

(No Model.)

G. C. MAYNARD
ELECTRIC PUSH BUTTON.

No. 259,186.

Patented June 6, 1882.

Fig. 1.

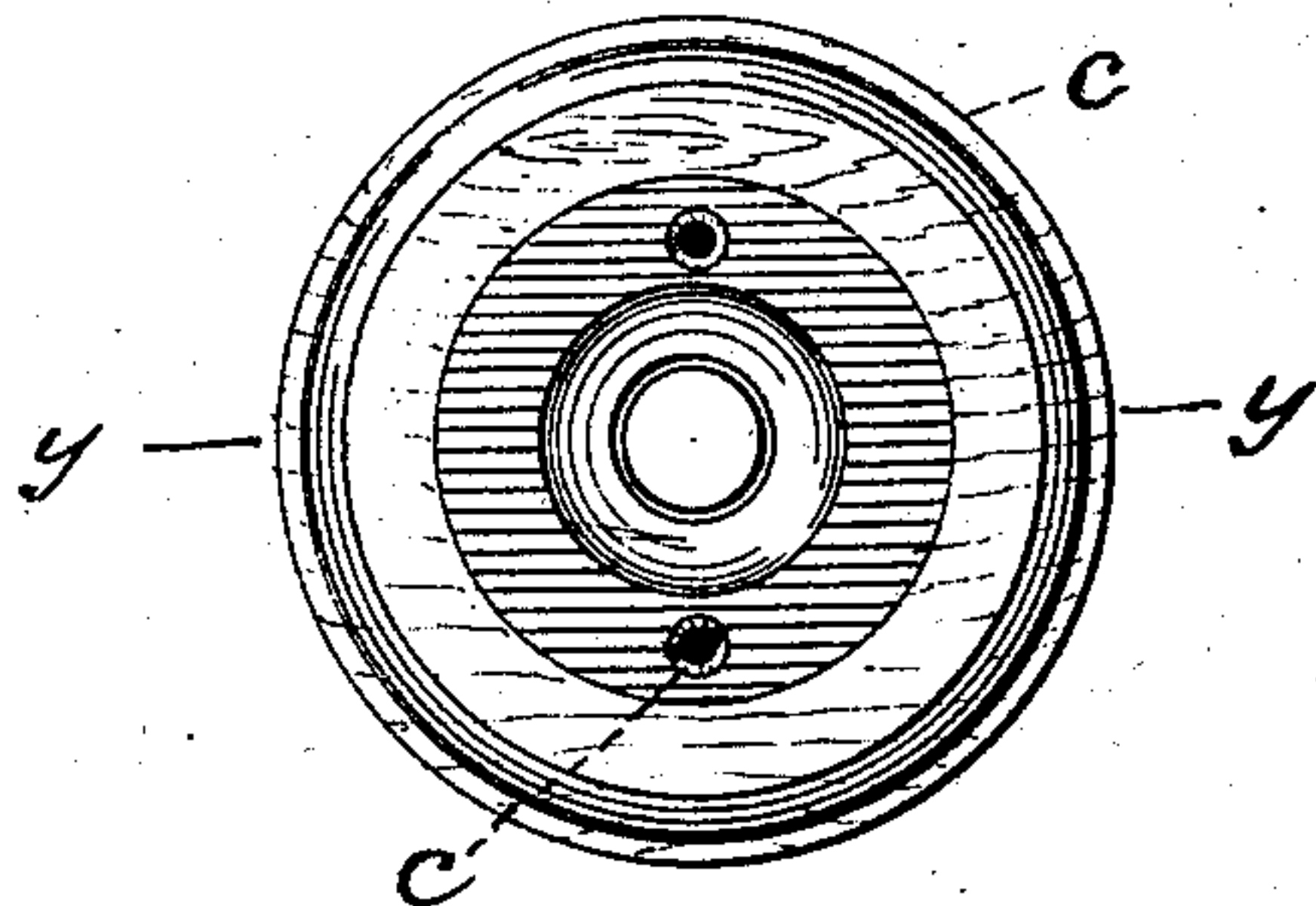


Fig. 2.

