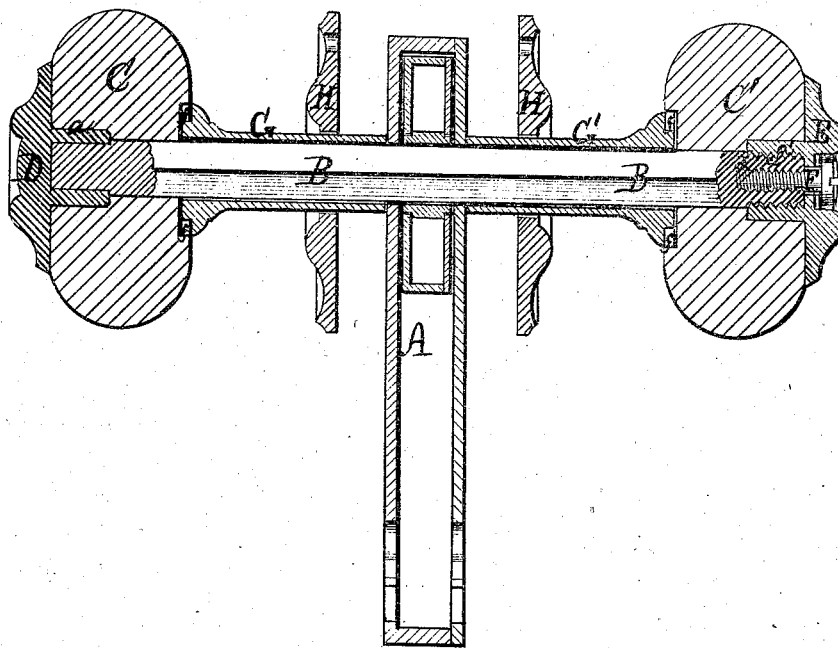


*Charles Morrill. Imp<sup>ts</sup> in Door Knobs.*

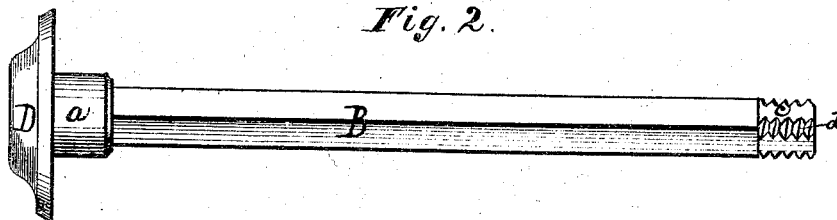
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PATENTED JAN 17 1871

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*M. M. & Sons*  
*J. B. Beecher*

*Inventor:*

*Chas. Morrill*

# UNITED STATES PATENT OFFICE.

CHARLES MORRILL, OF NEW YORK, N. Y., ASSIGNOR TO GEORGE H. BIDWELL, OF SAME PLACE.

## IMPROVEMENT IN ATTACHING KNOBS TO THEIR SPINDLES.

Specification forming part of Letters Patent No. 110,992, dated January 17, 1871.

### *To all whom it may concern:*

Be it known that I, CHARLES MORRILL, of the city, county, and State of New York, have invented certain new and useful Improvements in Door-Knobs; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form part of this specification.

My invention consists in the method of attaching door-knobs to their spindles by passing the spindle entirely through the knob, and holding it in place by a screw-head, screwing upon the end of the spindle, and with a check-screw, whereby many advantages are obtained, as will be hereinafter stated.

In the accompanying drawings, Figure 1 is a vertical central section of my invention. Fig. 2 is a side view of the spindle which carries the knobs and operates the latch of a lock.

A designates an ordinary lock, which I have illustrated for the purpose of showing the application thereto of my improvements in door-knobs.

B designates the spindle, which carries at each end a knob, C C'. One end of the spindle carries, preferably, a permanent head or washer, D, against which the knob C abuts. To prevent the knob C from turning, a square spindle may pass through a square hole in the knob; or a boss or hub, *a*, attached to the head or washer D, may be made with four or more definite sides and passed into a correspondingly-shaped recess or cavity in the knob; or lugs may be attached to the boss or to the washer, so as to enter recesses in the knob; or rivets or screws may be employed, if desired, for accomplishing the holding of the knob securely against turning on the spindle. The other end of the spindle is provided with a male screw-thread, *c*, and in this end of the spindle a female screw, *d*, is cut. A screw-head, E, is used for holding the knob at this end of the spindle, and this head is provided with a female screw, *a'*, fitted to the male screw *c* on the end of the spindle, and a check-screw, F, is fitted to screw into the female

screw *d*. I have shown these screws as provided the one with a right and the other with a left hand screw-thread; also a difference in the size of the thread of said screws. Either would be sufficient without the other to prevent the knob from working loose. I will here remark that the method above described for holding the knob C' on the spindle may be employed with reference to that of C, if desired.

G G' designate two sleeves, which are slid upon the spindle, one upon one side of the lock and the other upon the other side thereof. These sleeves are of such length as to extend from the knob close up to the lock or up to the follower thereof, should such follower project through the case of the lock, as it sometimes does. These sleeves may have a square bore to fit the spindles and prevent the knob turning independently of the spindle; or the sleeves may have a round bore, in which case the lugs *f f* pass into recesses in the knob and prevent the turning of the sleeves upon the spindle.

H H are the usual guard-plates or "roses," as they are technically called, which are to be secured to the door in the ordinary manner; and it will be perceived that these roses can be slid along on the sleeves to any desired point, according to the thickness of the door, and thereby adapt the knobs and fittings to any thickness of door, and without leaving the spindles exposed at any point.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the spindle B, screw-heads E D, check-screw F, knobs C C', and lock, of the sleeves G G', constructed, arranged, and operating substantially as and for the purposes herein specified.

2. The spindle B, provided with a screw-thread, *c*, in combination with the screw-head E and check-screw F, substantially as and for the purposes herein specified.

CHAS. MORRILL.

Witnesses:

M. M. LIVINGSTON  
T. B. BEECHER.