A. RANKIN.

Door-Knob.

No. 169,036. Patented Oct. 19, 1875.

Fig. 1

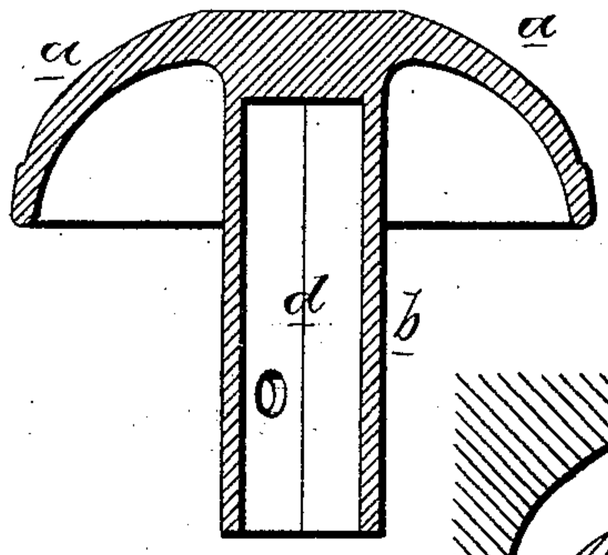


Fig. 3.

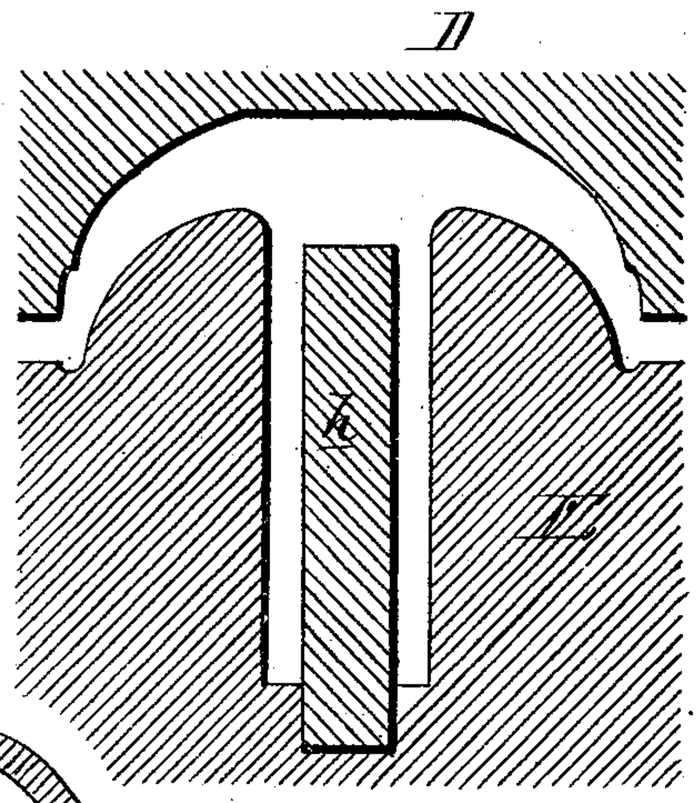
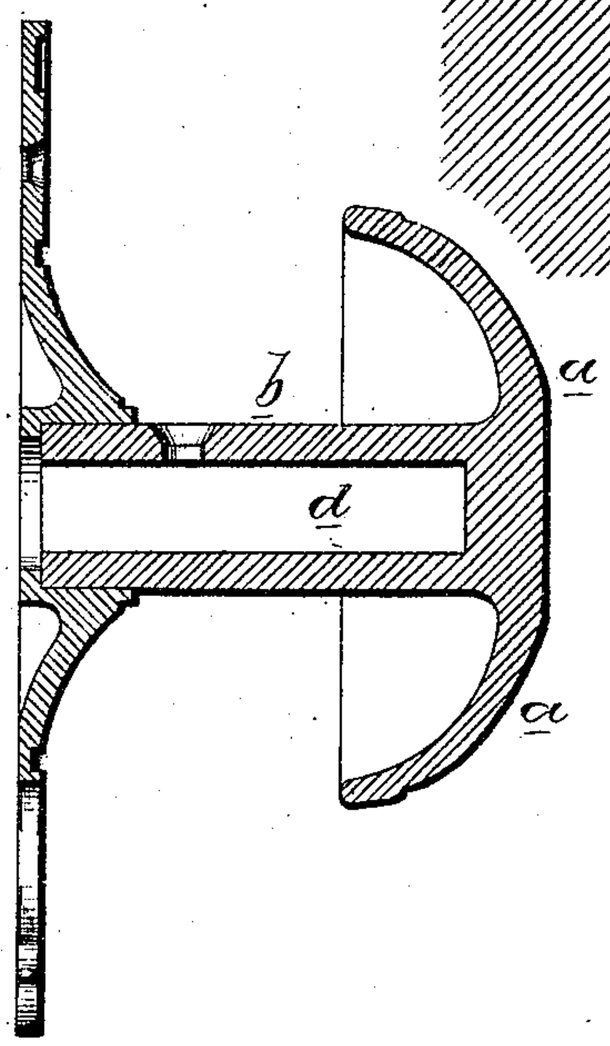


Fig. 2.



Witnesses,
Harry Smith
Hubert Howson

Andrew Rankin
by his attorneys
Howson and Sons

UNITED STATES PATENT OFFICE.

ANDREW RANKIN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN DOOR-KNOBS.

Specification forming part of Letters Patent No. **169,036,** dated October 19, 1875; application filed September 7, 1875.

To all whom it may concern:

Be it known that I, ANDREW RANKIN, of Philadelphia, Pennsylvania, have invented an Improved Door-Knob, of which the following is a specification:

My invention relates to that class of door-knobs which are made of cast metal, ornamented on the exposed surface and bronzed; and the object of my invention is to make a cheap knob of this class, an object attained in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical section of the knob; Fig. 2, a horizontal section of the knob and boss; and Fig. 3, a view of the mold used in casting the handle.

The heads of cast-metal knobs of the class to which my invention relates, have heretofore been made of two parts fitted and secured together, the outer or exposed part being ornamented by figures in relief, and the stem projecting from the inner part. I discard this costly mode of constructing knobs, and make both head and stem in one piece, as shown in the drawing, the head *a* being of a concavo-convex form, or of a form approximating thereto, and the stem *b* projecting from the inside of the head, and having the usual square orifice *d* for receiving the latch-spindle.

The cheapness of my improved knob will be best understood by referring to the ready means of molding it, as shown in the sectional view, Fig. 3, of two parts of the mold, separated from each other, D being the upper part of mold, with ornamental depressions corresponding with the relief ornaments to be imparted to the exposed surface of the head, and E the lower portion of the mold with the core *h*, for forming the square opening in the stem.

The head may be circular or many-sided, but must always be rounded, or partly straight and partly rounded, or other equivalent shape, on the outside, and hollow on the inside, the head being thus made comparatively light, and yet of such an external shape as to be conveniently handled.

I claim as my invention—

The within-described cast-metal handle, consisting of the concavo-convex head *a* and stem *b* cast in one piece, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANDREW RANKIN.

Witnesses:

HUBERT HOWSON,

HARRY SMITH.