

No. 822,708.

PATENTED JUNE 5, 1906.

M. W. WRIGHT.
BRUSH.

APPLICATION FILED FEB. 13, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

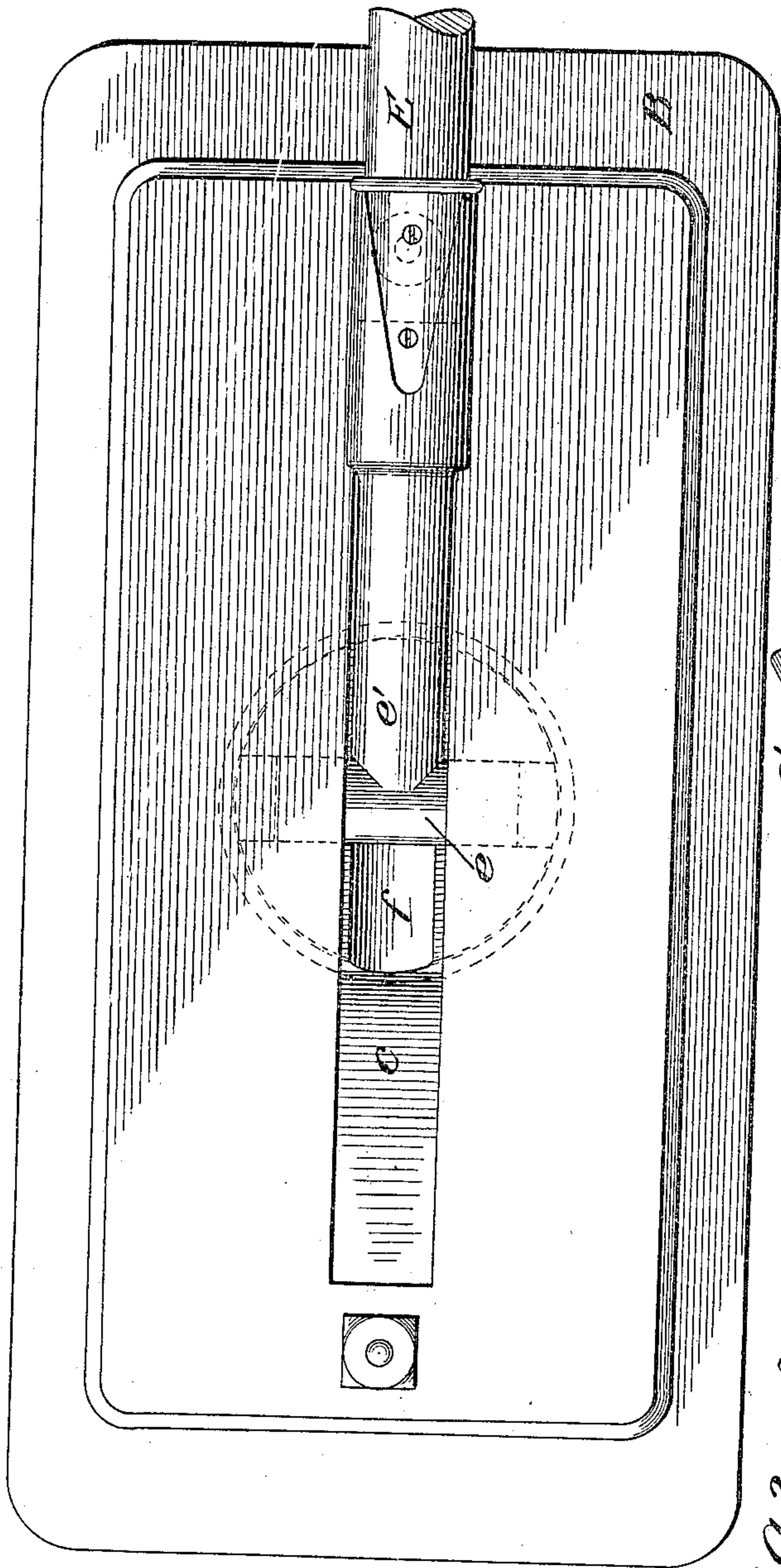
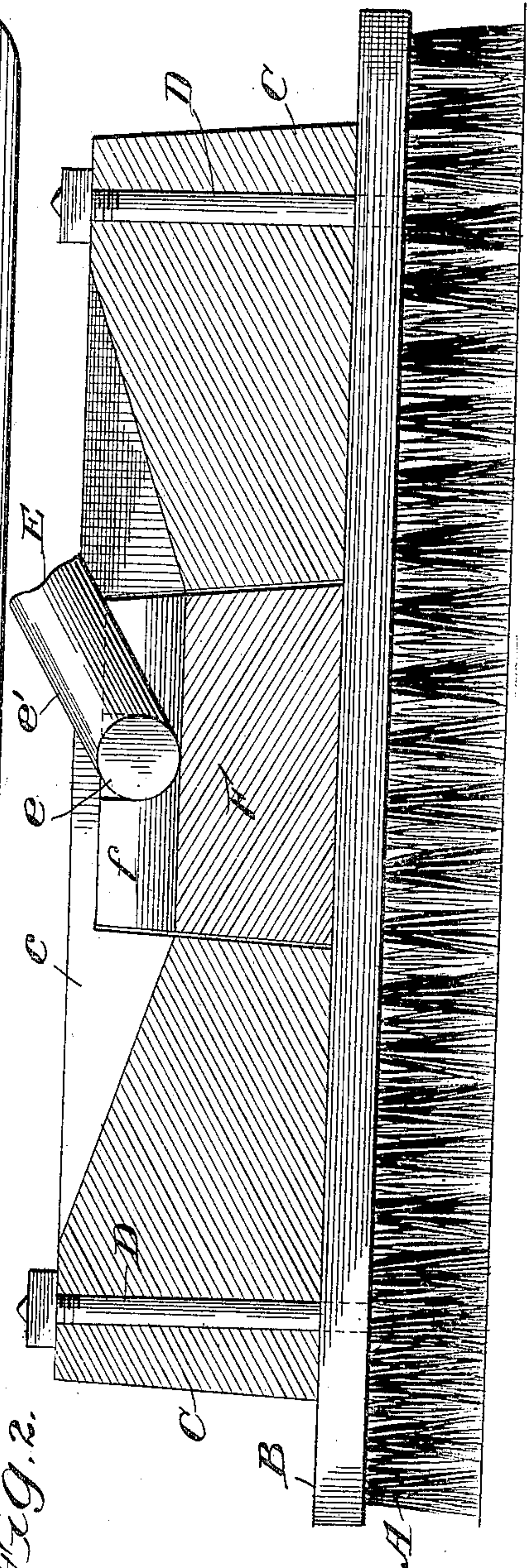
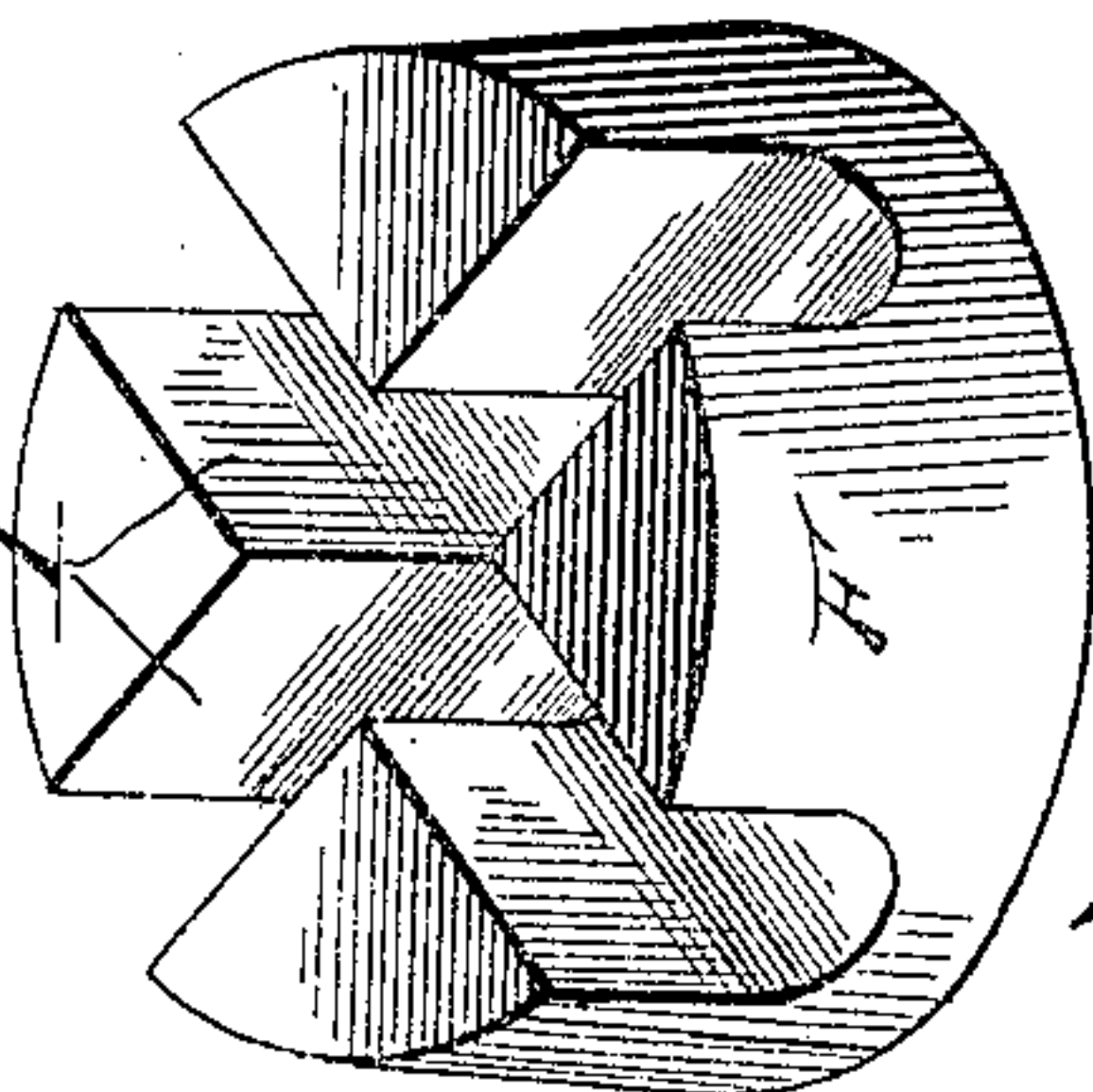


