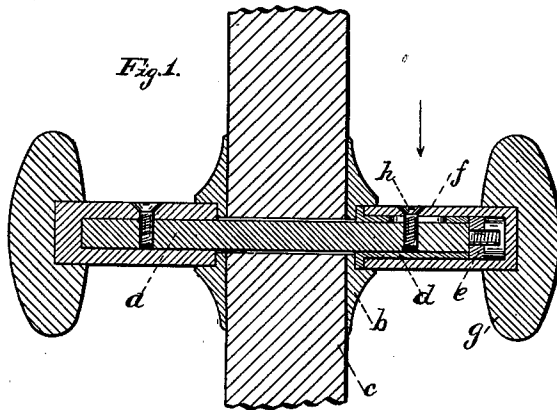
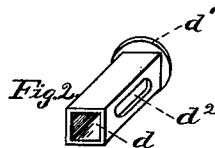
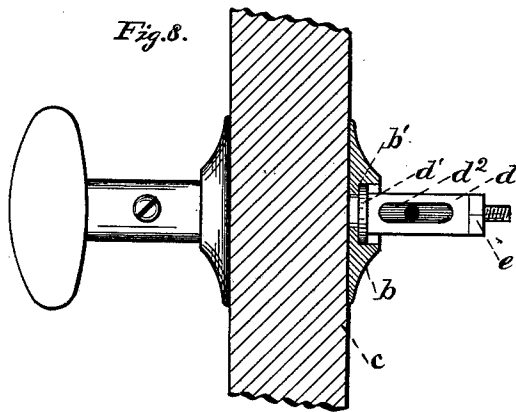


W. STEWART.
Knob-Attachment.

No. 200,880.

Patented March 5, 1878.



Witnesses:
Robt. F. Gaylord
H. P. Dooly

Inventor:
Wm Stewart
By W. E. Summels
att'y

UNITED STATES PATENT OFFICE.

WILLIAM STEWART, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN KNOB ATTACHMENTS.

Specification forming part of Letters Patent No. **200,880**, dated March 5, 1878; application filed January 26, 1878.

To all whom it may concern:

Be it known that I, WILLIAM STEWART, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements pertaining to a Knob-Latch, of which the following is a specification, reference being had to the accompanying drawings, where—

Figure 1 shows a central sectional view of the shaft, rose, and adjacent parts. Fig. 2 is a detail view of the adjusting-sleeve. Fig. 3 shows a top view, with a knob removed and the rose cut in cross-section.

The object of the invention is the attainment of a ready and secure means for so adjusting the shaft of a knob-latch that it shall not have the endwise or up-and-down play now so common.

The letter *a* denotes a square or many-sided shaft of a knob-latch. *b* denotes a rose fastened to a door, *c*. The letter *d* denotes a sleeve upon the shaft *a*, provided at the inner end with a collar, *d'*, fitting to the central depression *b'* of the rose. The shaft is threaded at the end, and there bears the nut *e*, bearing against the end of the sleeve.

The square-sided sleeve and the nut are both of a size, diametrically, and both fit into

the tubular shaft *f*, which projects from the knob *g*. The sleeve has the mortise *d''*, thereby permitting the passage of the screw *h*, which runs from the tubular shaft *f* into the shaft *a*. The opposite end of the shaft may be fitted up as shown in the drawings, or of any other common construction.

Such opposite end of the shaft being properly held in place, it is evident that by means of the nut *e* and the sleeve *d*, intermediate between the nut and the rose or the door, the shaft can be regulated and adjusted at any time so as to have no end play.

If, as shown, the sleeve be furnished with the collar *d'*, fitting into the central depression *b'*, such endwise adjustment of the parts also prevents up-and-down play of the shaft.

I claim as my improvement—

In combination, the many-sided shaft *a*, the sleeve *d*, fitting to said shaft, the nut *e*, the knob *g*, provided with the tubular shaft *f*, fitting over the nut and sleeve, and the screw *h*.

WILLIAM STEWART.

Witnesses:

ROBT. F. GAYLORD,
WM. E. SIMONDS.