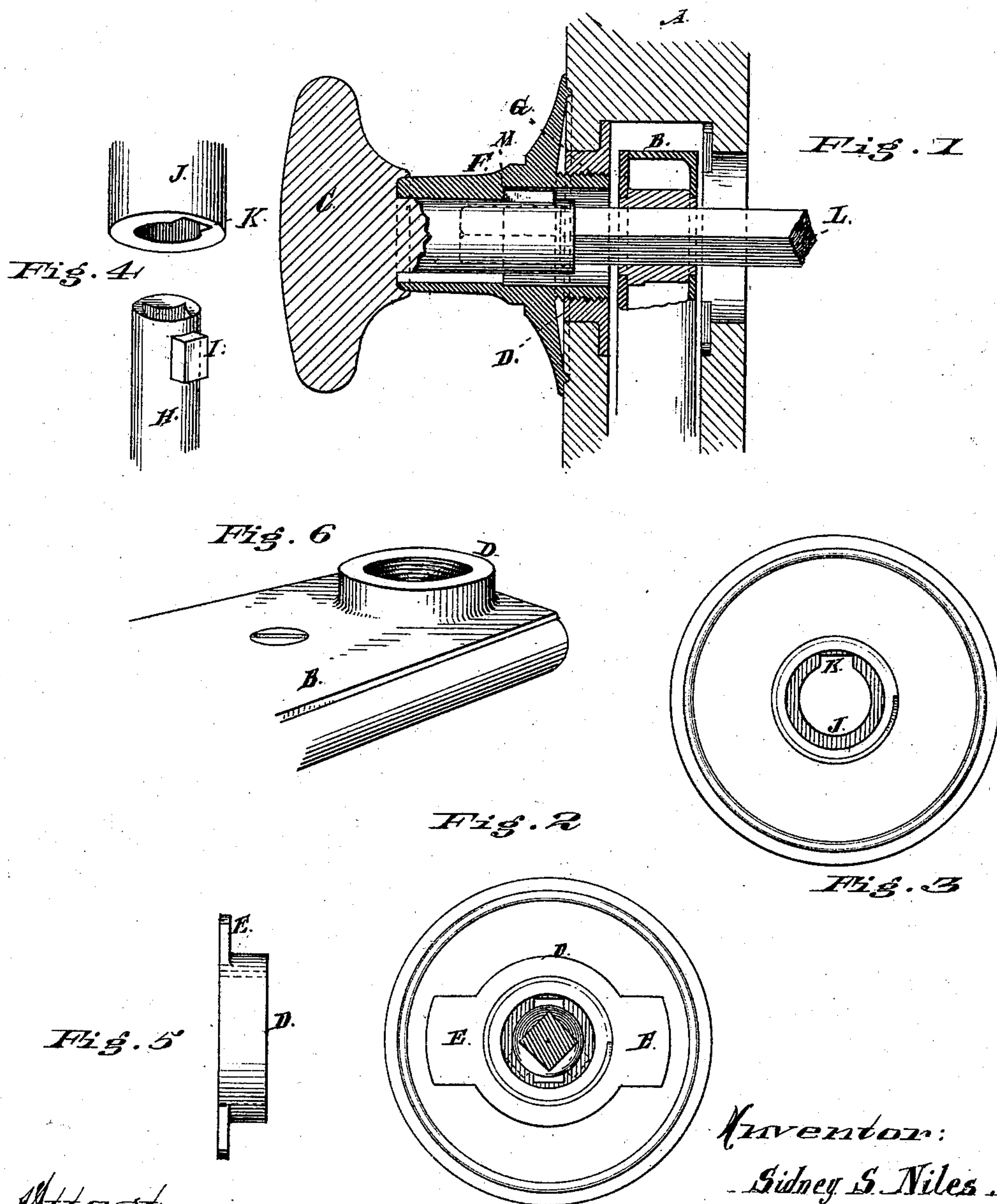


S. S. NILES.
DOOR-KNOB ATTACHMENT.

No. 177,877.

Patented May 23, 1876.



Attest
L. M. Harris
L. M. Harris

Inventor:
Sidney S. Niles.
By *Coburn & Thacher*
Attorneys.

UNITED STATES PATENT OFFICE.

SIDNEY S. NILES, OF OAK PARK, ILLINOIS.

IMPROVEMENT IN DOOR-KNOB ATTACHMENTS.

Specification forming part of Letters Patent No. 177,877, dated May 23, 1876; application filed March 20, 1876.

To all whom it may concern:

Be it known that I, SIDNEY S. NILES, of Oak Park, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Door-Knobs, which is fully described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a sectional view of the door with one of my knobs applied. Fig. 2 represents an end view of one of the knobs removed from the door. Fig. 3 represents a detached view of the rose, showing the end of its slotted shank. Fig. 4 represents the end of the knob-shank, showing its lug, and the rose-shank, showing the slot which receives the lug, as hereinafter specified. Fig. 5 shows a side view of the screw-threaded ring, to which the rose of the knob is attached; and Fig. 6 is a view of a part of the lock detached from the door, showing the screw-threaded ring forming a part of the lock-plate.

My invention relates to that class of door-knobs that are attached to a spindle, that passes through the lock in such manner that the spindle can be turned from either side of the door to open.

The invention consists in the peculiar construction and combination of the rose, knob-shank, and attaching screw-threaded rings, as will be hereinafter fully set forth.

In the accompanying drawings, A represents the door; B, the mortised lock. D is a metal ring having an interior screw-thread, and is made either a part of the lock-plate, as shown in Fig. 6, or with flanges E, as shown in Fig. 5. F is a metal door-knob rose, having a cylindrical projection, G, with an exterior screw-thread adapted to fit the screw in the ring D.

It will be observed that the ring D projects either from the lock-plate, or is held in the door by its flanges E, so that when the cylindrical projection G is screwed to said ring the rose F is securely fastened to the door.

The knob C has a shank, H, provided with a lug, I, and the metal rose F is provided with a

hollow shank, J, with an interior slot, K, which receives the lug I. L is the spindle, which passes loosely through the lock B, in such a manner as to turn the catch of the lock when it is turned with it. This spindle fits into the shank H of the door-knob, one end fitting into the shank of the knob on one side of the door, the other end in the shank of the opposite knob.

It will be observed that, if the rose F is screwed entirely down to its place on the door before the knob is put in place, the knob would be at once removed on account of the lug I remaining opposite of the slot K, or being capable of being turned opposite thereto; but if the knob C is put in place, and then the rose F turned around, so as to carry the lug I away from the slot K sufficiently far to prevent it from being turned opposite thereto, the lug then rests against the shoulders M, and prevents the knob from being removed in all ordinary usages of the lock.

When the ring D constitutes a part of the lock-plate, it is not sufficiently wide to be flush with the side of the door, as shown in Fig. 1, but is made narrower, so as to pass into the mortise at the edge of the door.

The different parts of the knob are firmly secured in this manner together and to the door, and the fastenings which secure them are very strong, and they can be taken apart only by turning the rose F so as to partially or wholly unscrew it from the ring D.

Having thus fully described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of the screw-threaded ring D, rose F, constructed with a threaded projecting ring, G, slot K, and shoulder M, and the knob-shank H, provided with a lug, I, substantially as described.

SIDNEY S. NILES.

Witnesses:

HEINRICH F. BRUNS,
L. M. HARRIS.