Fig. 2.



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Fig. 3.



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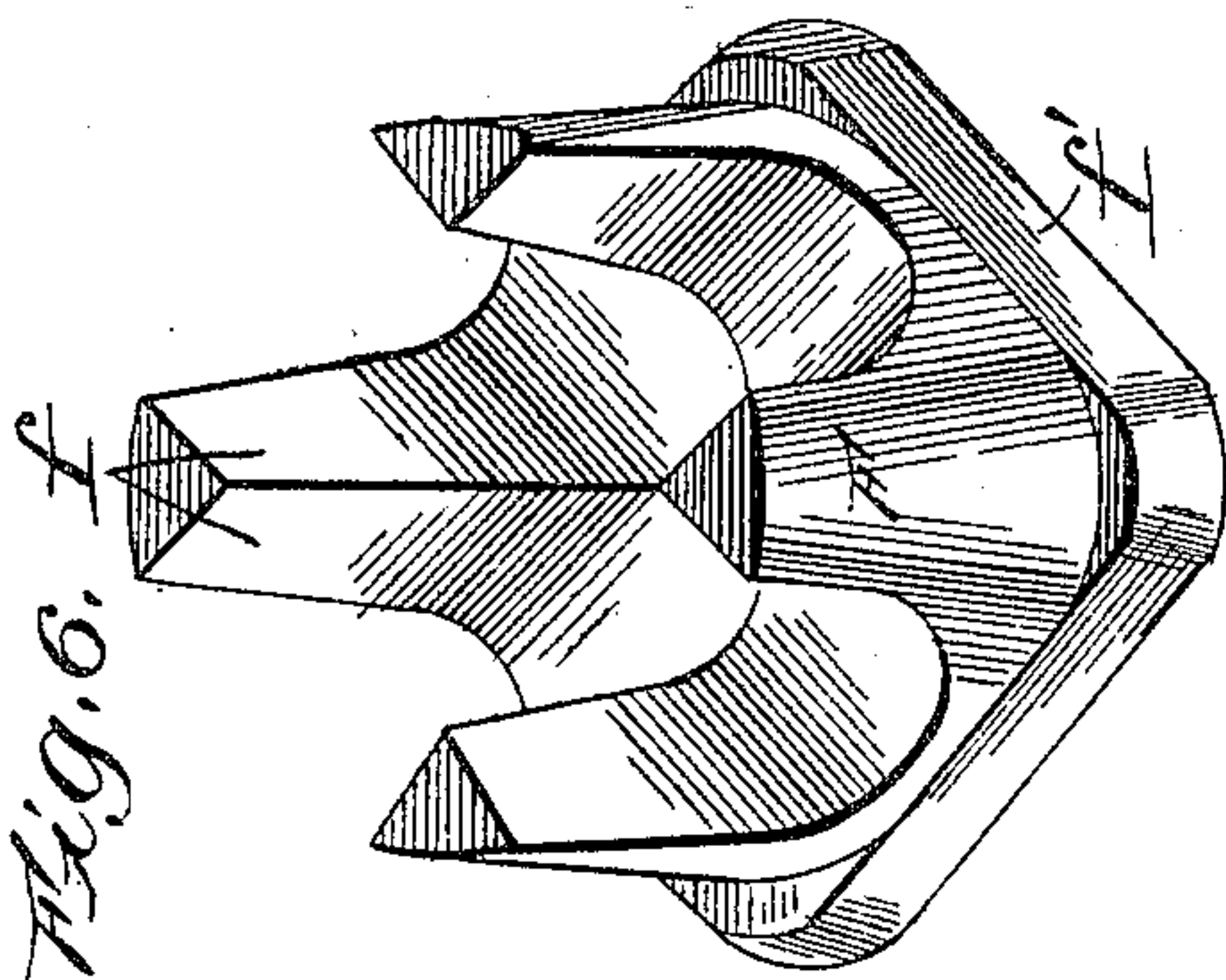
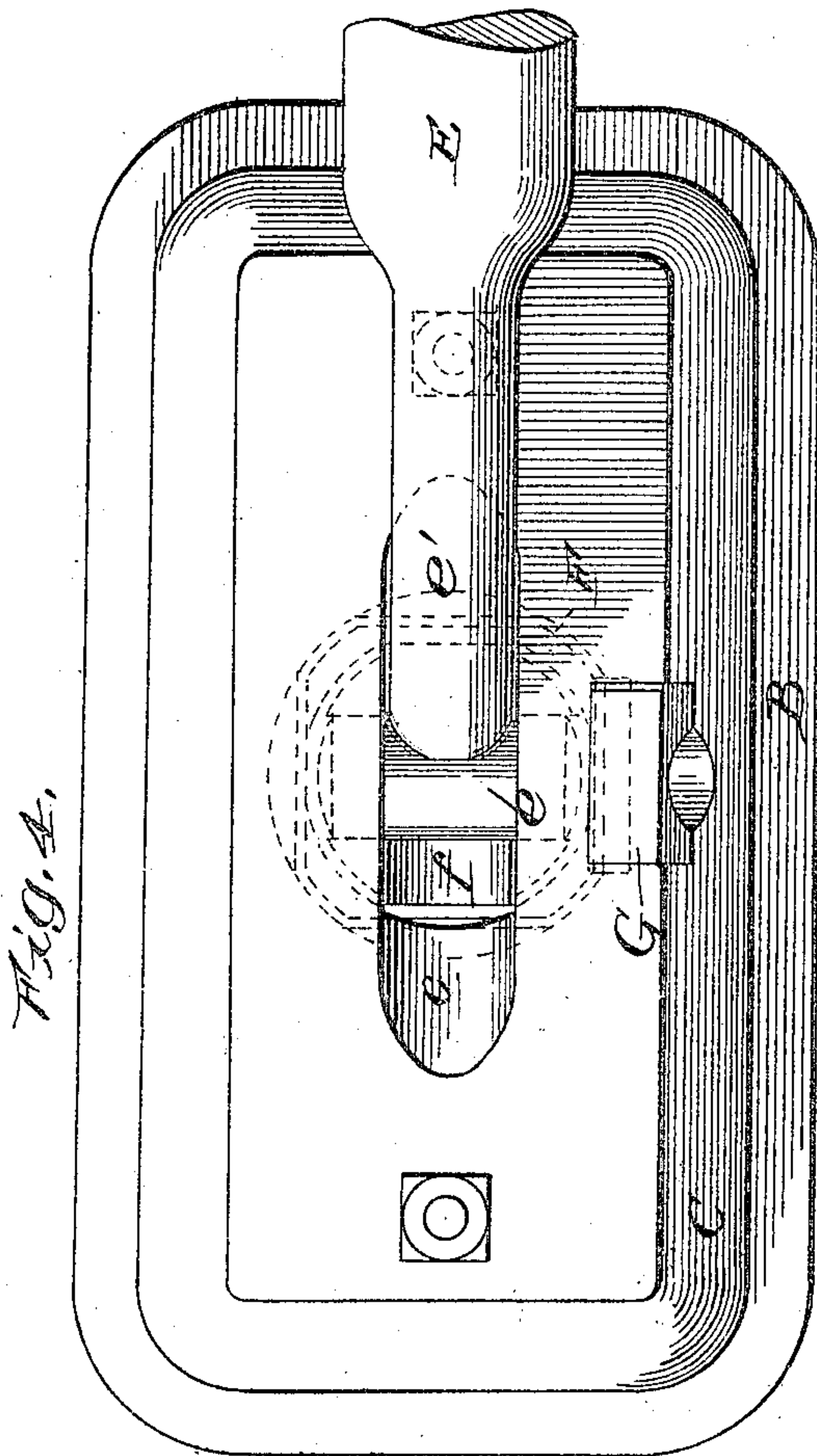
