

(No Model.)

J. H. SHAW.

DOOR KNOB.

No. 321,862.

Patented July 7, 1885.

Fig. 1

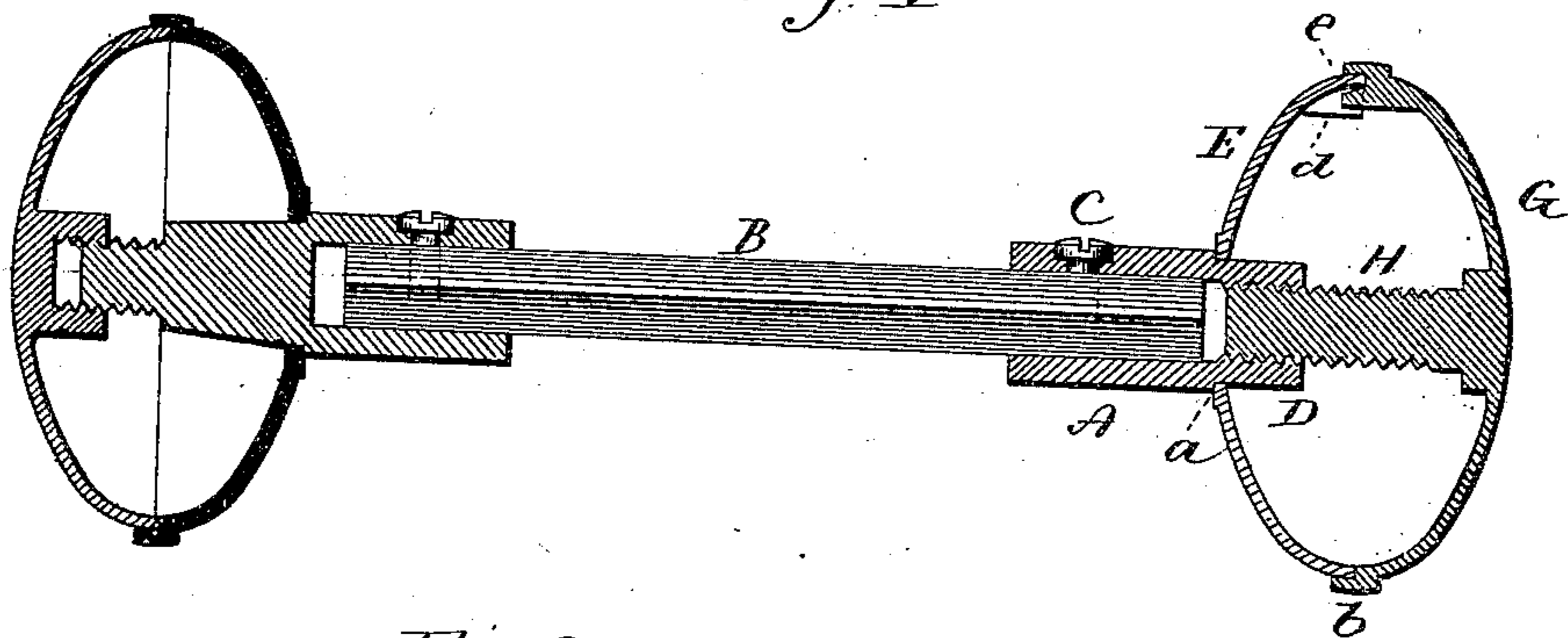


Fig. 2.

