May 24, 1927. 1,630,032

C. F. ROOD

DOORKNOB

Filed June 29, 1926

Fig. 1.

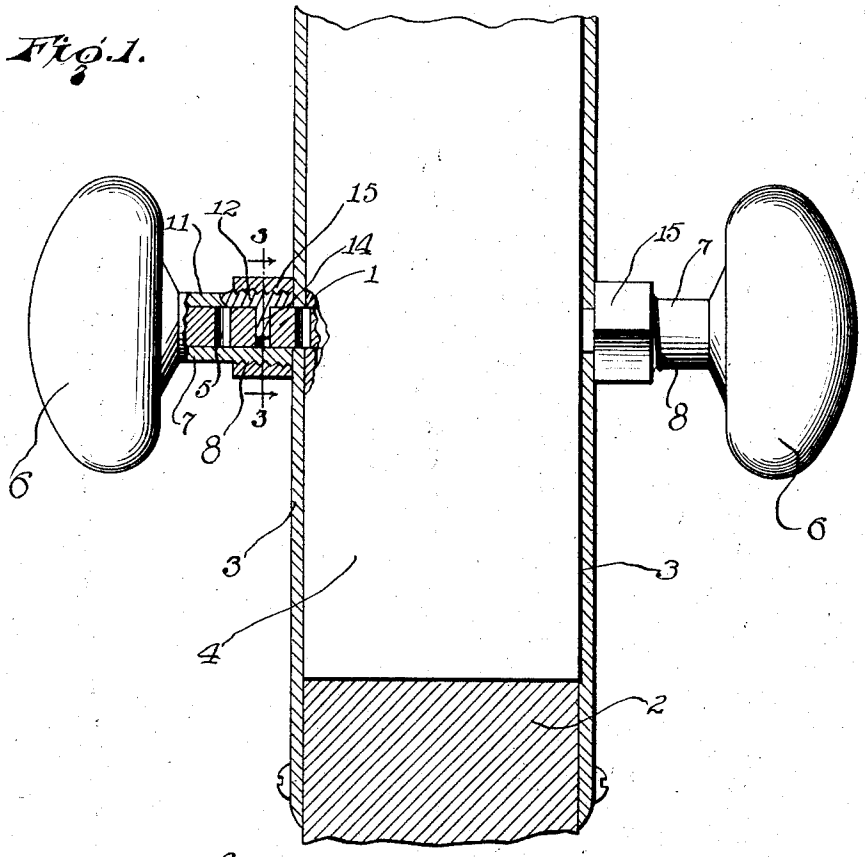



Fig. 2.

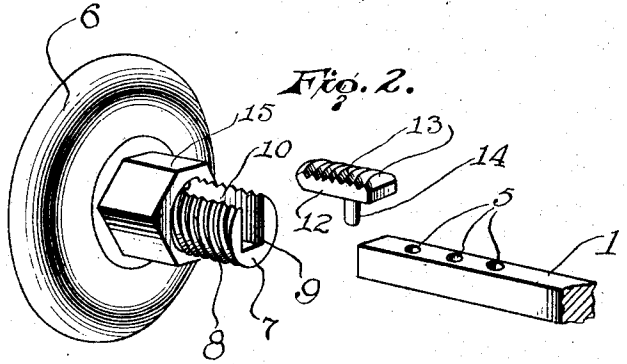
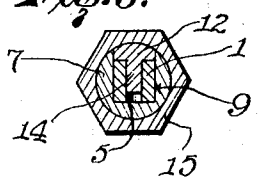



Fig. 3.




C. F. Rood, Inventor

By Lacey & Lacey, Attorneys

Patented May 24, 1927. 1,630,032

# UNITED STATES PATENT OFFICE.

CHARLES F. ROOD, OF SUTHERLIN, OREGON.

## DOORKNOB.

Application filed June 29, 1926. Serial No. 119,499.

This invention relates to door knobs and more particularly to a fastener adapted to connect a door knob with a cooperating spindle.

One object of the invention is to provide a fastener by means of which a door knob may be securely but removably held in engagement with a spindle and rattling of a knob due to longitudinal movement of the spindle through a door prevented.

Another object of the invention is to so construct the fastener that it will be prevented from working loose and releasing the knob.

This invention is illustrated in the accompanying drawing, wherein

Figure 1 is a view principally in elevation and partially in longitudinal section showing a door knob of the improved construction applied to a spindle passed through a door;

Fig. 2 is a perspective view of the door knob together with a portion of the spindle and the keeper which holds the knob in engagement with the spindle;

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1.

The spindle 1 which is passed through the door 2 and protrudes from the face plates 3 of the lock 4 is of a conventional construction and consists of a metal bar which is rectangular in cross section and has each end portion formed with passages 5 spaced from each other longitudinally of the bar and constituting seats. A knob 6 is applied to each end of the spindle and as the knobs are of a duplicate construction and secured to the spindle in a like manner only one will be described in detail.

Each knob is provided with a neck or shank 7 which projects from the inner end of the knob and has its free end portion threaded, as shown at 8. A socket 9 which is rectangular in cross section and adapted to snugly receive a protruding end portion of the spindle 1 extends into the shank from its free end and is provided with a side opening 10 which extends from the free end of the shank and terminates in spaced relation to the inner end thereof. At its inner end the walls of the side openings 10 are beveled to provide a surface 11 upon which the under cut inner end of the keeper or filler 12 is adapted to rest. The keeper 12 is also formed of metal and has its outer surface formed with teeth 13 which constitute segments of threads and serve to complete the threads formed upon the shank when the keeper is in place. A pin 14 extends from the inner face of the keeper or filler and is adapted to be received in a selected one of the openings 5. It will be readily seen from an inspection of Fig. 1 that after the spindle has been passed through a door the keeper may be applied to its protruding end with the pin received in a selected opening or seat 5 and the shank of the knob then applied to the spindle with the keeper fitted into the side opening 10 and its under cut end resting upon the beveled surface 11. The securing nut 15 which is carried by the shank and disposed adjacent the knob, as shown in Fig. 2, before the knob is applied to the spindle is now screwed upon the threaded portion of the shank towards its free end and as it moves upon the shank its threads will engage the teeth or tread segments of the keeper as well as the threads of the shank. The threads of the shank prevent the nut from sliding longitudinally thereon and since the threads of the nut are interlocked with the threads of the keeper it will also be impossible for the keeper to slide longitudinally of the shank. The knob will, therefore, be very securely held upon the spindle but may be readily released when necessary. By adjusting the nut until it engages the face plate 3 of the lock longitudinal movement of the spindle through the lock and door may be eliminated and rattling prevented from occurring. One of the knobs may be applied to the spindle before it is passed through the door and lock or the spindle may be first passed through the door and then the two knobs secured to it.

Having thus described the invention, I claim:

A device of the character described com-

prising a spindle, a handle including a threaded shank formed with a socket open along one side and at its outer end, said spindle being fitted into said socket, a filler removably fitted into the open side of said socket, and interlocked with the spindle to prevent movement longitudinally thereof, said filler having threads forming a continuation of the threads of the shank, and a securing nut screwed upon said shank and filler to hold the filler in place and retain said handle in engagement with said spindle.

In testimony whereof I affix my signature.

CHARLES F. ROOD. [L. S.]