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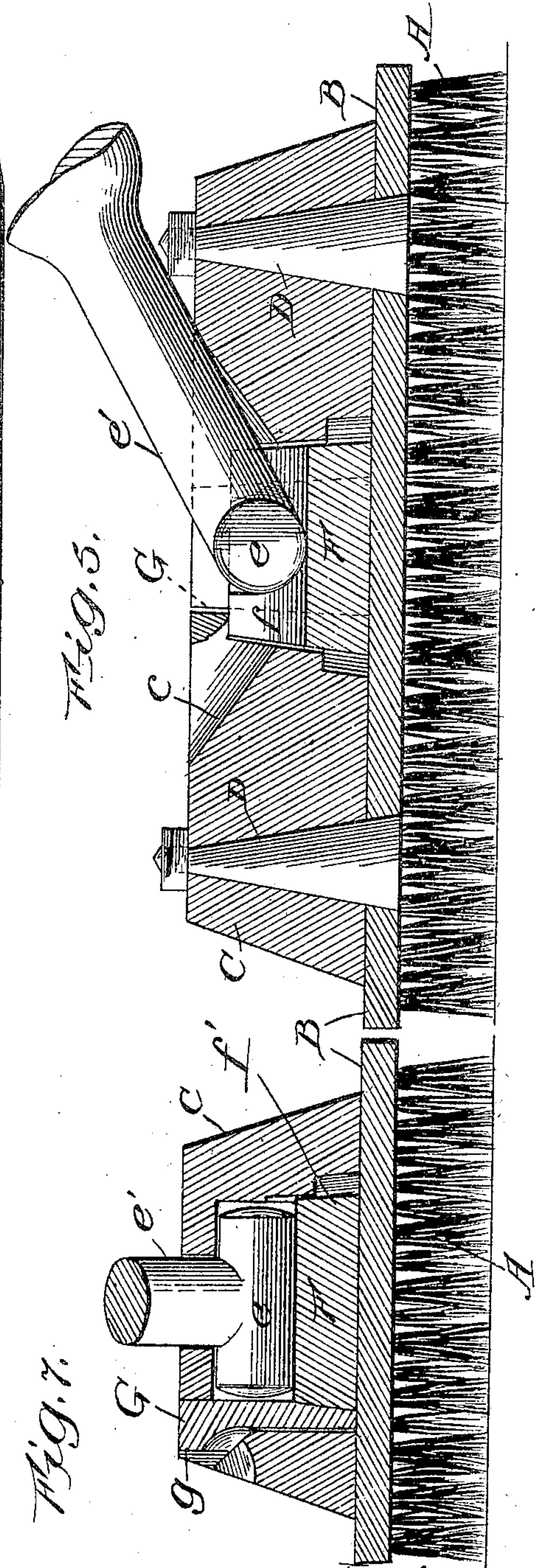
M. W. WRIGHT.
BRUSH.

