

MILLS W. BARSE.

Improvement in Attaching Knobs to their Spindles.

No. 120,362.

Patented Oct. 31, 1871.

Fig. 1.

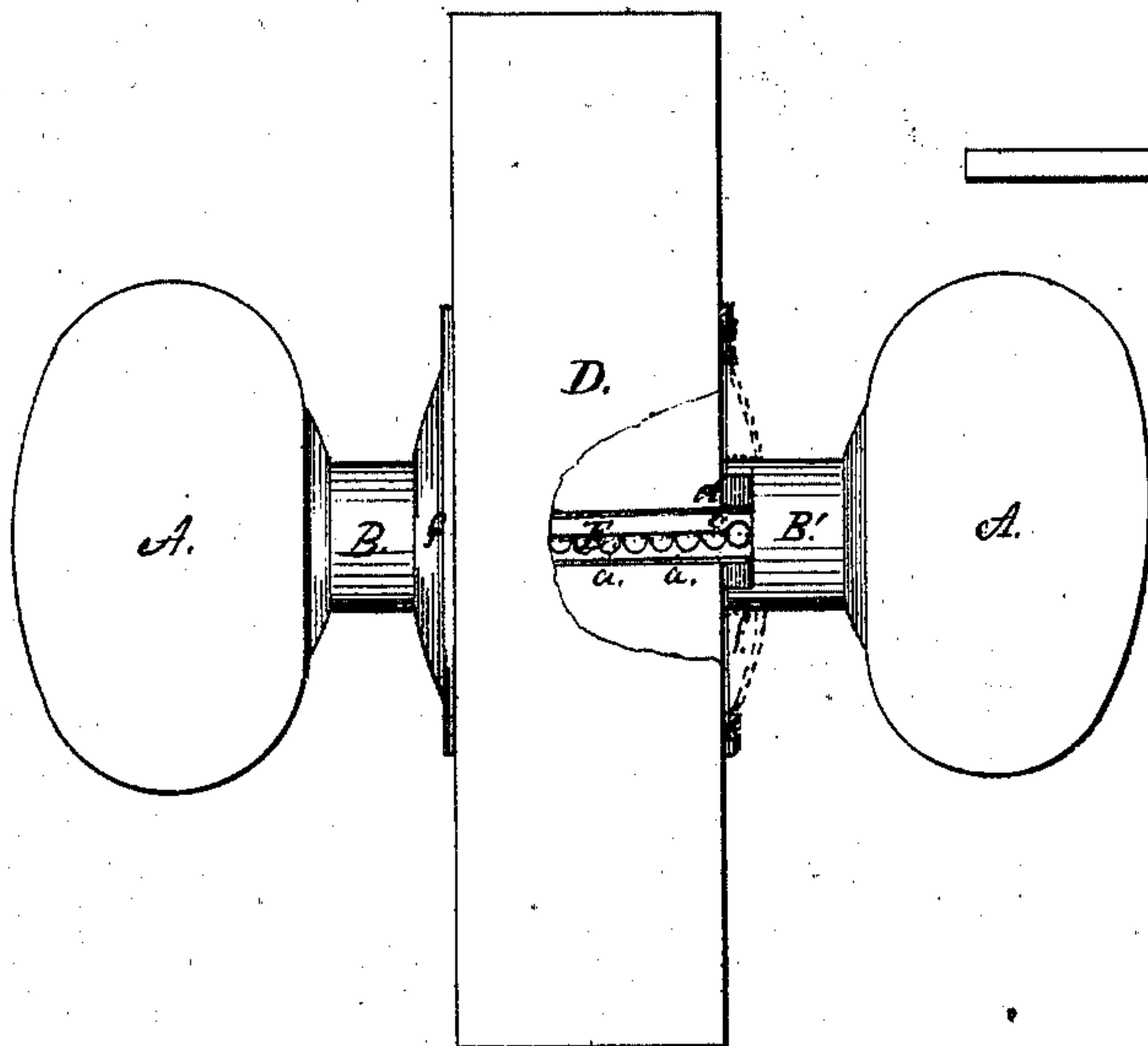


Fig 2.