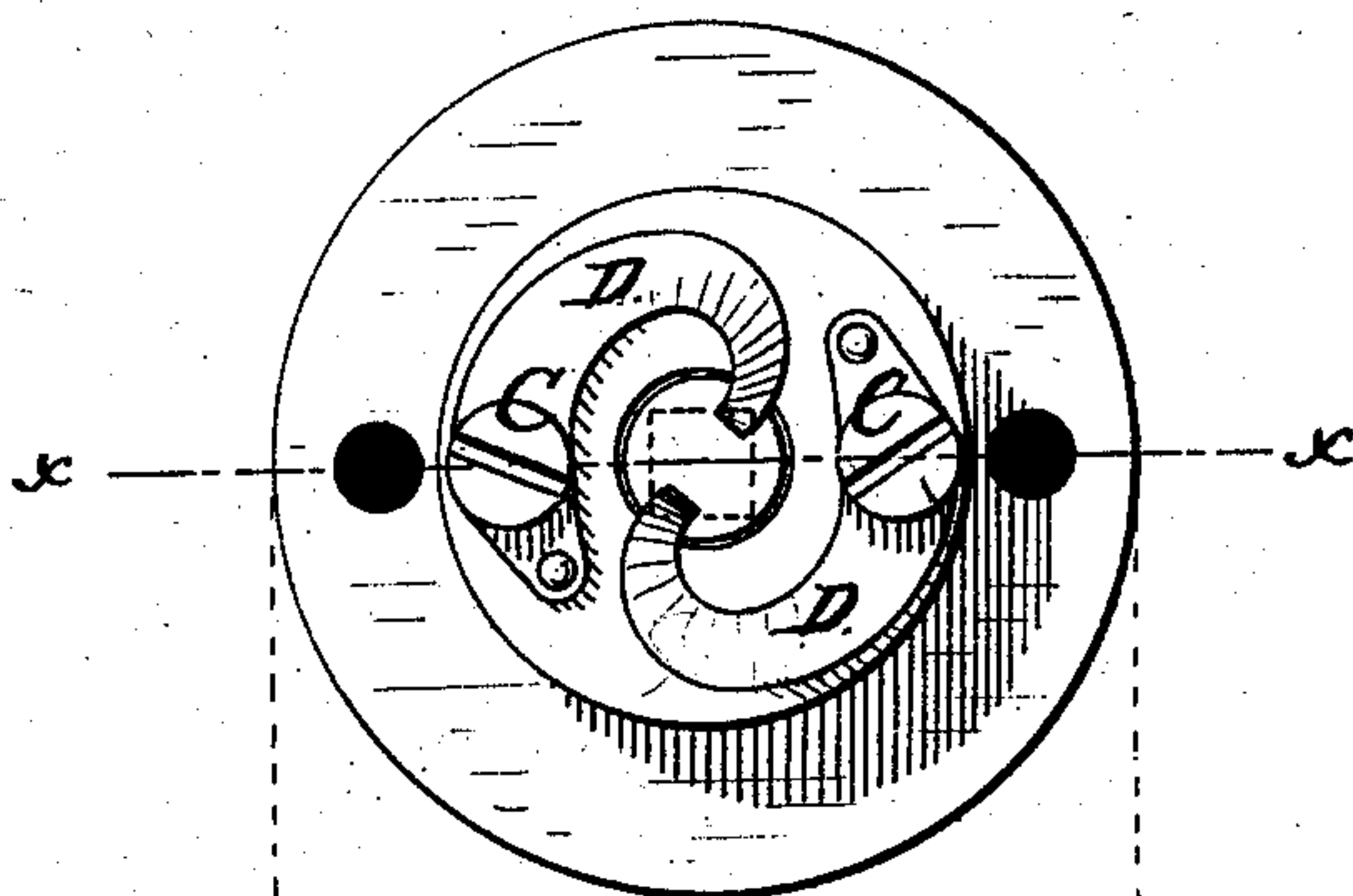


Fig. 5.

