

(No Model.)

E. A. JOHNSON.

DOOR KNOB.

No. 303,435.

Patented Aug. 12, 1884.

Fig. 1.

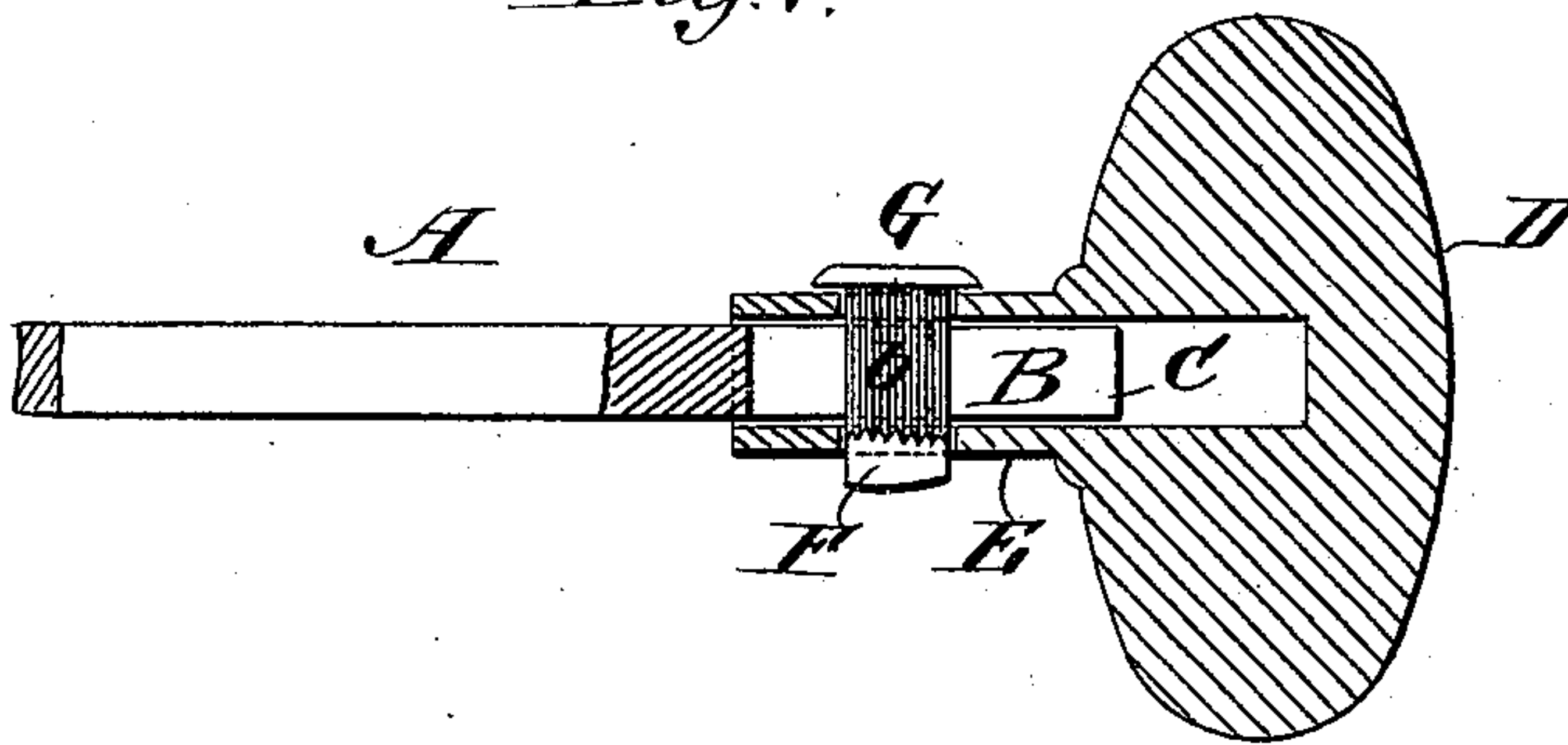


Fig. 2.