APPLICATION FILED FEB. 13, 1905.

2 SHEETS—SHEET 2.



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Inventor:
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UNITED STATES PATENT OFFICE.

MARSHALL W. WRIGHT, OF CHICAGO, ILLINOIS.

BRUSH.

No. 822,708.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed February 13, 1905. Serial No. 245,463.

To all whom it may concern:

Be it known that I, MARSHALL W. WRIGHT, a citizen of the Dominion of Canada, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brushes, of which the following is a specification.

The present invention relates more particularly to brushes of the class used for waxing and polishing floors and are heavily weighted, so that in order to do the work it is simply necessary to move the brush back and forth by means of a suitable handle, the weight of the brush itself being such that downward pressure upon the handle is not necessary; but I desire to have it understood that the invention is applicable also to lighter brushes—such, for example, as are used for scrubbing and other purposes—and even to carpet-sweepers. It is peculiarly adapted, however, to those brushes that are used for polishing floors and have long handles that enable the operator to stand erect, or substantially so, while manipulating them. For convenience and economy in packing, storing, and shipping such brushes and for convenience in putting them out of the way in pantries, &c., when not in use it is desirable that the handle be removable with facility; and the object of the present invention is to accomplish this object. Others have heretofore accomplished it; but I aim to accomplish it by simpler means that are not only fully adequate, but which admit of being manipulated with the greatest possible facility.

To these ends the invention consists in the features of novelty that are hereinafter described with reference to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is a plan view of a brush embodying the invention, a portion of the handle being broken away. Fig. 2 is a vertical section thereof in a central longitudinal plane. Fig. 3 is a perspective view of the lock-block. Figs. 4, 5, and 6 are views similar to Figs. 1, 2, and 3, showing a modification. Fig. 7 is a transverse section thereof.

Brushes of the class to which the invention relates usually have a working face made of bristles A, a back B, to which said bristles are secured in some suitable manner, a weight C, superimposed upon the back B and se-

cued thereto by bolts D or some other suitable means, and a handle E, jointed to the brush, so that it may have a pivotal movement relatively thereto. All of these features are familiar to those skilled in the art.

The handle usually has a T-head *e*, which is attached to the brush (or, more particularly stated, the weight) by one means or another; and the present invention resides in the means whereby the attachment of the handle and brush is effected, (the term "brush" being here used to comprehend the entire structure minus the handle.) This means consists of a simple rotatable block F, occupying a socket of corresponding shape in the body of the brush, (more specifically stated, in the under side of the weight C,) the top of the body (*i. e.*, the weight) being provided with a longitudinal slot *c* for the double purpose of admitting the cross-head *e* of the handle E to engagement with the block F and permitting the sweep of the handle relatively to the brush as the latter is moved back and forth in using it. The block F is provided with slots or grooves *f*, which are of sufficient depth and width to receive the cross-head *e* and form seats therefor, and the slot *c* is of sufficient width to admit the shank *e'* of the handle. The slots *f* are at right angles, and while one is occupied by the cross-head the other affords clearance for the movement of the handle as the brush is moved back and forth.