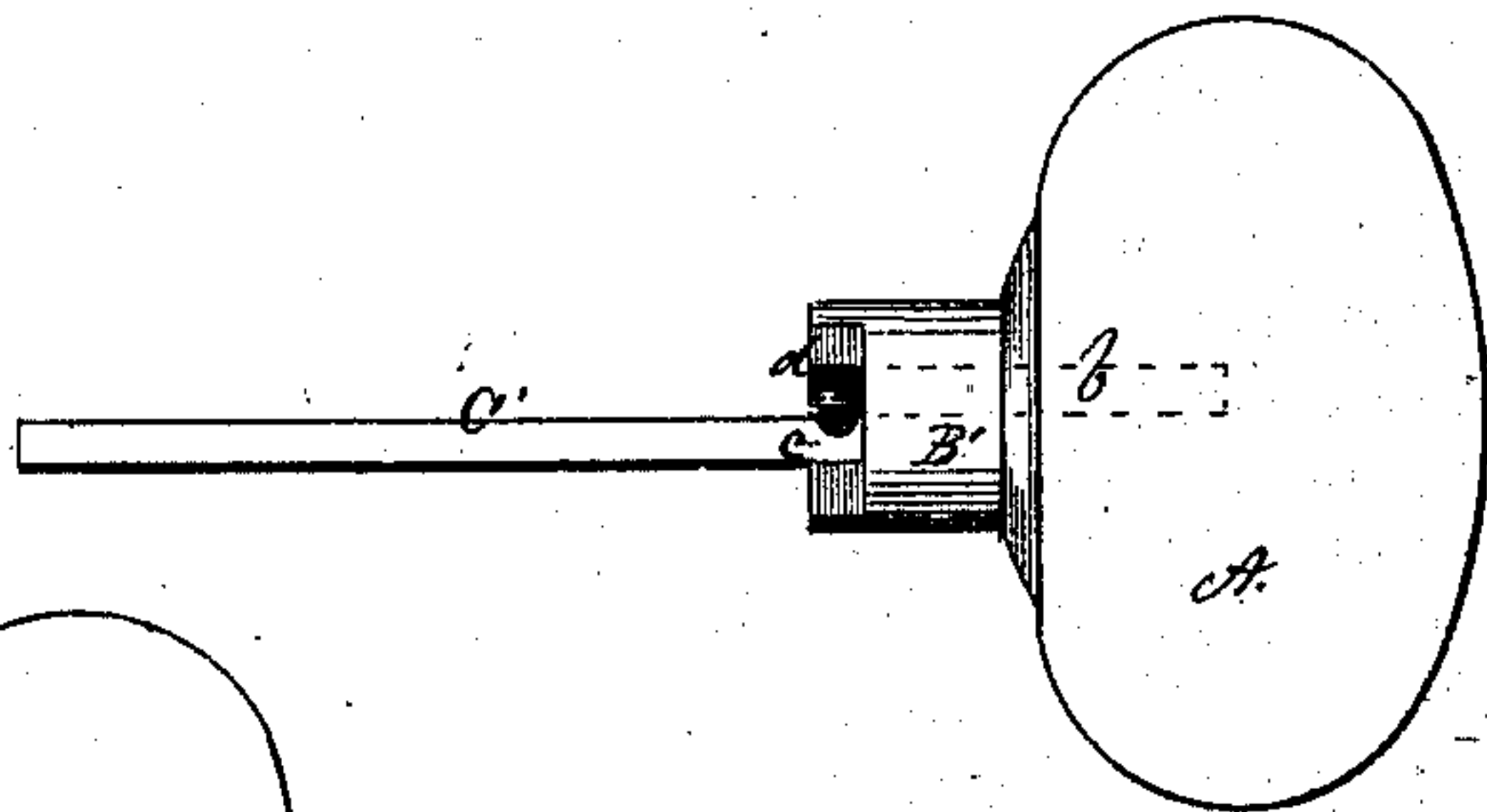


Fig. 4.

