(No Model.)

I. P. HUMPHREY.

KNOB ATTACHMENT.

No. 499,834. Patented June 20, 1893.

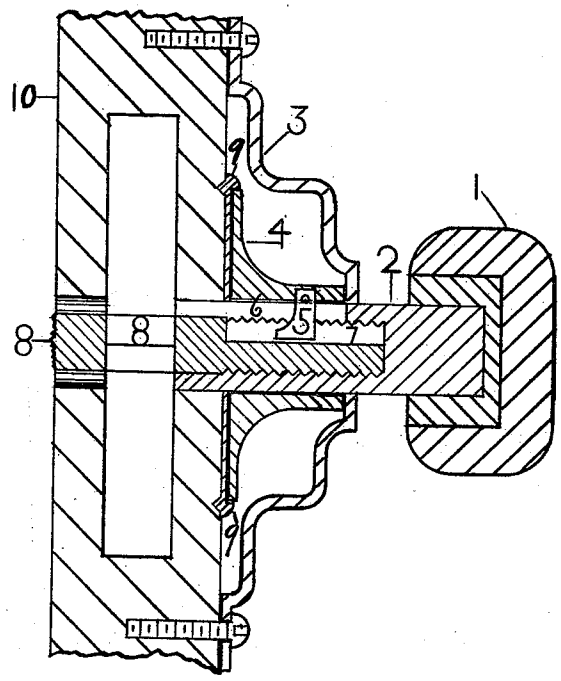

Fig: 1.

Fig: 3.

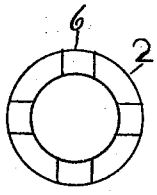

Fig: 2

Witnesses
J. F. Harris
A. M. Turner.

Inventor
Ira P. Humphrey
By his Attorney
W. M. Brown

UNITED STATES PATENT OFFICE.

IRA P. HUMPHREY, OF TROY, NEW YORK.

KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 499,834, dated June 20, 1893.

Application filed August 18, 1892. Serial No. 443,464. (No model.)

To all whom it may concern:

Be it known that I, IRA P. HUMPHREY, a citizen of the United States, residing at Troy, Rensselaer county, New York, have invented certain new and useful Improvements in Knob-Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a new and improved fastening for door knobs and similar articles.

In the drawings Figure 1 shows a vertical sectional view of a portion of an ordinary door with an opening for an ordinary mortise-lock (the lock being omitted) and a horizontal sectional view of a door knob, its stem, and the lock bolt with my fastening device; Fig. 2 a plan view of the end of the knob stem (omitting the inner screw threads); and Fig. 3 a plan of the end of the lock bolt (omitting the screw threads).

Heretofore many knobs have been attached to the lock bar by having a vertical threaded hole in the bar and a co-incident threaded hole in the knob stem and when the knob was in position a set screw was turned in the threaded holes and the knob and its stem made fast but, notwithstanding the use of washers and such contrivances, the knobs and their stems were often loose and would rattle and the set screw would jar loose and be lost and the knobs and their stems would become detached from the door and lock. My device avoids these difficulties by providing for turning the knob stem on the lock bar by means of screw threads thus allowing of making a firm solid bearing between the two and preventing rattling and also by providing a locking device to prevent the knob turning off the bolt after it is once turned up to position.

In the drawings the knob 1 is attached to the stem 2 in the ordinary way. This stem 2 has a circular threaded hole in its end and four slots or channels (more or less) cut entirely through the material of the stem as shown at 6, passing from the free end of the stem lock toward the knob to any required distance. The lock bar 8 has coincident channels 7 cut in it as shown clearly in Fig. 3, and has its ends threaded to mesh with the inner ends of the knob stem 2 so that when the stem 2 is turned upon the bar 8, the channels or slots 6 will or can be made to coincide with slot 7. I also provide a recessed plate 9 having prongs, preferably, on its under surface by which it may be made fast to the face of the door and having an opening through its center preferably so that it will slip over the knob stem 2. In the recess on this plate 9 I set the rose 4 having an opening through it so that the knob stem will slip easily through it and in the opening in the rose 4 I set a movable dog or pawl 5, the movement of which is indicated by the dotted lines, this pawl or dog 5 being arranged to drop through channel or slot 6 in stem 2 and into channel 7 in the bar lock 8 and when in this position locking the stem 2 and bar 8 so that they cannot be separated from each other but the rose 4 to which dog 5 is affixed turns freely in the recess of plate 9 so that when the knob is turned it will operate the lock bar and the mechanism of the mortise-lock. I also provide the escutcheon 3 which slips upon the stem 2 and when set in position holds the rose 4 in position. The operation is as follows: The stem 2 being turned upon the bar 8 the dog 5 is held in the position shown by the dotted lines until the stem 2 is brought to a bearing, when the dog 5 is dropped and enters the slots 6 and 7 and thus prevents the stem 2 being turned off the bar 8. The escutcheon 3 being now in place holds rose 4 and dog 5 in position allowing rose 4 to turn in the recess in plate 9. The knob and its stem will now be fast in place and cannot rattle nor can it be removed without first removing the escutcheon 3, thus making a fastening that cannot easily be tampered with, and one not liable to get out of order and that will remain permanently fast and not rattle.

In Fig. 1 I show but one channel in the stem 2 and bar 8, and I do this to avoid confusion in the drawings, but as many or as few channels as may be desired may be used.

I do not confine myself to the precise form of mechanism shown but any equivalent or

any well-known mechanism may be used. The dog 5 when it is turned downward or by reason of its hanging downward instead of being on the upper side of the stem 2 is kept in its place by friction or fitting tight enough against the sides of the recess in the rose 4 in which it is set and on the escutcheon so that it will not drop out of its channels 6 and 7.

Having fully described my invention, what I claim is—

A fastener for door knobs and similar articles, consisting of a knob stem having a threaded longitudinal opening arranged to receive the threaded end of the lock-bar, said stem and said bar having coincident openings in them and having a rose or washer through which the knob stem passes and which does not limit the inward thrust of the knob stem, and a catch or dog attached to the washer or rose and arranged to enter and leave the coincident openings at will, said rose and washer being revoluble with the stem and bar but otherwise held immovable to the door or its attachments for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

IRA P. HUMPHREY.

Witnesses:
W. M. BROWN,
A. M. TURNER.