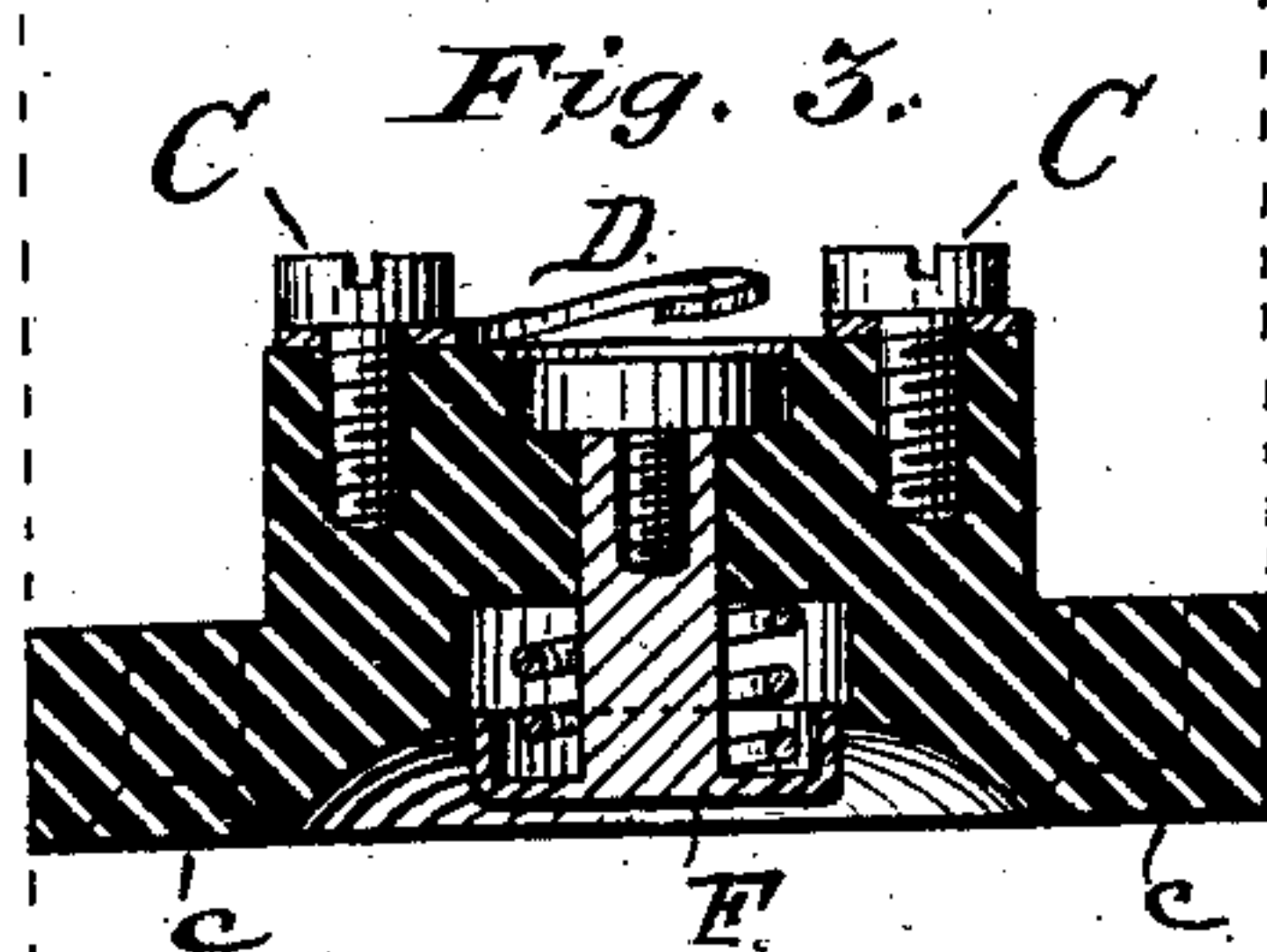
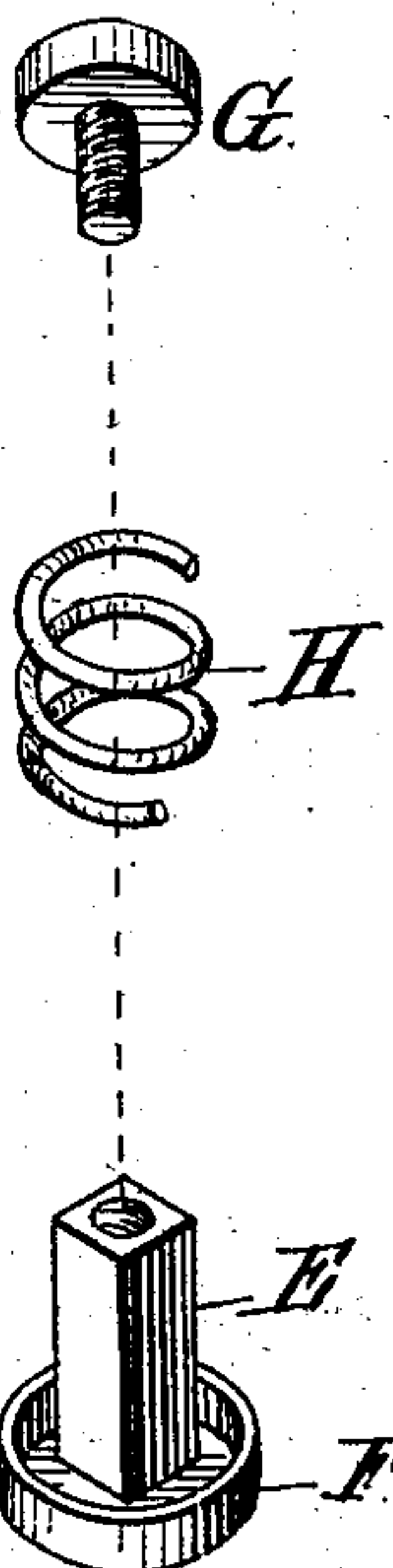