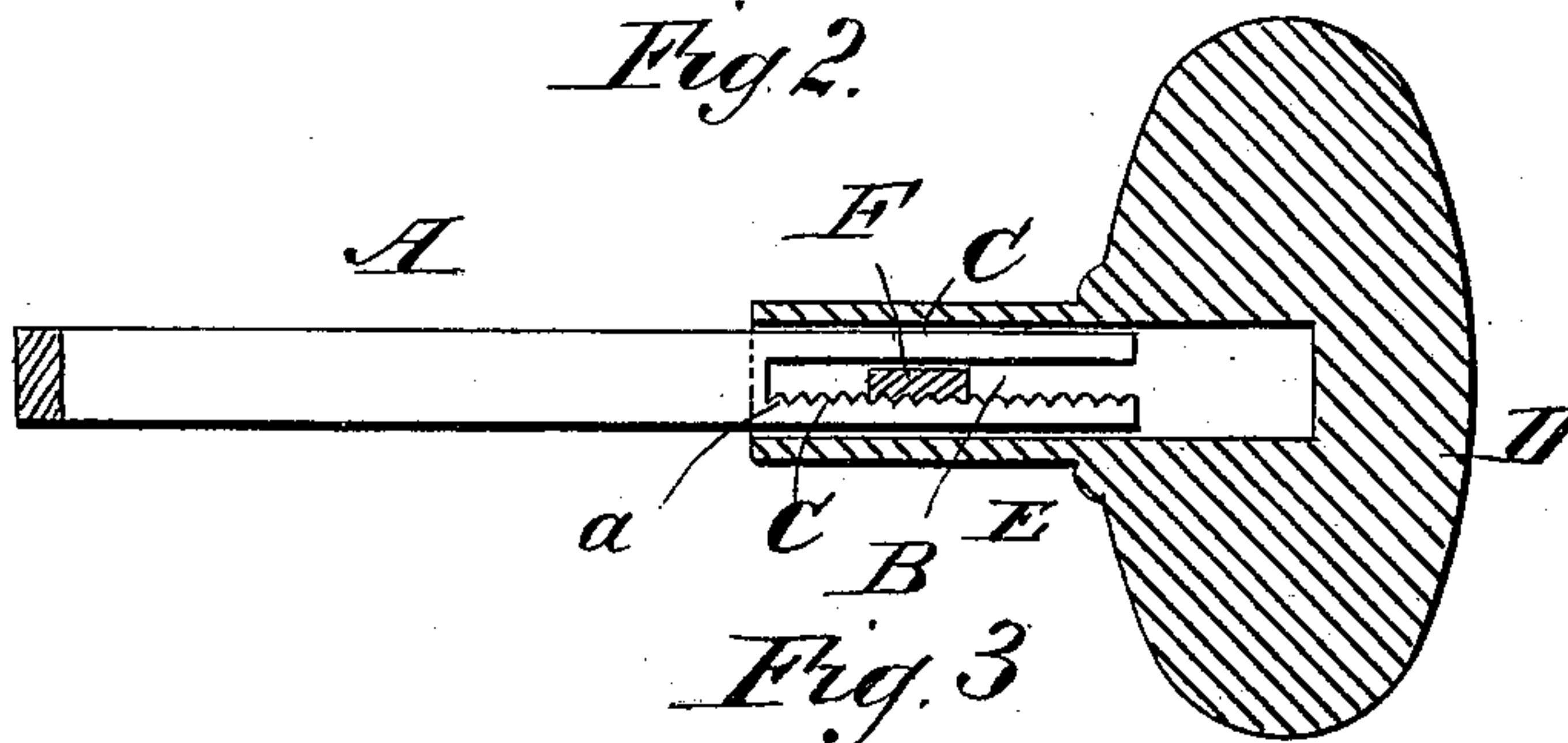


Fig. 3.

