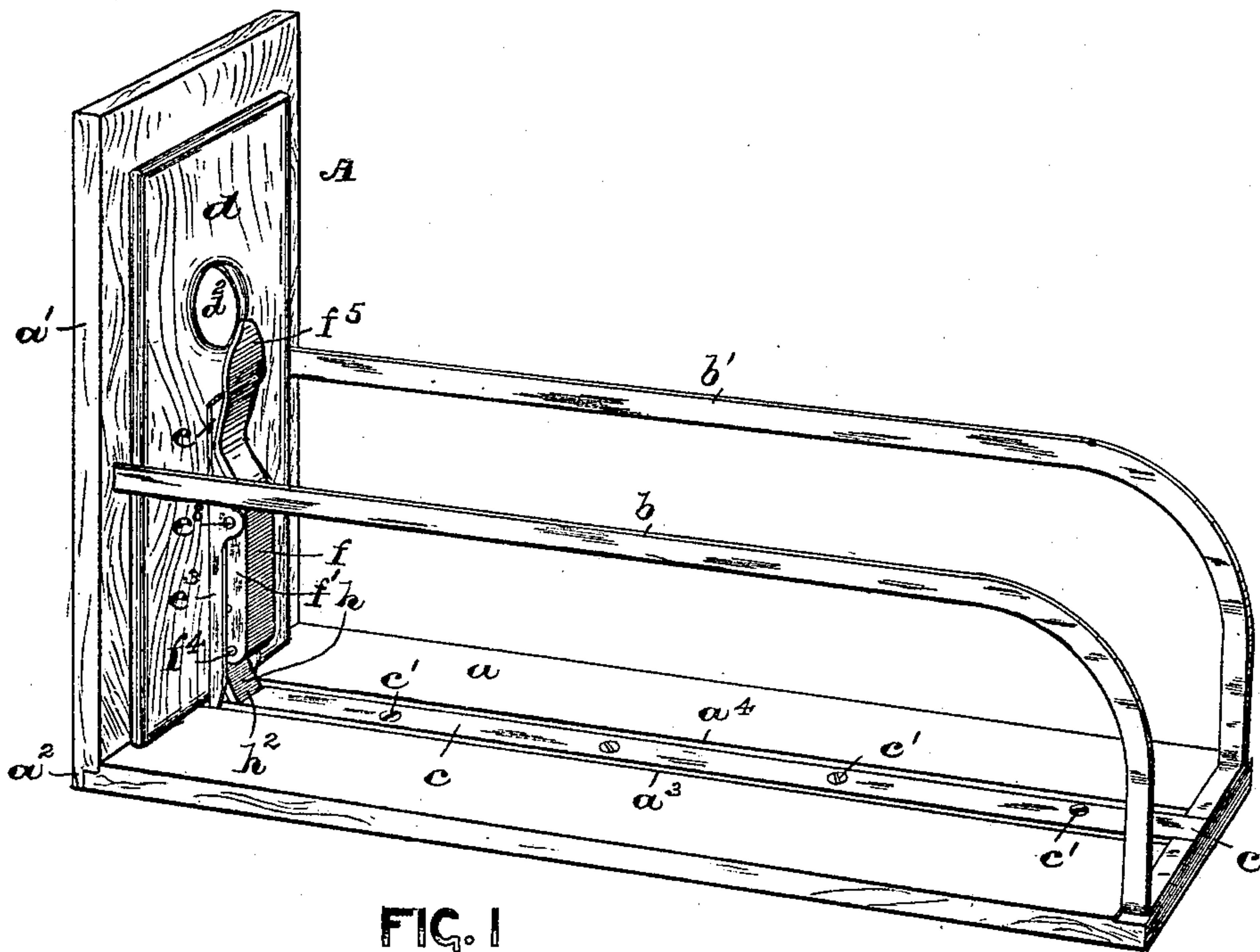


FIG. 1

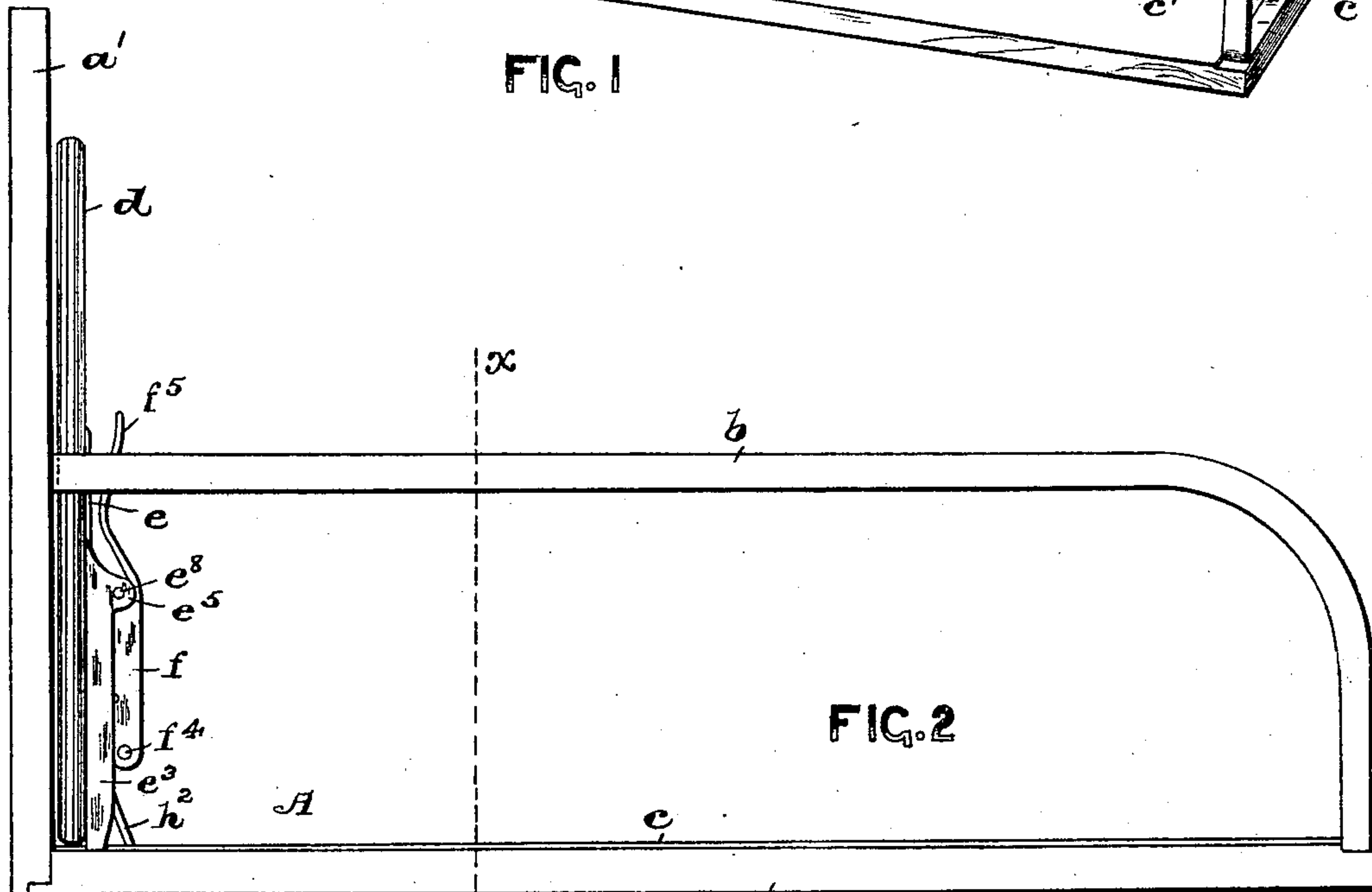


FIG. 2

WITNESSES:

INVENTOR:

Wm H. Campfield, Jr.
Philip Henry Ward:

