C. COLEMAN.

ATTACHING KNOBS TO SPINDLES.

No. 169,421. Patented Nov. 2, 1875.

Fig. 1

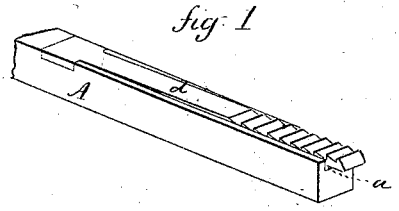
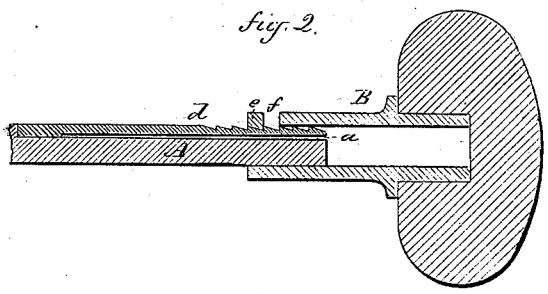


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

CORNELIUS COLEMAN, OF WEST MERIDEN, CONNECTICUT, ASSIGNOR TO PARKER AND WHIPPLE COMPANY, OF SAME PLACE.

IMPROVEMENT IN ATTACHING KNOBS TO SPINDLES.

Specification forming part of Letters Patent No. **169,421**, dated November 2, 1875; application filed September 28, 1875.

To all whom it may concern:

Be it known that I, CORNELIUS COLEMAN, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new Adjustable Door-Knob Spindle; and I do hereby declare the following, when taken in connection with the 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, perspective view of the spindle; Fig. 2, longitudinal section with the knob attached.

This invention relates to an improvement in the construction of door-knob spindles, the object being to automatically engage the knob with the spindle, so as to hold it in its proper relative position; and it consists in providing the spindle with a serrated spring, so that when the neck of the knob is forced upon the spindle one of the serrations in the spring will engage a corresponding projection in the neck.

The spindle is substantially the same usual square bar A. On one side a longitudinal groove, *a*, is formed, and into this a spring, *d*, placed and secured by the inner end, so as to become practically a part of the spindle. The upper surface of this spring is serrated, or formed with a succession of notches. The spring, when free, rests above the surface of the spindle. The neck B of the knob is formed with a recess to pass onto the spindle in the usual manner, and within the neck a shoulder, *e*, is formed, so as to engage either of the notches of the spring, as seen in Fig. 2. The other end of the spindle is made fast to the knob for that end in the usual manner, and in that condition the spindle is passed through the door and hub of the latch, and then the neck B of the other knob passed on over the spring to its proper position, and so that the shoulder *e* will engage a corresponding notch in the spring. When the knob is arranged in its proper position this securely holds the knobs together, and without the liability of displacement as in the common mode of attachment, as by a screw through the neck.

In order to detach the knob, if desirable, an opening, *f*, is formed through the neck adjacent to the shoulder *e*, so that an instrument may be inserted through the opening and bear the spring down away from and so as to release the shoulder, and allow the knob to be drawn from the spindle.

I prefer to arrange the spring in a groove, so that the neck of the knob will take a bearing upon the spindle each side of the spring; but the spring may be the full width of the spindle, or arranged at one end, it only being essential that the notched or serrated spring be arranged in connection with the spindle.

I am aware that it is not new to attach knobs to spindles by means of a spring to engage the two, and I therefore do not wish to be understood as broadly claiming such construction.

I claim—

The combination of the spindle A, the spring D attached to the spindle, its free end at the end of the spindle, and constructed with several notches, a knob, the neck of which is constructed to pass onto the spindle over the free end of the said spring, and with a shoulder, *e*, to engage either of the said notches on the spring, and with the perforation *f* through the neck onto the spring, substantially as described.

CORNELIUS COLEMAN.

Witnesses:

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