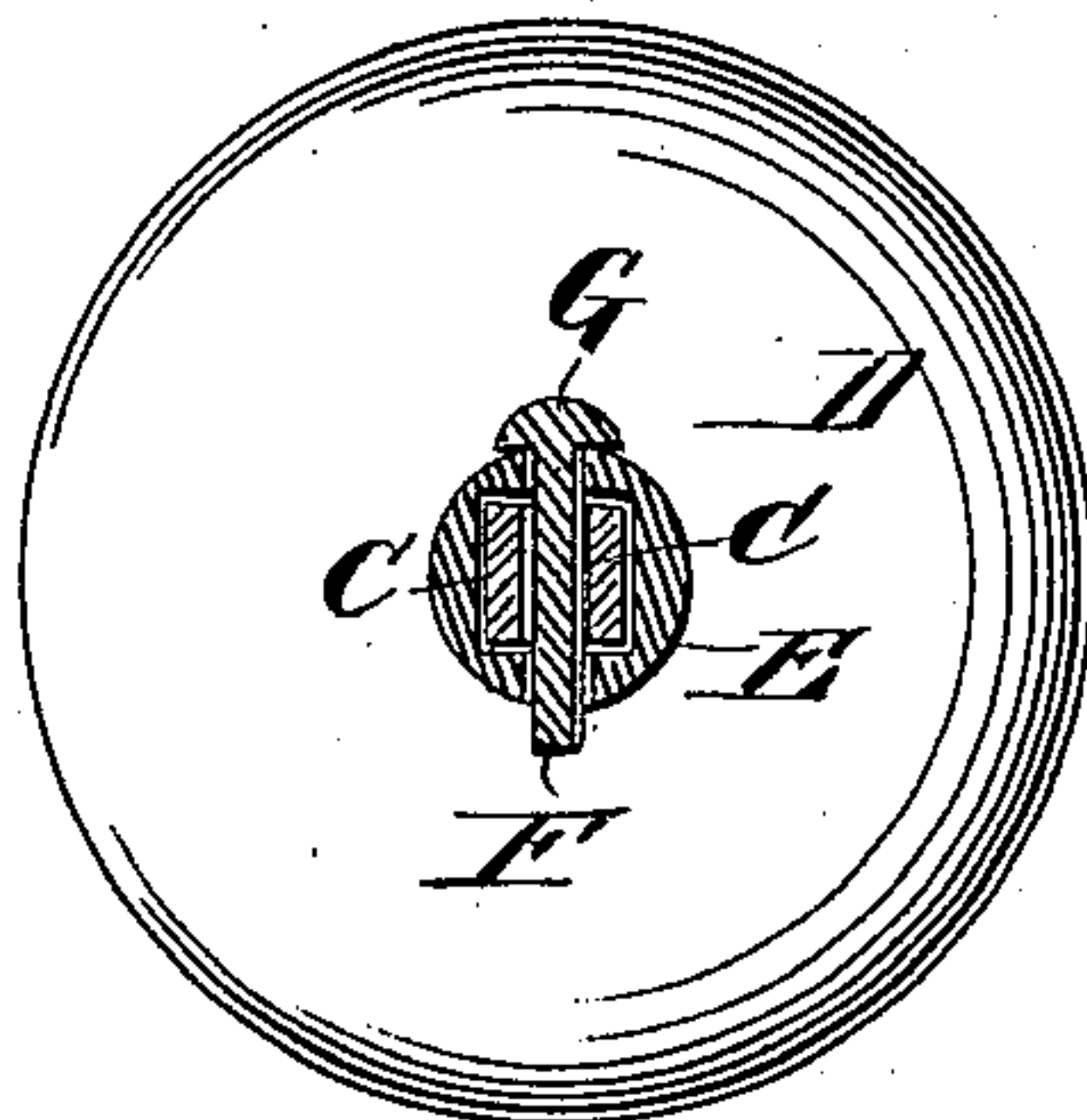
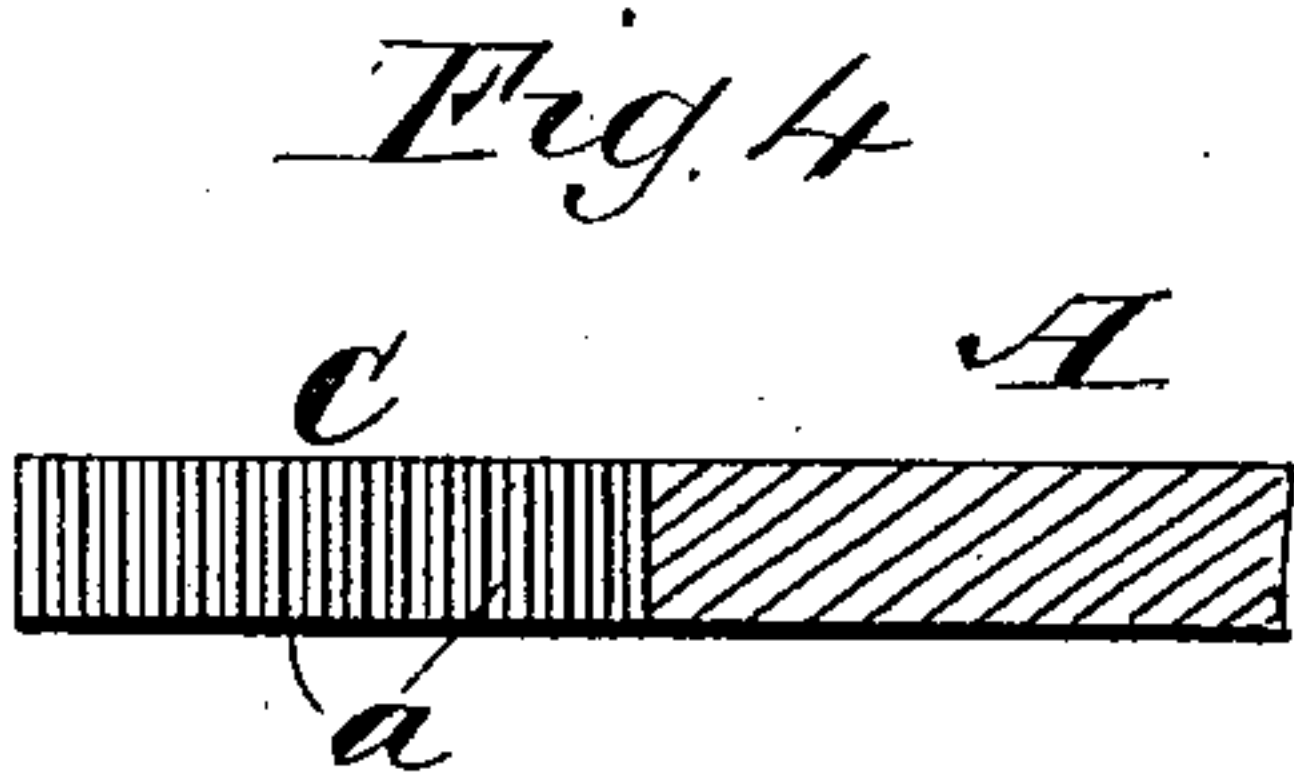