EMIL J. BEIN,
BY
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ATTORNEY

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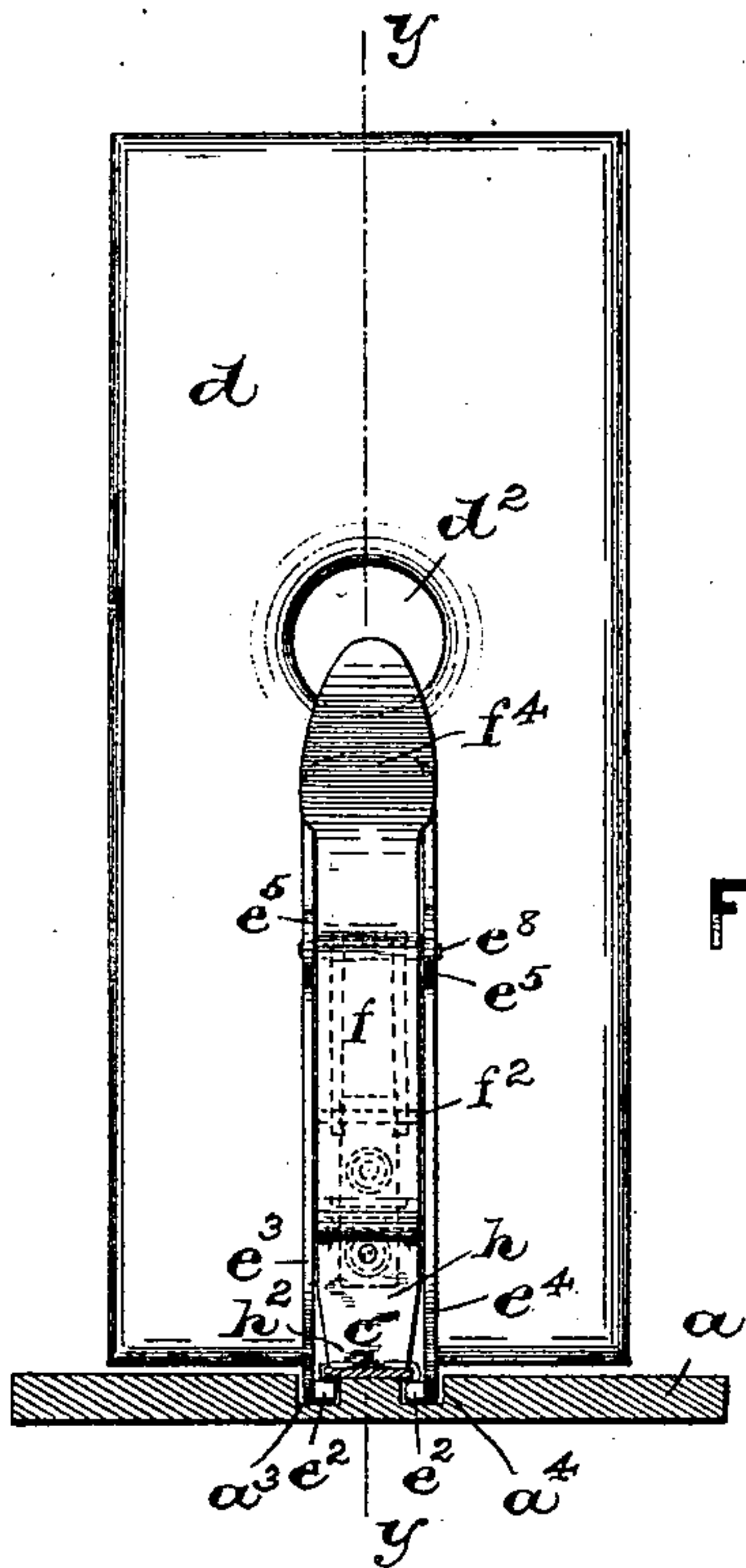