In order to attach the handle, the block F is placed with one of its slots parallel with slot *c*. The handle is then placed in vertical position and the cross-head *e* inserted through the slot *c* and into the registering slot *f* of the block F. The handle is then given a quarter-turn, thus bringing the cross-head *e* across the slot *c*, so that the top wall of the socket engages it and prevents it from being lifted out. After this the handle cannot be removed until the cross-head is again returned to parallelism with the slot *c*. With the cross-head *e* standing at right angles to the slot *c* the handle is capable of free and unrestricted movement relatively to the brush in the vertical longitudinal plane of the slot *c*, and the brush will be compelled to partake of the movements of the handle without becoming disengaged therefrom, unless, as before described, the handle be placed in a position perpendicular to the back of the brush.

The block F and the socket which it occupies are shown as being tapered. This is for the sole purpose of facilitating "drawing" in the process of molding them, the block and weight being preferably made of cast-iron.

The object of the modified form of the invention is to positively prevent the accidental rotation of the block, even when the handle is vertical. In some uses of these brushes the operator swings the brush back and forth through a considerable distance, and in doing so the handle passes the vertical position, first to one side and then to the other. Without some means for preventing the rotation of the block it is possible that at the instant the handle reaches the vertical position a twist or strain tending to a relative rotary movement of the brush and handle about the vertical axis of the latter will turn the block and either free the handle or interfere with its free movement in the slot of the brush. To prevent this, the block is provided with a non-circular portion having shoulders or faces *f'*, adapted to be engaged by a key G, mounted in a suitable socket in the weight C. The key has a laterally-projecting head *g*, adapted to be engaged by the finger for lifting it out of engagement with the non-circular portion of block, and the weight is recessed to receive said head, so that it does not project. In order to prevent the complete withdrawal of the key, it is enlarged at bottom, preferably wedge shape, and its socket at top is not of sufficient width to permit its withdrawal.

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

1. A brush having a socket, said socket having a top wall with an opening therethrough, a handle having a head adapted to be inserted and removed through said opening and having also a neck occupying said opening and revoluble therein, and a block occupying the socket and revoluble therein, said head having non-rotative engagement with the block, whereby they may be rotated together for the purpose of bringing the head into and

out of register with said opening, substantially as described.

2. A brush having a socket, said socket having a top provided with a slot, a block occupying said socket and revoluble therein and a handle having a cross-head engaging the block and a neck passing through the slot, the block and handle being revoluble for the purpose of engaging and disengaging the cross-head and the top wall of the socket, substantially as described.

3. A brush having a socket, said socket having a top wall provided with a longitudinal slot opening thereinto and extending in both directions therefrom, a block occupying said socket and revoluble therein, said block having a diametrical groove, and a handle having a T-head adapted to be inserted through said slot and into said groove, whereby when the handle is held in vertical position and given a partial rotation the T-head will engage the top wall of the socket and whereby when the handle is inclined from vertical position the side walls of the slot will engage it and prevent the revolution of the block, substantially as described.

4. A brush having a socket, said socket having a top wall provided with a longitudinal slot opening thereinto, a revoluble block occupying the socket and having diametrical grooves at right angles to each other, and a handle having a cross-head adapted to occupy one of said grooves and to be engaged by the top wall of the socket, substantially as described.

5. A brush having a socket, and a slot opening thereinto, a revoluble block in said socket, a handle engaging the block and adapted to be engaged with and disengaged from the brush by rotating the block, and a key for preventing the accidental rotation of the block, substantially as described.

MARSHALL W. WRIGHT.

Witnesses:

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