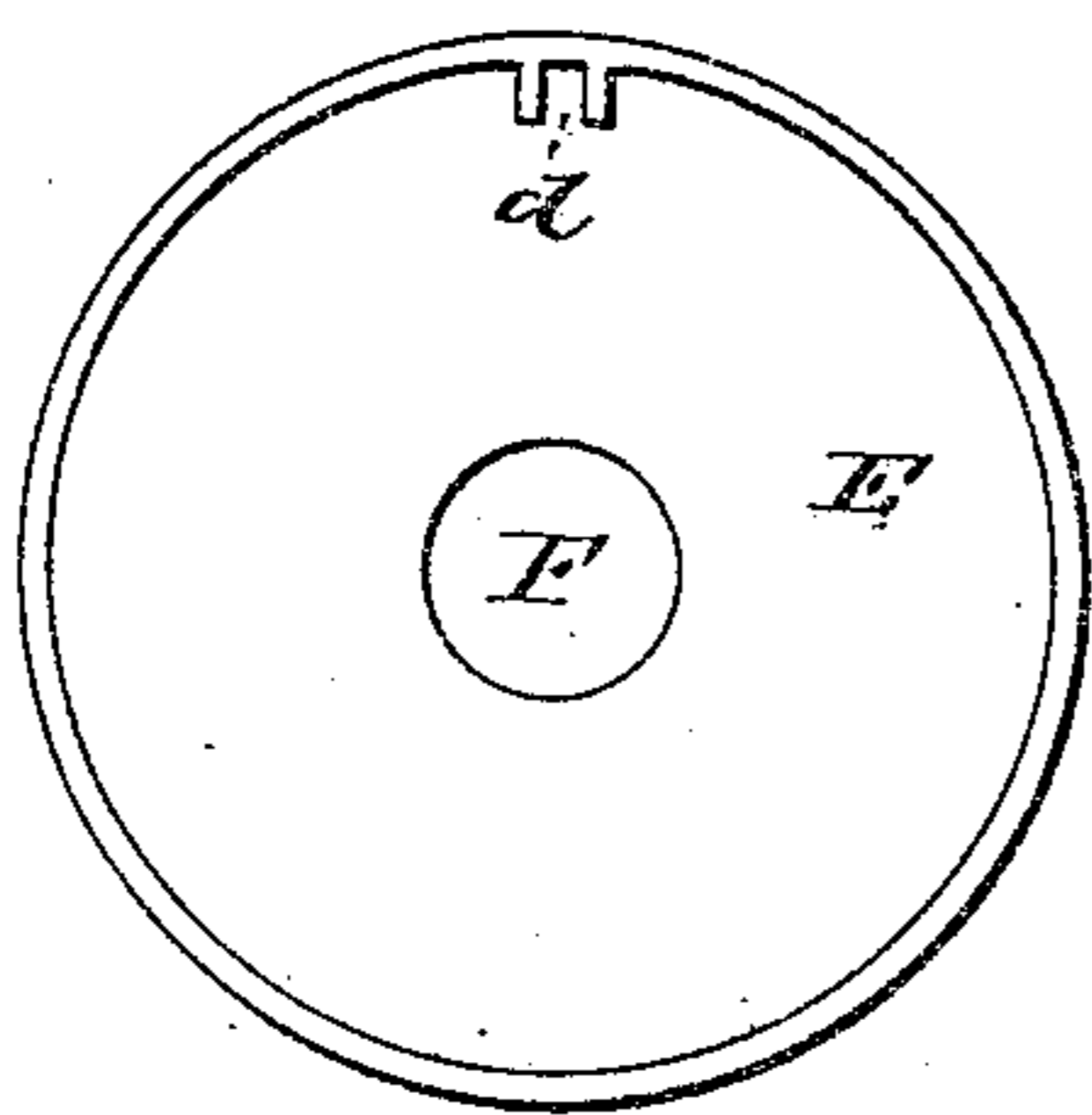