FIG. 3

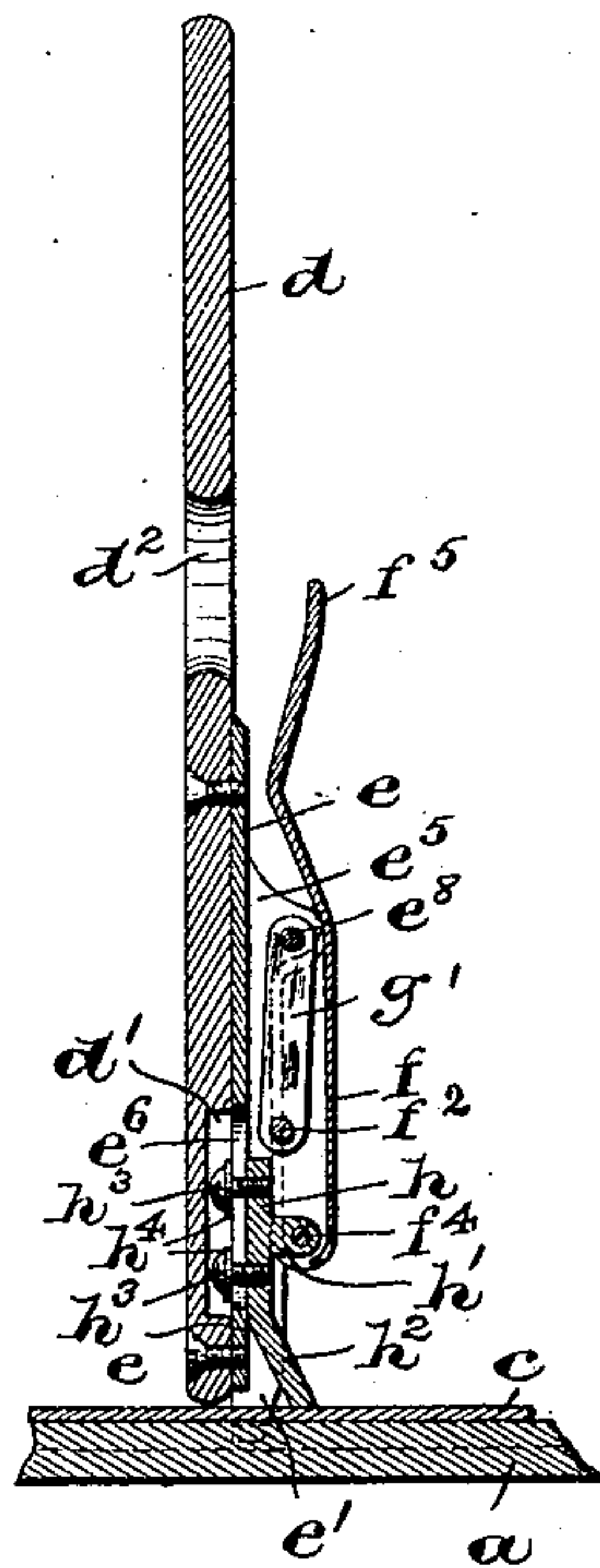
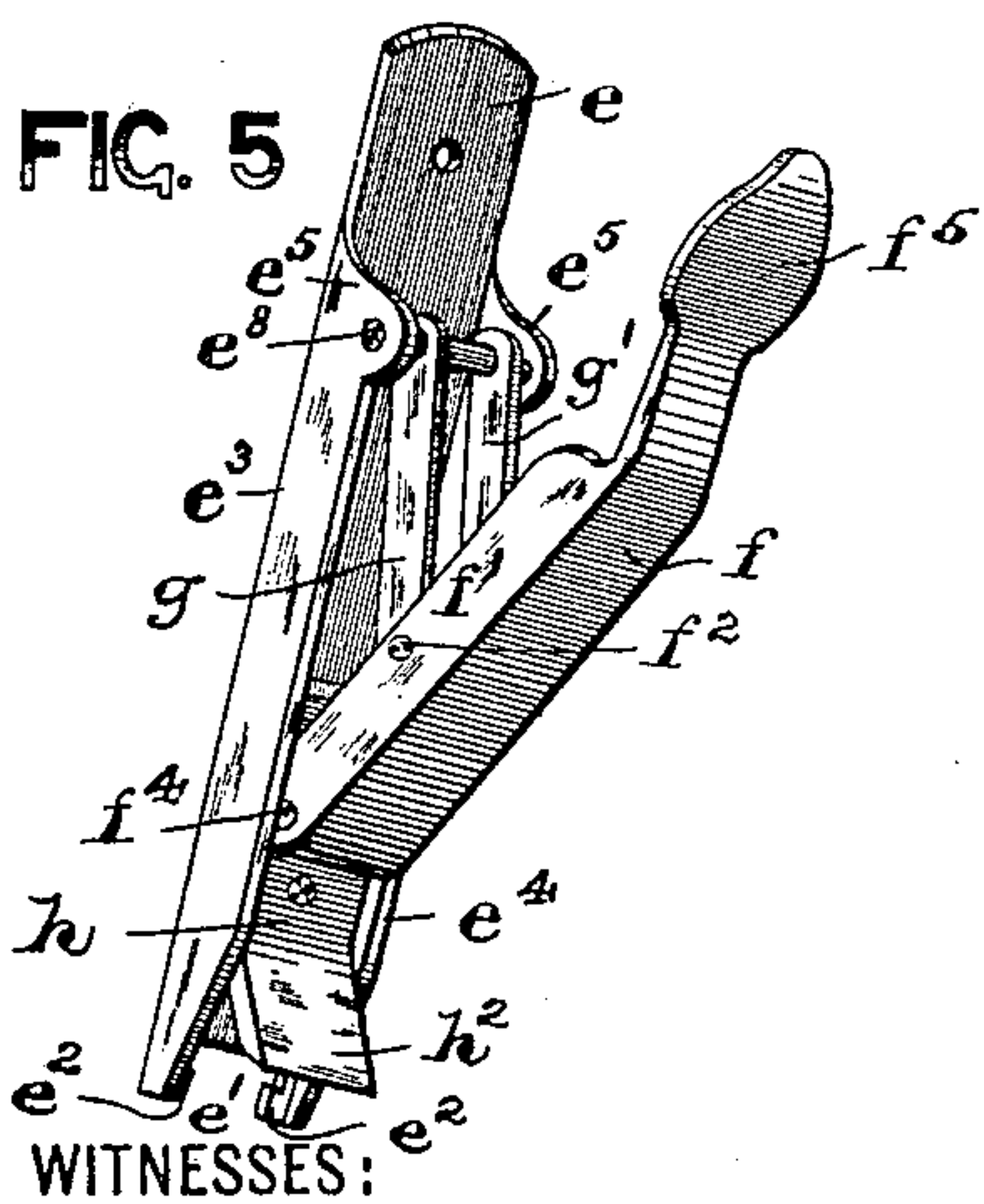


