H. J. P. WHIPPLE. Attaching Knobs to Spindles.

No. 141,408.

Patented July 29, 1873.

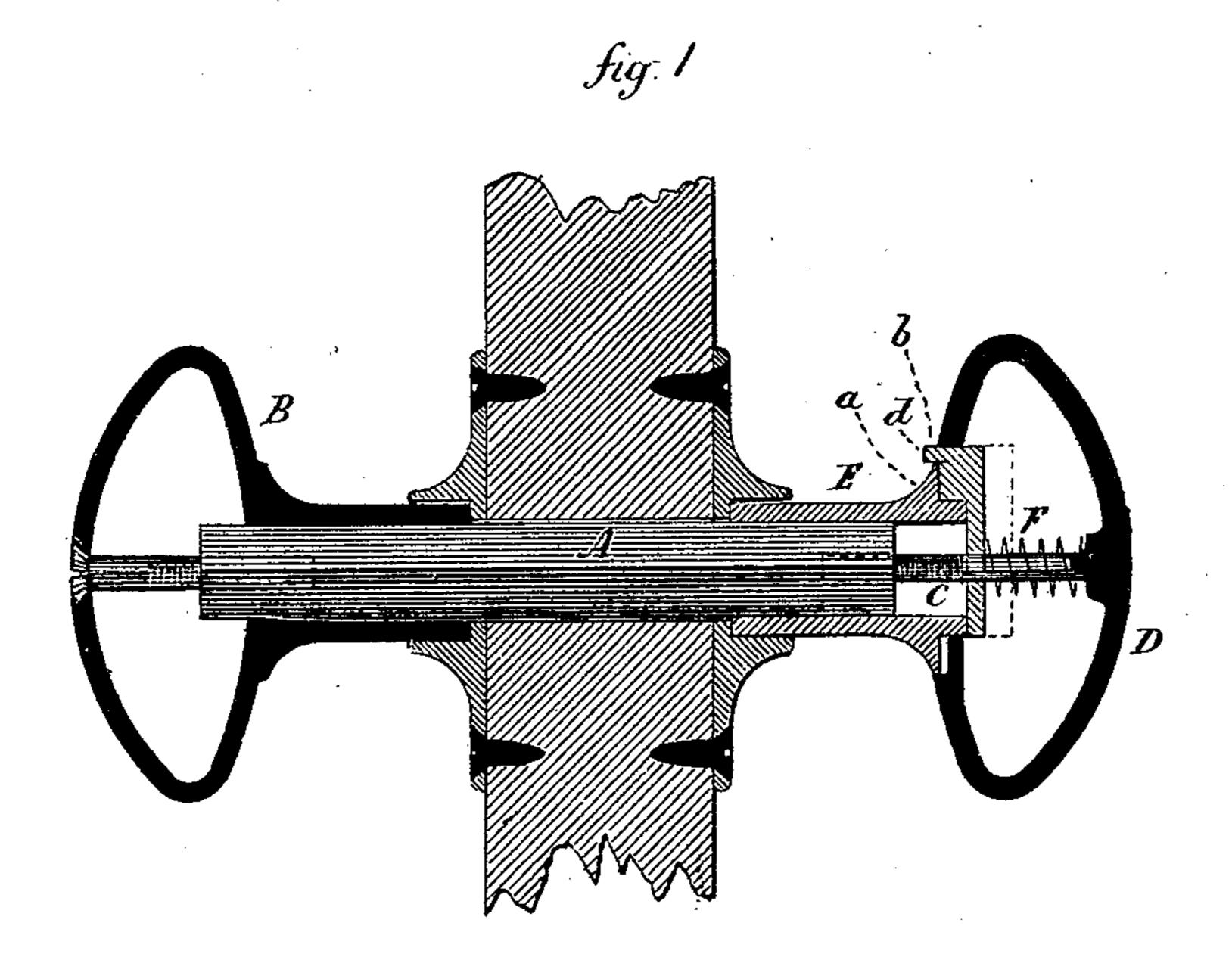


fig 2

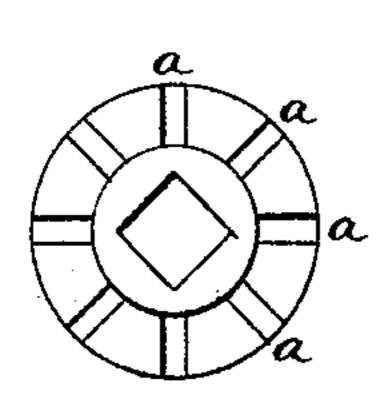
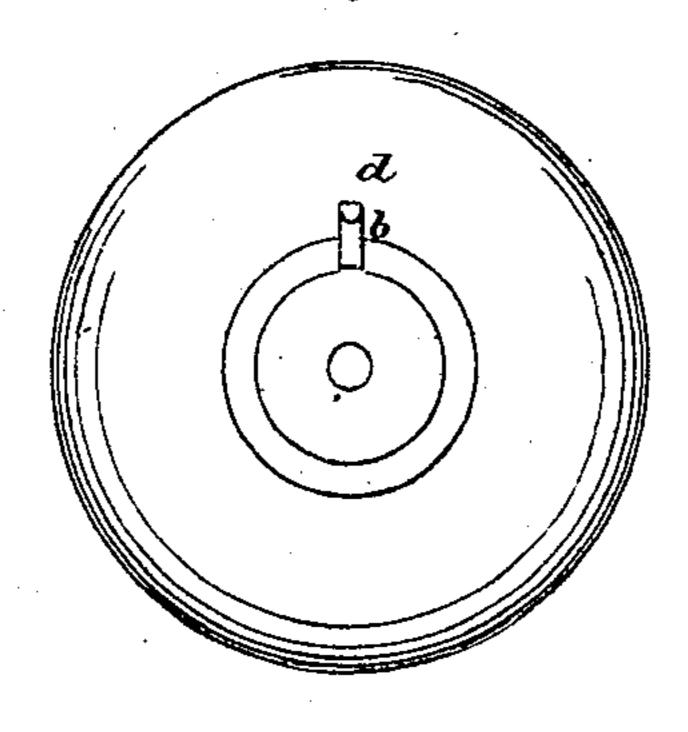


fig. 3



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UNITED STATES PATENT OFFICE.

HENRY J. P. WHIPPLE, OF MERIDEN, CONNECTICUT.

IMPROVEMENT IN ATTACHING KNOBS TO SPINDLES.

Specification forming part of Letters Patent No. 141,408, dated July 29, 1873; application filed June 19, 1873.

To all whom it may concern:

Be it known that I, Henry J. P. Whipple, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Securing Knobs to Spindles; 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, a longitudinal central section of the knob as attached to the door; Fig. 2, an end view of the neck portion of the knob; and in Fig. 3, an inside view of the knob detached.

This invention relates to an improvement in the method of attaching door-knobs to the spindle; the object being to make a nice adjustment between the neck of one knob and the neck of the other; and the invention consists in forming the knob proper and the neck detachable; the knob provided with a screw to run into the spindle, which is correspondingly threaded, and also with a latch, which, when the knob is turned on to the desired extent, will, when free, fall into a corresponding notch in the neck of the knob, coupling the neck and knob together, so that by the turning of the knob the neck and spindle will be turned.

A is the spindle, to one end of which a knob, B, is attached, in any known or convenient manner. The spindle is of the usual rectangular form, or may be of any other known or desired shape. Its other end is tapped to receive a screw, C, which is attached to or made a part of the knob D. The knob is chambered out, and is separate from the neck E. The neck is constructed of the usual form, and so as to fit against the knob, that when the two are combined, as seen in Fig. 1, their external appearance will differ but little, if any, from other knobs. The end of the neck next the knob is formed with one or more notches, a, as seen in Fig. 2. The knob is provided with a latch, b, and beneath this, within the knob, a spring, F, is arranged, the tendency of which is to force this latch from the knob, and on the latch a projection, d, is formed, by means of which the latch may be depressed. This latch is constructed so as