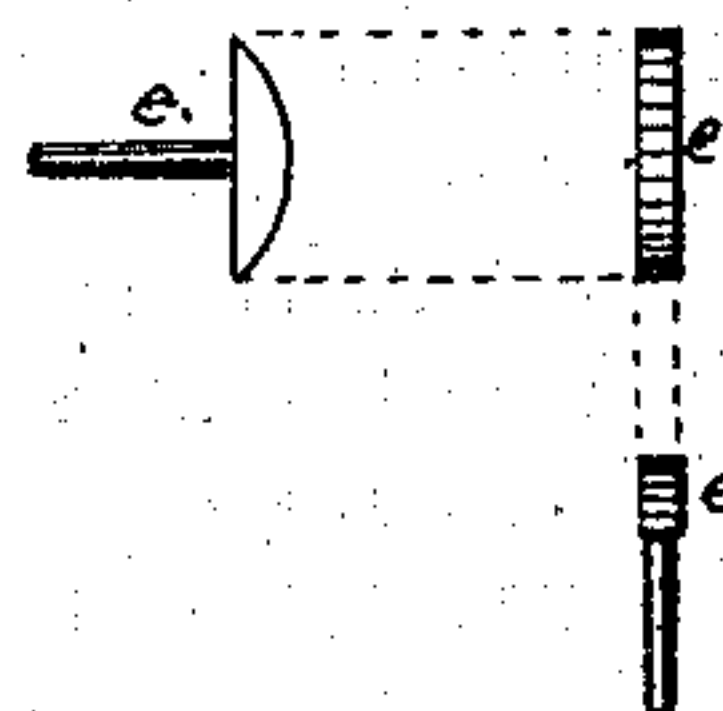
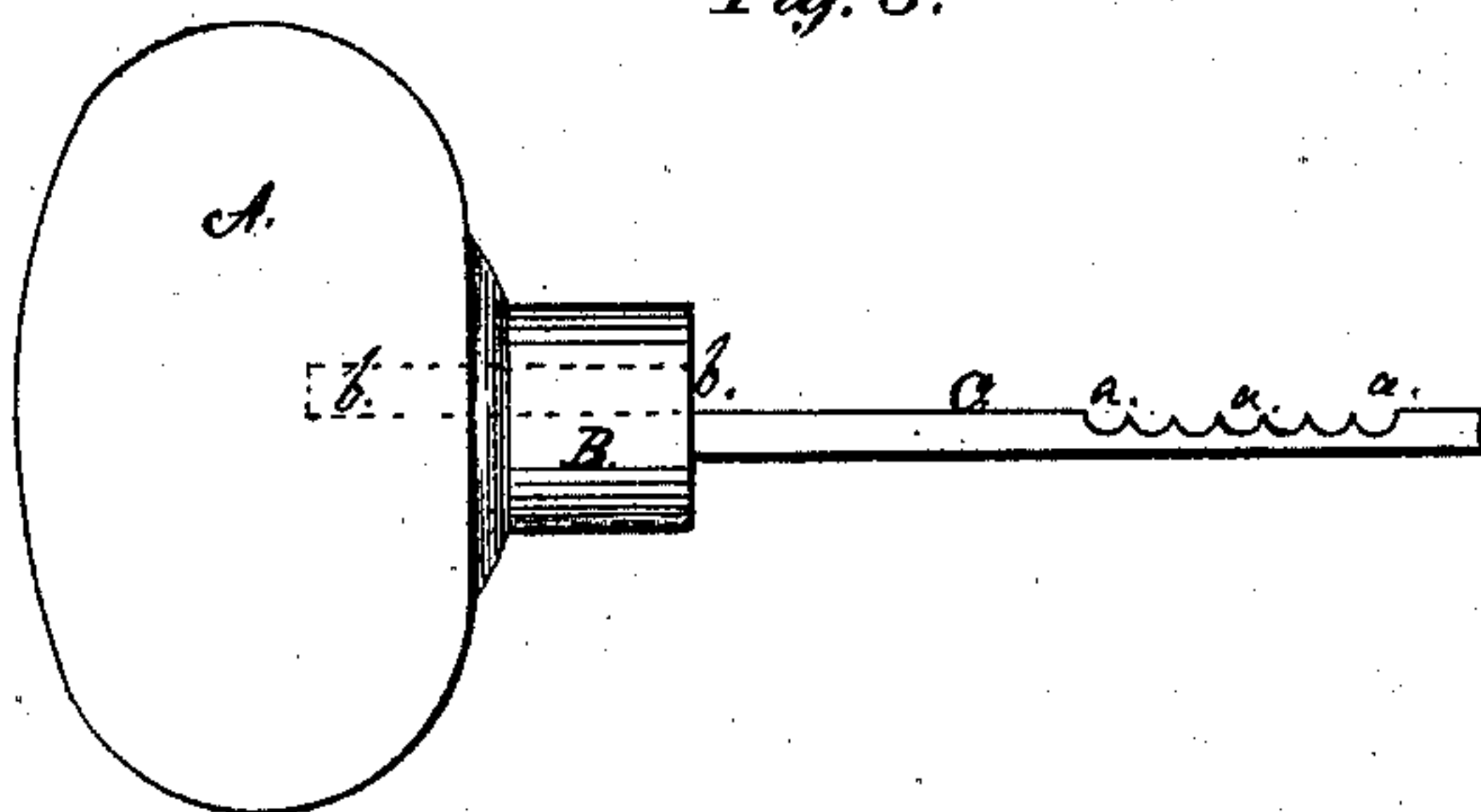