FIG. 4



WITNESSES:

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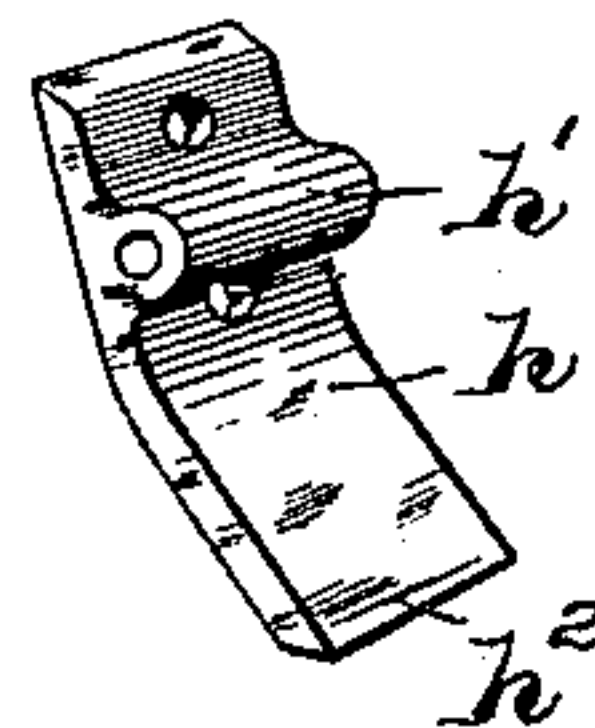


