(No Model.)

B. F. LIBBY.

KNOB ATTACHMENT.

No. 339,440. Patented Apr. 6, 1886.

Fig. 1.

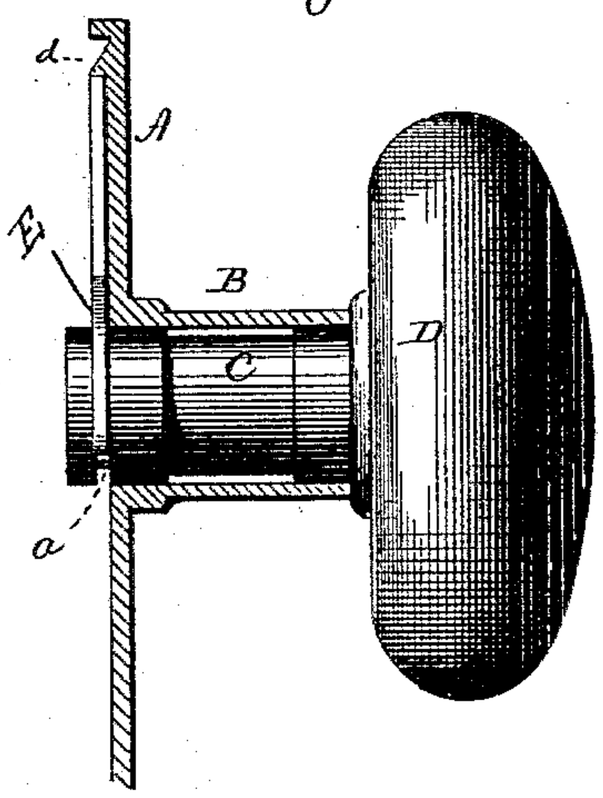


Fig. 2

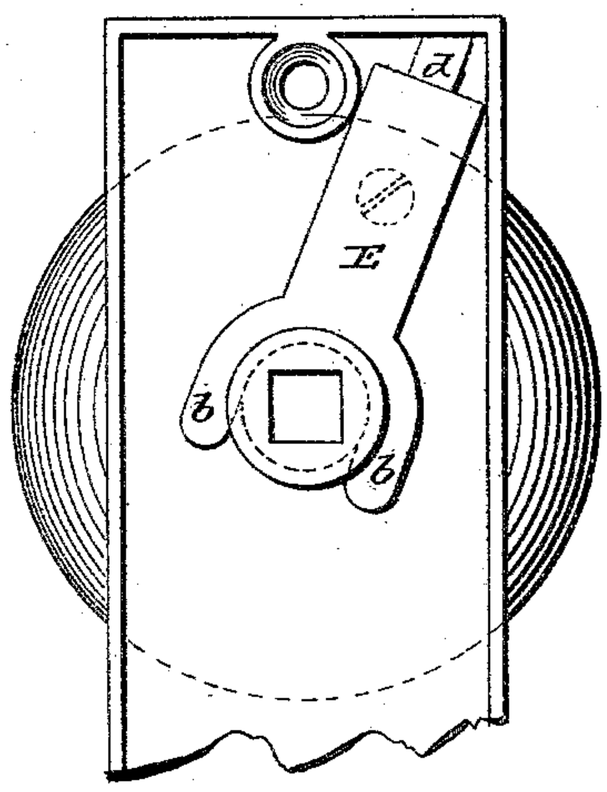


Fig. 4

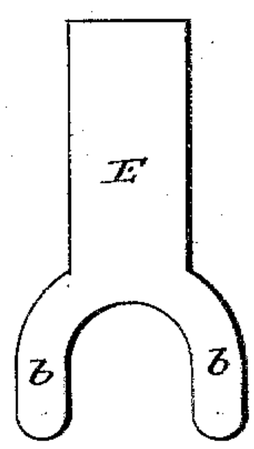


Fig. 3.

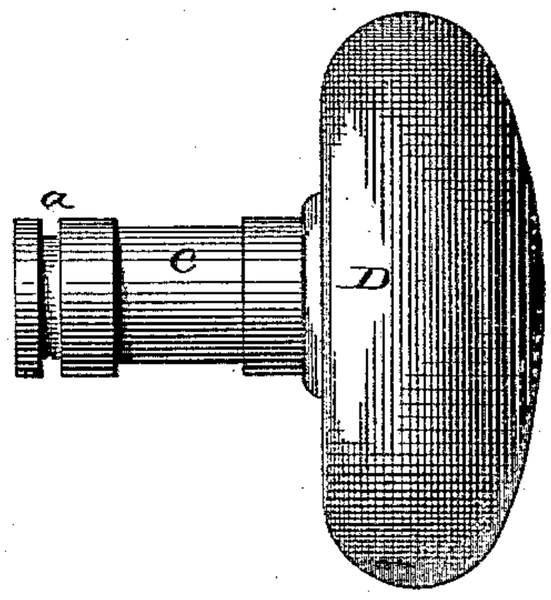
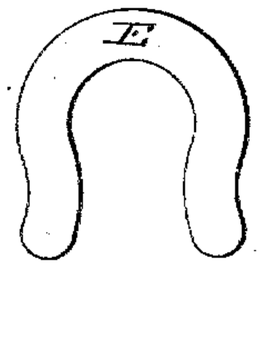


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

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KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 339,440, dated April 6, 1886.