to fall into either one of the notches a on the neck; therefore, to attach the knob to the spindle, pass the spindle having the other knob attached through the door in the usual manner; then set the neck E onto the spindle; then the knob is set onto the neck and turned, running the screw C into the spindle. In thus turning the knob the latch is held back, as seen in broken lines, Fig. 1, by placing the finger upon the projection d, and it is turned until the neck has been brought into the desired position relative to the thickness of the door—that is, so that it will turn freely in its seat, yet have as little play as practicable. When this point is attained, release the latch, and it will fly forward and fall into one of the notches on the neck, and thus prevent the turning of the knob, because, coupled with the neck by means of the latch, the neck and knob become as one. At any time if the knobs become too tight or too loose they may be readjusted by pressing in the latch and turning the knobs accordingly. The notches are preferably made so as to arrest the turning in either direction—that is, with angular sides; but this is not essential, as one side may be inclined, the other angular, so that, in turning the knob on, the latch will pass freely over the inclined side of the notches. The angular sides prevent the return, the screw setting sufficiently to prevent the further turning on of the knob. But I prefer to construct the notches and latch so that when in connection they will positively prevent the turning of the knob in either direction independent of the neck. By this construction the nicest adjustment may be attained, and I avoid the difficulty which so frequently occurs by the displacement of the screw through the neck in the common construction.

I claim as my invention—

The detached knob and neck D and E, in combination with the spindle A, when the said knob is provided with a screw, C, and latch b, and the neck constructed with one or more notches, a, by means of which and the said latch the knob and neck are coupled together, substantially as set forth.

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