FIG. 7

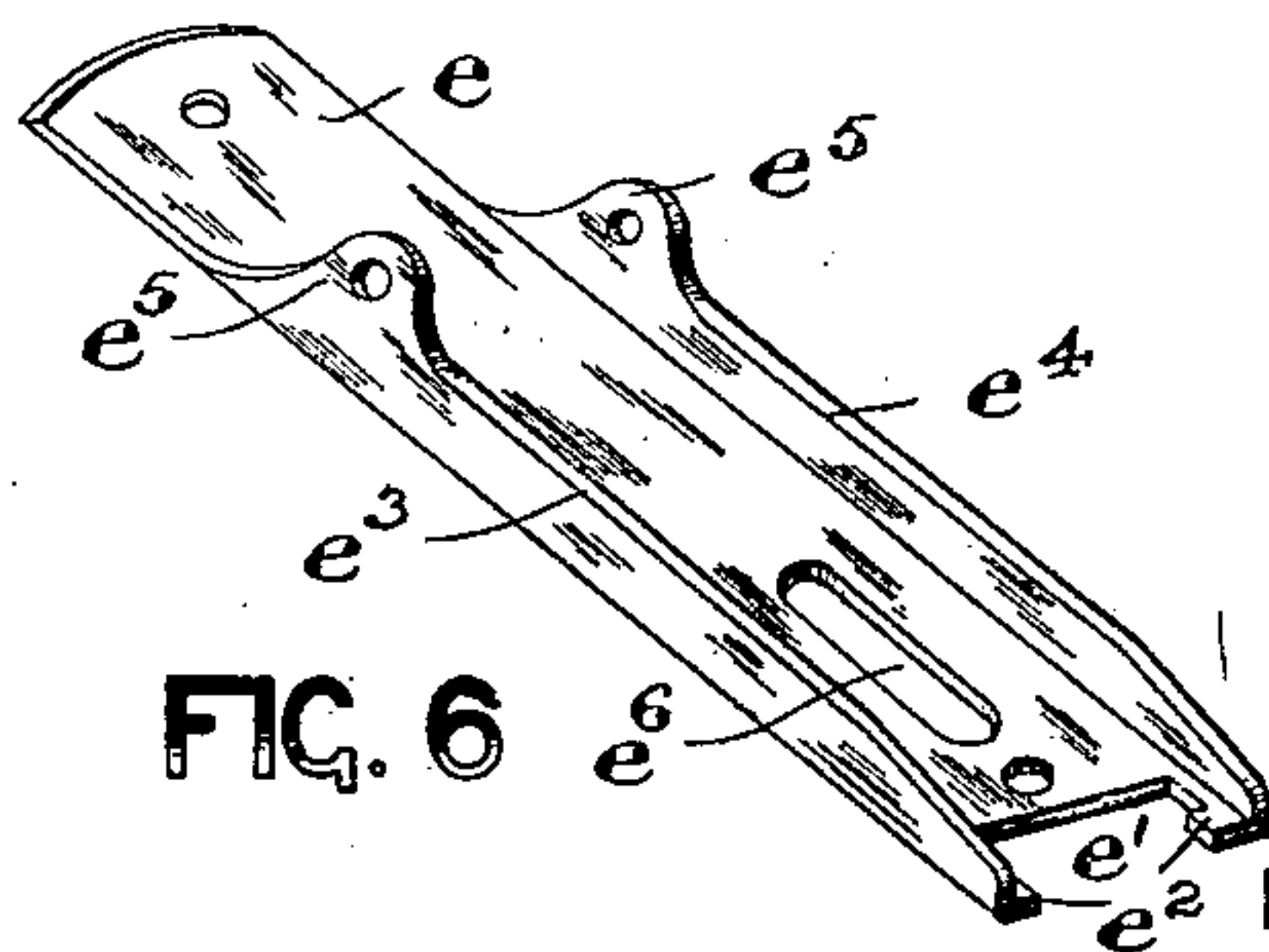


FIG. 6

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UNITED STATES PATENT OFFICE.

EMIL J. BEIN, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE TUCKER
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BILL-FILE.

SPECIFICATION forming part of Letters Patent No. 631,772, dated August 29, 1899.

Application filed July 6, 1897. Serial No. 643,650. (No model.)

To all whom it may concern:

Be it known that I, EMIL J. BEIN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Bill or Paper Files; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention has reference to a novel construction of paper or bill file in which the box or case to receive the files or papers is provided with a movable follower-board, behind which the papers to be filed away are stored.

The object of this invention is to produce a novel construction of clamping or holding mechanism which shall take up a minimum space on the front of the follower or presser board, so that there may be no loss of space, to enable the filing away in the box or case of the largest possible number of papers.

The invention therefore consists, essentially, in a novel construction of clamping lever or mechanism operatively connected with the follower or presser board to permit of a forward or backward movement of the board and also serving to lock or firmly clasp the same in an upright position against the papers, whether there is but one paper in the box or a large number of the same.