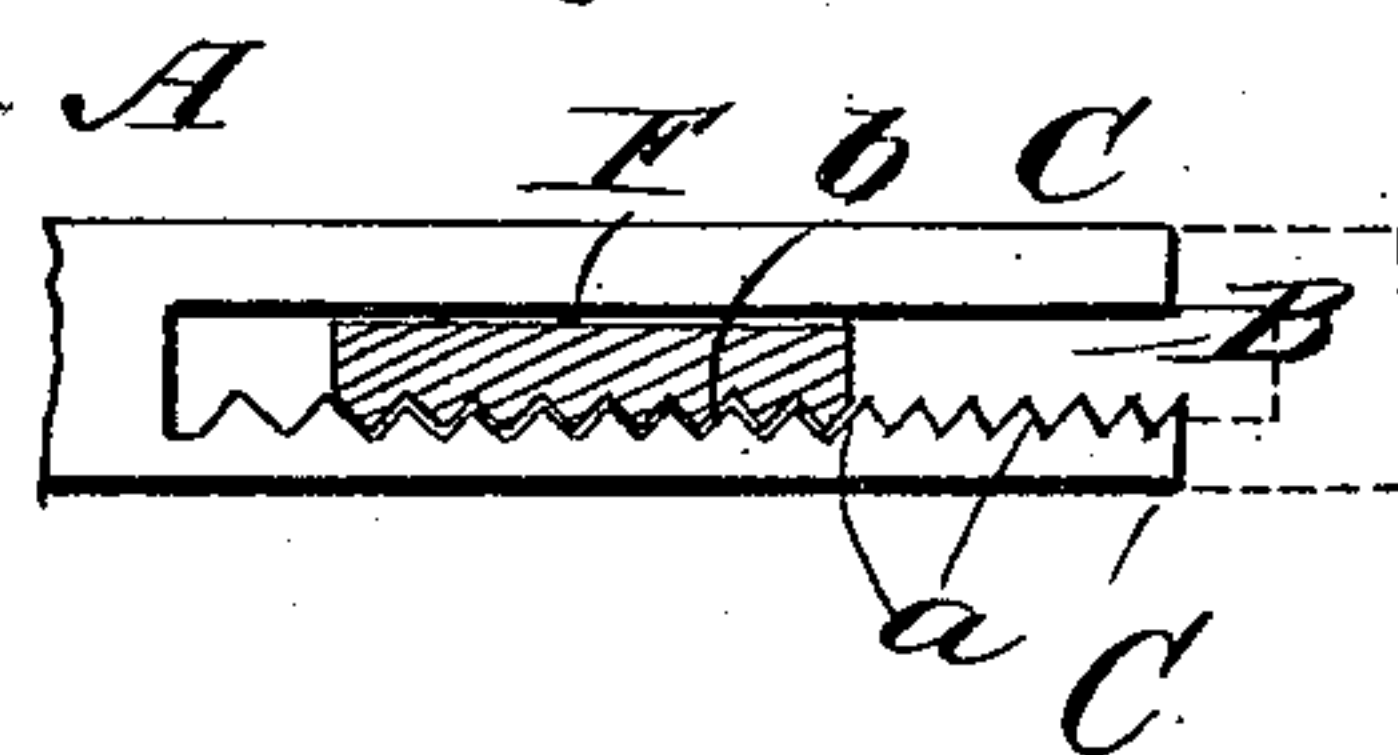