Fig. 4.

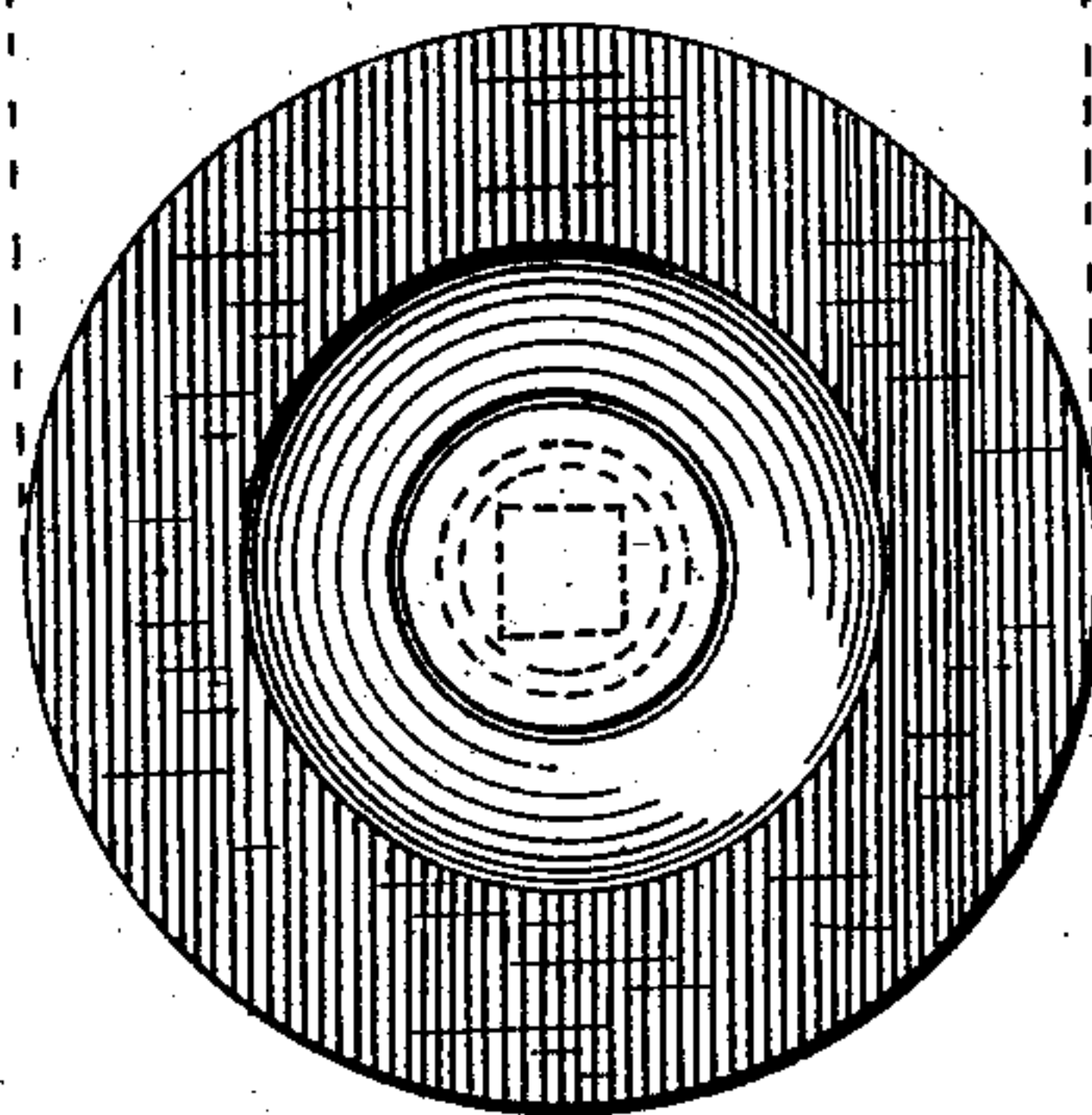
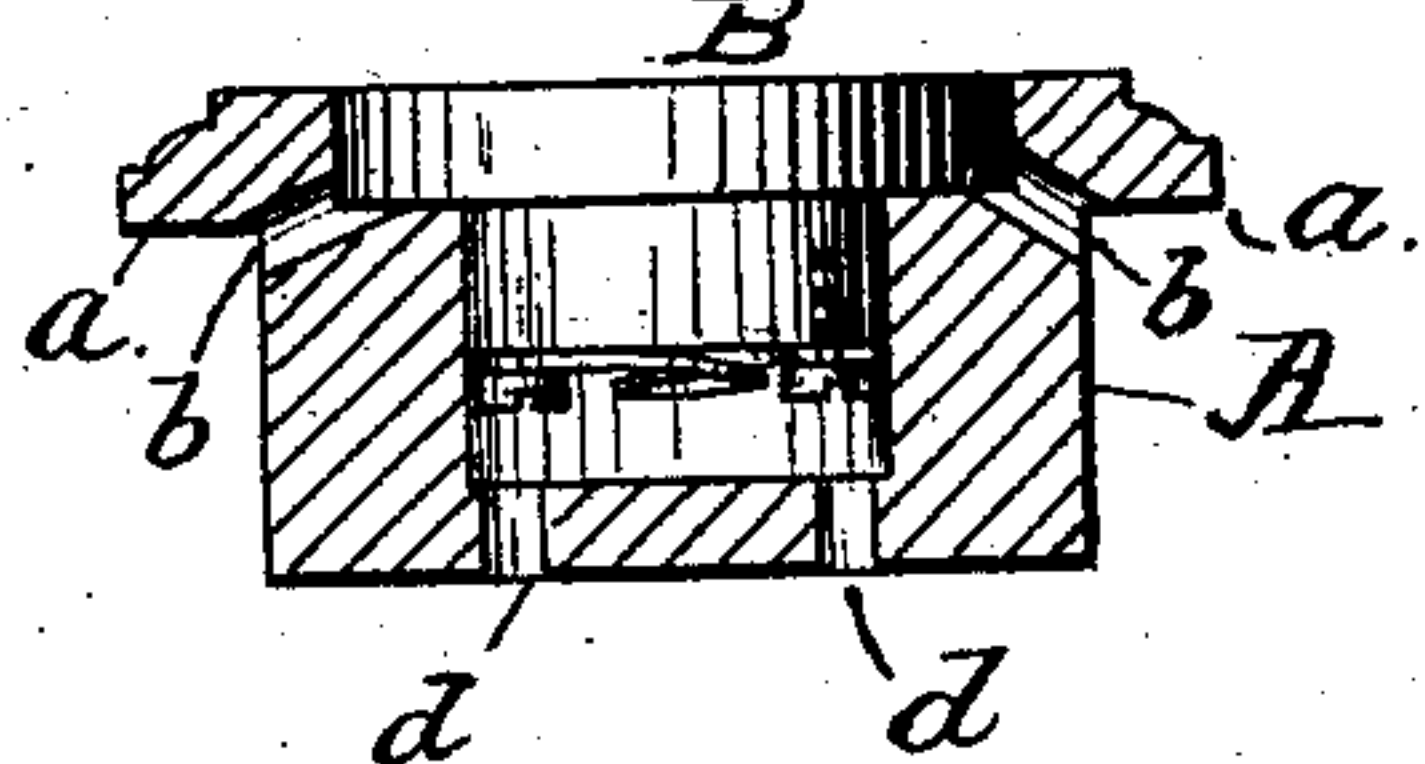


Fig. 6.



WITNESSES

T. C. Brecht.
L. F. Kelleher.

INVENTOR

Geo. C. Maynard

By J. M. C. W. Entire Attorney

UNITED STATES PATENT OFFICE.