The invention consists, furthermore, in combination with a follower or presser-board having an opening for the insertion of the finger with a clamping-lever or suitable holding mechanism attached to the board, having the finger or pull portion of a pivoted lever in close proximity to the face of the board and directly in front of the hole therein, whereby the thickness of the operating mechanism occupies a minimum amount of space in front of the board, and hence provides a construction of bill or paper file adapted to receive the largest possible number of papers.

The invention also consists in such other novel arrangements and combinations of

parts and the minor details of construction thereof, all of which will be fully set forth in the accompanying specification and finally embodied in the clauses of the claim.

The invention is clearly illustrated in the accompanying sheets of drawings, in which—

Figure 1 is a perspective view of a box or case provided with a movable follower or presser board and a clamping or holding mechanism, all embodying the features of my present invention, and Fig. 2 is a side view of the several parts illustrated in said Fig. 1. Fig. 3 is a cross-section of the base-board of the box or case, taken on line x and representing the follower or presser board and its holding or clamping mechanism in front elevation, and Fig. 4 is a vertical section taken on line y in Fig. 3. Fig. 5 is a perspective view of the several parts of my novel construction of locking or holding mechanism before it is attached to the follower or presser board, and Figs. 6 and 7 are similar views of certain parts of the mechanism illustrated in said Fig. 5.

Similar letters of reference are employed in all of the above-described views to indicate corresponding parts.

In said drawings, A indicates the box in which the papers are to be filed away for future reference. Said box, which may be of any desired form, is provided with the usual form of base-board a , connected at the base of the front a' , as shown at a^2 , and also at the sides by means of the guide bars or rods b and b' , as clearly represented in Figs. 1 and 2; but the use of the guide bars or rods is not essential, and said parts a and a' may be otherwise secured to form substantially a triangular box, as will be clearly evident. In the center of said base-board a are a pair of parallel and longitudinal grooves a^3 and a^4 , above which I have secured, by means of screws, as c' , or in any other well-known manner, a guide-bar c in such a manner that its longitudinal edges partially overhang said grooves a^3 and a^4 , as will be seen from an inspection of Fig. 3. The follower or presser board d is movably arranged above said base-board a by means of a plate e , adapted to be secured upon the face of said board d in any well-

known manner, said plate *e* having a suitably cut-away portion *e'* and a pair of lugs or projections, as *e*², which are adapted to extend down into said slots *a*³ and *a*⁴ in the base-board *a* and engage beneath the projecting longitudinal edges of the guide-bar *c*. Owing to this arrangement and construction of the parts said follower or presser board can be freely moved backward and forward in an upright position and can be tilted to an inclined position in the usual manner at any desired point of the board *a*. Said plate *e*, which is preferably made from sheet metal, is provided along its longer sides with upwardly or outwardly extending ribs or flanges *e*³ and *e*⁴, each of which has a perforated ear *e*⁵, and *e*⁶ is an elongated slot or opening, as clearly illustrated in Fig. 6. Pivotally arranged on a suitable pin *e*⁸, which is fixed in said perforated ears *e*⁵, are a pair of arms *g* and *g'*, their lower ends being in turn pivotally connected with a suitable pin *f*², secured in a pair of flanges or ribs *f'* of an operating-lever *f*. At or near the lower end *f*³ of said lever and secured in said flanges or ribs *f'* is a pin *f*⁴. (See Figs. 4 and 5.) Pivotally arranged upon said pin *f*⁴ is a perforated lug or lugs *h'* of a suitable clamping or holding dog or bar *h*, said dog or bar being provided with an outwardly-extending grasping or locking jaw *h*². Said dog or bar *h* is also slidably arranged above the elongated slot or opening *e*⁶ in the plate *e* by means of one or two screws *h*³, which are screwed into said dog or bar *h* and extend through the slot *e*⁶, having their heads arranged in a groove or recess *d'*, forming a guide in the follower or presser bar *d*, or they may be secured in any other manner and bear against washers *h*⁴, which in turn bear against the surrounding edges of the slot or opening *e*⁶ in the plate *e*, and thereby operatively hold said dog or bar *h* in sliding contact on the face of said plate *e*, as clearly illustrated in Fig. 4. By this arrangement the dog or clamping-bar *h* slides vertically against the face of said plate *e*, thereby overcoming any possible forward tilting motion of the follower-board *d* when the parts of the operating mechanism are in their clamping positions. The said bar *h* being thus pulled or pushed down in its vertical guide forms a very positive lock with but very little friction and consequent wear of the movable parts, as in the constructions of clamping devices as heretofore made, the clamping-bars of which have an outward movement, which thus bring an outward strain upon the follower-board and prevent its being positively locked in its position for retaining the papers or files back of it. Said operating-lever *f* is formed with an inwardly and slightly-outwardly projecting end portion *f*⁵ at the top, which forms a finger-piece on said lever in very close proximity to the face of the follower or presser board *d* directly in front of a hole or opening *d*² in said