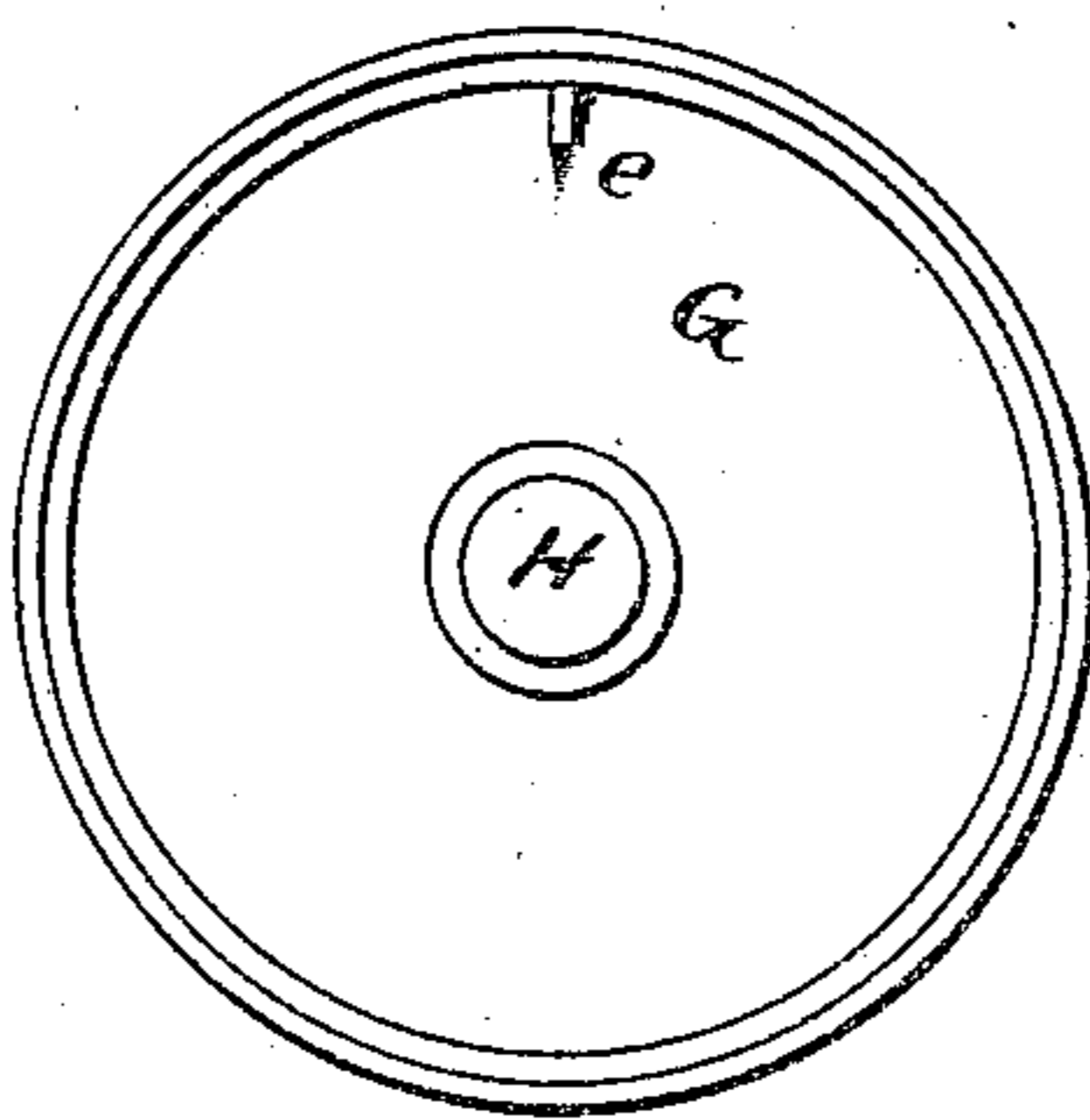