GEORGE C. MAYNARD, OF WASHINGTON, DISTRICT OF COLUMBIA.

ELECTRIC PUSH-BUTTON.

SPECIFICATION forming part of Letters Patent No. 259,186, dated June 6, 1882.

Application filed April 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. MAYNARD, a citizen of the United States, residing at Washington, District of Columbia, have invented new and useful Improvements in Electric Push-Buttons or Circuit-Closers, of which the following is a specification.

My invention relates to certain new and useful improvements in the construction of push-knobs or electric circuit-closers; and it consists in the particular construction and arrangement of parts hereinafter described and specifically claimed.

In order that those skilled may fully understand my invention, I will proceed to describe the construction and operation of the same and the advantages derived therefrom, referring by letters to the accompanying drawings, in which—

Figure 1 is a plan view of my improved button secured within a "bush," adapted for use in plastered walls. Fig. 2 is a rear plan view, on an enlarged scale, of the push-button removed from the bush. Fig. 3 is a section of the same, taken at the line *x x* of Fig. 2. Fig. 4 is a front plan view of the same. Fig. 5 is a perspective view of the core or shank and spring, the several parts being detached to illustrate the manner in which they are secured to economize space. Fig. 6 is a cross-section taken at the line *y y* of Fig. 1, to show the relation between the push-button proper and the bush, and the manner in which the latter is secured in place.

Similar letters indicate like parts in the several figures.

A represents a bushing, made preferably of wood "turned" with a flange, *a*, to rest against the face of the wall within or against which it is to be secured. The center of the bush is bored or countersunk, as clearly shown at Fig. 6, to receive the push-button proper, B. In order to provide means for securing the bush, I provide it at the points indicated with screw-holes *b b*, which, with the screws, are thoroughly concealed when the push-button B is secured within its seat by screws *c*, passing through the rim of the same. The bush is also provided with channels or holes *d d*, through which the electric wires are conducted to their respective screw-posts C C, which in turn secure in place conducting spring-plates D D.

The push-button proper is formed preferably of hard rubber, and is hollowed out or countersunk centrally, as most clearly shown at Fig. 3, and arranged through the center of the button B is the core, which is illustrated dissected at Fig. 5, consisting of a metal shank, E, provided with a hollow head, F, a screw-nut, G, and a spiral spring, H. These parts are so arranged that the shank E shall pass through a central opening in the rubber button B, which is provided with a receptacle and seat for the spring and hollow head H F on one side and a seat and receptacle on the opposite side for the securing screw-nut G. From this construction it will be seen that the spring H is confined between the hollow head F and the seat prepared for it in the button B, and that by reason of the head F being hollow much less depth of space in the button is required for its accommodation. The screw-nut G, being applied on the opposite side of the button B and connecting with the end of the shank E, not only serves as the means for producing metallic contact with the two plates D to complete the circuit, but may be utilized to adjust the tension of the spring H, and to draw the head F a greater or less distance within the countersink in front of the button. The button proper, B, may be used without the bush A when desired, and any number of buttons B may be secured within suitable seats prepared for them in a common bed or board; or any number of the button-heads and shanks, Fig. 5, may be combined in countersunk holes in one board or plate of vulcanite. It will be seen that the shank is completely insulated when in its normal position, and that the circuit is made in the usual manner by forcing it against the plates D.

The button B being placed as shown within the body of the bush, and the button being countersunk centrally, and the core or shank arranged therein as described, the whole thing requires very little space when applied to a wall, or, in other words, a very slight projection occurs, and likewise, owing to its peculiar construction, the button B may be readily secured in place independent of the bush.

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

1. The button B, countersunk centrally and on opposite sides, in combination with the core

composed of the parts E G, screwed together, substantially as and for the purpose set forth.

2. In combination with the button B, constructed as described, and the core G E, made
5 in two parts, and provided with the hollow head F, the interposed and concealed spiral spring H, having one end thereof arranged within the hollow head, substantially as and for the purposes set forth.

10 3. The bush A, provided with a central recess for the reception of the button B, and provided with screw-holes *b b* and wire conduits or channels *d d*, substantially as shown and described.

4. The bush A, constructed as described, 15 in combination with the button B, adapted to cover and conceal the securing-screws of the bush, as hereinbefore set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 20 witnesses.

GEORGE C. MAYNARD.

Witnesses:

WM. C. MCINTIRE,

WM. H. BATES.