Application filed November 23, 1885. Serial No. 183,594. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. LIBBY, of South Norwalk, in the county of Fairfield and State of Connecticut, have invented new Improvements in Knob Attachments; 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 side view of the knob, showing vertical central section of the rose; Fig. 2, a rear view of the rose, showing the knob secured; Fig. 3, a side view of the knob detached; Fig. 4, the securing-fork detached; Fig. 5, a modification of the fork.

This invention relates to an improvement in a device for securing one knob of a pair which is made adjustable on the spindle to adapt it to doors of different thicknesses, the object being to make a firm and secure attachment independent of the spindle; and it consists in constructing the rose with a sleeve to receive the neck of the knob, the neck extended through the rose, and constructed upon its projecting end with an annular groove, combined with a fork removably set against a bearing upon the inside of the rose, the prongs of the fork resting in the groove in the neck of the knob, and as more fully hereinafter described.

In illustrating my invention I show the rose as of an oblong shape, such as used where the escutcheon for the key-hole is made in the same piece with the rose; but the shape of the rose is immaterial and may be any of the known shapes or styles.

A represents the rose. It is constructed with an outwardly-projecting sleeve, B, the internal diameter of which corresponds to the neck C of the knob D, in length corresponding to that of the neck of the knob, so that the knob will take a bearing against the outer end of the sleeve. The neck and knob are united in the usual manner. The neck itself is constructed to extend through the rose, and project upon the reverse side, and is free for rotation in the sleeve. Near the inner end and in the projecting portion of the neck an annular groove, *a*, is formed, which should be substantially flush with the plane of the inside of the rose.

E is the fork, which is constructed with a bifurcated end having two prongs, *b b*. (See Fig. 4.) The prongs correspond to the groove *a* in the neck of the knob in thickness and in distance between them, so that they may set within the groove, as seen in Fig. 2.

In coupling the knob with the rose the neck is passed through the sleeve, and then the fork E introduced to embrace the neck in the groove *a*, as seen in Fig. 2, the body of the fork lying upon the inside of the rose, and when so coupled the knob, while free for rotation, cannot be withdrawn. The fork should be prevented from rotation with the knob, and to do this I construct the rose upon the inside with a lug or bearing, *d*, against which the body of the fork may abut when in position, the body of the fork being sufficiently elastic to spring over the abutment and into place, and when there is secured against displacement, except by the application of some instrument for the purpose. The fork may, however, be otherwise secured to prevent its rotation, say, as by a screw through the fork into the rose, as indicated in broken lines, Fig. 2; or the prongs of the fork may be made elastic, the opening into the fork between the lugs slightly less in diameter than the diameter of the neck at the bottom of the groove, as seen in Fig. 5, and so that the fork may be forced into the groove, the prongs embracing the neck in the groove so as to prevent accidental displacement. In that case the fork does not require to be secured to the knob, but may be left free to revolve with the knob or remain stationary, as the case may be. I, however, prefer the fixed fork, as first described. In this case, as in other constructions where the knob is secured to the rose instead of the spindle, the rose is constructed to be strongly secured to the door either by screws through the rose on the one side into the rose on the opposite side or otherwise, constructions which are well known and do not require to be described in this specification. By this construction the knob is supported entirely by the rose—that is to say, the knob rests against the outer end of the sleeve

to resist inward force, and the fork takes a bearing upon the inside of the rose to resist outward force upon the knob.

I am aware that knobs have been constructed with an annular groove around the neck, and with a fork-like attachment adapted to set into the said groove inside the rose. I therefore do not claim, broadly, such construction; but I am not aware that the rose has been constructed with a sleeve extending outward, against the outer end of which the knob will take a bearing, the neck extending through the rose constructed with an annular groove inside the rose, and with a fork adapted to rest in said groove and take a bearing upon the inside of the rose, so that the knob is supported between the outer end of the sleeve on the rose and the inner surface of the rose.

I claim—

The combination of the rose A, constructed with the tubular sleeve B, the knob D, constructed with the neck C, corresponding to and so as to revolve freely in said sleeve, the neck of the knob extending through the rose, and at its inner end constructed with an annular groove, *a*, a fork, E, adapted to embrace the neck of the knob within said groove upon the inside of the rose, and the inside of the rose provided with a bearing against which said fork may rest to secure it in place, substantially as described.

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Witnesses:
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