Fig. 3.



Witnesses.
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JOHN H. SHAW, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO SARGENT & CO., OF SAME PLACE.

DOOR-KNOB.

SPECIFICATION forming part of Letters Patent No. 321,862, dated July 7, 1885.

Application filed April 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. SHAW, of New Haven, in the county of New Haven and State of Connecticut, have invented new Improvements in Door-Knobs; and I do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a section through two knobs, the one at the right showing the male screw on the knob and female screw in the neck, the one at the left showing this order reversed; Fig. 2, an inside view of the part E of the knob; Fig. 3, an inside view of the part G of the knob.

This invention relates to an improvement in that class of door-knobs which are made from cast metal, and which are cast in two parts, divided at the largest diameter in a plane at right angles to the axis, in order that the knob may be cast hollow. Various devices have been employed to secure the two parts together. In that more generally employed the one part is cast with a flange upon its edge to overlap the edge of the other part, and so as to be turned down over the said other part and embrace it to such an extent as to hold the two parts together. In some cases the two parts are soldered or brazed at their meeting edges.

The object of my invention is a cheap and simple construction, and whereby the subsequent labor of uniting the two parts at their meeting edge may be avoided; and it consists in a neck having an extension therefrom to enter the rear side of the knob, and so that a shoulder is formed around the neck, combined with the rear part of the knob, adapted to rest against said shoulder, and the forward part of the knob constructed to meet the rear part in a plane at right angles to the axis, each of the two parts constructed to interlock the one with the other, the outer part of the knob constructed with a concentric screw extending from its inner surface to the neck, the neck correspondingly screw-threaded, and whereby when the two parts are set together and interlocked the rear part may be set on over the neck, and the

screw on the outer part, turned into the corresponding threaded recess in the neck, will clamp the two parts upon the neck, as more fully hereinafter described.

A represents the neck, which is constructed to fit the spindle B in the usual manner, and may be adjusted thereon by the usual set-screw, C, or otherwise. The neck is constructed with a concentric extension, D, at its forward end, smaller in diameter than the neck, and so as to form a shoulder, *a*. The extension is internally screw-threaded concentric with the neck.

E is the rear part of the knob, which is made from cast metal and of concavo-convex shape, having a central hole. F, adapted to pass on over the extension D of the neck and set against the shoulder *a*, as seen in Fig. 1; G, the other or outer part of the knob, of shape corresponding to the inner part, E, the division between the two being at the largest diameter and in a plane at right angles to the axis of the knob. Preferably, one part—say G—is constructed with a flange, *b*, around its outer edge to overlap the other part, E, as seen in Fig. 1.

Upon the inside of the part G and in axial line, a screw, H, is attached to or made an integral part thereof, the screw H screw-threaded corresponding to the screw-thread in the neck, and of a length to extend into the neck.

One of the parts of the knob—say E—is constructed with a notch, *d*, upon its inner edge, and the other part, G, with a corresponding lug, *e*, adapted to set into the notch *d* on the other part, as seen in Fig. 1. When the two parts are set together, with the notch on the one engaging the lug on the other, the rotation of one part independent of the other is prevented.

To attach the knob to the neck, the two parts are engaged by the notch and lug, as before described, then set on over the neck, the screw H entering the neck, and the knob turned to draw the screw into the neck and the knob onto the neck until the inner part, E, comes to a hard bearing against the shoulder *a* on the neck. The knob should be turned onto the neck with very considerable force, so as to

make the clamp-like engagement between the knob and the neck so strong that the ordinary use of the knob, as in working the latch, will have no effect to unscrew the knob from the neck.

The engagement between the two parts I have represented as by a single lug on the one and corresponding notch on the other. It is immaterial upon which the lug or notch be formed, and there may be several interlocking devices applied, if desired, it only being essential to my invention that there shall be an interlocking-connection between the two parts, so that one part may not be rotated independent of the other.

By this construction of knob the two parts are cast complete, and in their union no labor is required to make engagement between the edges of the two parts. The overlapping flange simply hides the joint and forms an annular ornamental bead around the knob.

I have represented the neck as constructed with a female screw, and the part G with a male screw; but this order may be reversed—the female screw made on the part G and the male screw on the neck, as indicated at the left in Fig. 1.

I do not wish to be understood as claiming, broadly, a knob constructed in two parts di-

vided at right angles to the axis at the largest diameter of the knob, and so that one part may be interlocked with the other as the two parts are secured together, as such construction, I am aware, is not new.

I claim—

The herein-described door-knob, consisting of the neck A, adapted to receive the spindle, and constructed with an extension, D, at its outer end, forming a shoulder, *a*, around the neck, the part E of the knob, of concavo-convex shape, having a central opening to set on over the extension of the neck and so as to come to a bearing upon the shoulder *a*, and the part G of the knob, of similar concavo-convex shape and corresponding to the part E, the said parts constructed the one with a projection and the other with a corresponding notch, so that the two parts may interlock each other, the part G and the neck constructed the one with a male and the other with a female screw concentric with the axis of the neck, and whereby said two parts interlocked are clamped to the neck, substantially as described.

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Witnesses:

JOHN L. BRAND,
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