board for the insertion of the finger into the same and directly back of said finger-piece of the lever *f*, whereby said lever can be drawn forward and the holding-jaw *h*² of the dog or bar *h* disengaged from its operative holding engagement with the guide-bar *c* to permit the forward and backward movement of the board *d* upon the base *a* of the box or case A, as will be clearly evident.

When it is desired to introduce the papers between the follower or presser board *d* and the front board *a'* of the case or box A, the operator places his or her finger in the space formed by the opening *d*² in said board *d* directly behind the finger-piece or pull portion *f*⁵ of the lever *f*, whereby the parts of the locking or clamping mechanism by pushing said lever forward are moved from the positions indicated in Figs. 1 to 4, inclusive, to the position indicated in Fig. 5, and the follower-board is free to tip forward and can be moved along the guide-bar *c* to enable the person to get at the papers. To hold the papers in their stored or filed-away positions behind said board *d*, the said board is moved backward in its upright position on the base *a* of the box A and the lever *f* pushed back against the board. As soon as the lever is turned into the position indicated in Fig. 4 the grasping or holding end of the dog or bar *h* binds tightly upon the guide-bar *c*, and the arms *g* and *g'*, which are pivotally connected with the plate *e*, will forcibly push the follower or presser board *d* against the papers behind it.

From the above description it will be seen that I have produced a cheap and simply-constructed device which is perfectly operative for the purposes stated and in which the several parts of the locking or holding mechanism take up very little room in front of the board, and hence the box can be used to store away a great many more papers than in the constructions of file-holders as now made. Furthermore, by the arrangement of the compound-lever construction a back pressure is exerted upon the follower or presser board at or near the middle thereof, while at the same time there is a direct downward pressure of the dog and an upward motion of the board, whereby I derive the benefit of an absolute lock and receive the full benefit of the depth of the file.

I am fully aware that changes may be made in the several arrangements and combinations of the parts, as well as in the details of the construction thereof, without departing from the scope of my present invention. Hence I do not limit my invention to the exact arrangements and combinations of the several parts and the construction thereof as described in the accompanying specification and embodied in the clauses of the claim.

Having thus described my invention, what I claim is—

1. In a bill or paper file, the combination,

with the box or case, of a movable follower or presser board, and a locking or clamping mechanism operatively secured to said board, consisting essentially, of a slotted plate *e*, a holding dog or bar operatively held over the slot in said plate *e* and having a vertically-sliding motion on said plate, and means connected therewith for causing the holding or grasping engagement of said dog or bar with the base-board of the box or case, substantially as and for the purposes set forth.

2. In a bill or paper file, the combination, with the box or case, of a movable follower or presser board, and a locking or clamping mechanism operatively secured to said board, consisting, essentially, of a slotted plate *e*, a holding dog or bar operatively held over the slot in said plate *e* and having a vertically-sliding motion on said plate, a lever *f* pivotally connected with said dog or bar, and a separate means of pivotal connection of said lever with said plate *e*, substantially as and for the purposes set forth.

3. In a bill or paper file, the combination, with the box or case, and its movable follower or presser board, of a locking mechanism operatively secured to said board, consisting, essentially of a plate *e* having a pair of longitudinal flanges or ribs provided with perforated ears or lugs, a pin in said ears or lugs, a lever *f*, one or more arms pivotally connected with said pin on the plate *e* and with said lever *f*, and a holding dog or bar *h* having a vertically-sliding motion on said plate *e*, but also pivotally connected with the bottom of said lever *f*, and having a forwardly-extending holding-jaw, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 2d day of July, 1897.

EMIL J. BEIN.

Witnesses:

FREDK. C. FRAENTZEL,
WM. H. CAMFIELD, Jr.