Fig. 5.



WITNESSES:

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EDWIN ALFRED JOHNSON, OF ALLEGHENY CITY, PENNSYLVANIA.

DOOR-KNOB.

SPECIFICATION forming part of Letters Patent No. 303,435, dated August 12, 1884.

Application filed March 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWIN A. JOHNSON, of Allegheny City, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Door-Knobs, of which the following is a full, clear, and exact description.

The object of my invention is to facilitate the adjustment and securing of a door-knob on the knob-spindle according to the thickness of the door.

My invention relates to that class of knob attachments in which a serrated spindle is engaged by the edge of a key inserted through an aperture in the knob-shank; and the invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 shows a longitudinal sectional elevation of a door-knob and spindle provided with my improvement. Fig. 2 is a sectional plan view of the same; Fig. 3, a cross-sectional elevation. Fig. 4 is a detail longitudinal sectional view of the end part of the spindle. Fig. 5 is an enlarged sectional plan view of the key, showing it held in the forked end of the spindle.

One end of the knob-spindle A is provided with a longitudinal slot or slit, B, forming two prongs, C, on the end of the spindle. The inner sides of one or both prongs C are provided with vertical serrations *a*, preferably having a triangular cross-section. The knob D is provided with the usual neck, E, on its inner surface, for receiving the end of the spindle A. After the end of the spindle A has been passed into the neck E, a flat key,

F, is passed through a longitudinal slot in the neck E and between the prongs C, the said key having longitudinal serrations *b* in one or both side surfaces, which teeth are a trifle blunter than the teeth *a* in the inner surfaces of the prongs C, so that the teeth *b* of the key will bind on the teeth *a* of the prongs, and thus hold the parts together firmly and prevent rattling. The key F is provided on its top with a head, G, to prevent the key from dropping out. The binding of the teeth *a* and *b* also prevents the key from becoming loosened and dropping out. The bottom projection of the key facilitates removal when necessary. The end of the spindle A can be passed into the neck E a greater or less distance, as may be necessary, according to the thickness of the door, and in any desired position the knob can be locked in place by passing the key through the neck on the knob and the slit in the spindle, as described. The slot in the spindle may be open or closed at the inner end, as preferred.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a knob attachment, the combination of the apertured knob-shank and spindle A, provided with the longitudinal slot C, one of the sides of which has a series of vertical serrations, *a*, with a flat key provided on one of its faces with a series of vertical serrations for engaging those of the spindle, whereby when the key is inserted the interlocking serrations will be held closely in place by the key bearing against the opposite wall of the slot, substantially as set forth.

EDWIN ALFRED JOHNSON.

Witnesses:

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