Fig. 3.



Witnesses.

Chas. H. Poole.

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By J. B. Woodruff. Attorney  
of Record

# UNITED STATES PATENT OFFICE.

MILLS W. BARSE, OF OLEAN, NEW YORK.

## IMPROVEMENT IN ATTACHING KNOBS TO THEIR SPINDLES.

Specification forming part of Letters Patent No. 120,362, dated October 31, 1871.

*To all whom it may concern:*

Be it known that I, MILLS W. BARSE, of Olean, in the county of Cattaraugus and State of New York, have invented certain new and useful Improvements in the Mode of Adjusting Door-Knobs to the Thickness of the Door and securing them firmly in position; and the following is a full, clear, and exact description of the same, reference being had to the drawing making a part of this specification.

Figure 1 represents an edge view of a small portion of a stile with a piece broken out, showing the two bars as they are coupled together to form the spindle and secure the knobs to the door. Fig. 2 is a view of the inside knob and bar detached, showing a notch and recess for the key-pin, and the socket to receive the end of the corresponding bar, in dotted lines. Fig. 3 is a detached view of the corresponding outside door-knob and bar, showing a series of notches for the key-pin, by which the two knobs are adjusted to the thickness of any door. Fig. 4 shows three different views of the key-pin for holding the knobs in place.

The object of my invention is to dispense with screws to hold the knobs to the spindle, and make them cheap, more durable, more accurate, more easily adjusted, and more firmly and safely secured to the door. My invention consists in the application and use of two flat bars to form the spindle, each bar being secured to the stem of a knob, which is provided with a socket to receive the outer end of the other bar, one of them having on its inner face a series of semicircular notches, and the other a single corresponding notch to receive a key-pin to couple them together.

To enable others to make and use my invention, I will describe it more in detail, referring to the drawing and the letters thereon.

The handles or knobs A A may be made of any material ordinarily used for the purpose, in the same manner, and secured to metal stems B

B, in which are formed the sockets *b b* for the bars C C' to slide into, the two jointly forming the spindle to operate the latch or bolt and also secure the knobs to the door D. The bars C and C', which have one end firmly secured to the metal stems B B, are made flat, and one-half as thick as their width, so that when two of them are placed together they form a square spindle, E, as seen in Fig. 1. One of the bars, C, is provided with a series of semicircular notches, *a a a*, on its inner face, toward the end, to correspond with a single notch, *c*, in the other bar C', for the purpose of inserting the key-pin *e* to lock the two bars C and C' together, at any desired distance apart, when the ends of the bars are both inserted in the sockets *b b*, thereby firmly securing the knobs to the door. The head of the key-pin *e* is made flat and curved to fit the recess *d* of the stem B', and the rose *f* holds the key-pin *e* securely in its place when it is screwed to the door in the usual manner.

Thus it will be seen that door-knobs constructed as above described can be adjusted to the thickness of a door and permanently secured, requiring no plate-washers to prevent end-chase, and no set-screws, which often work loose and let the knob off, the appearance and finish being the same on both sides of the door.

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

The spindle E, formed of two bars, C and C', one of which is provided with a notch, *c*, and the other with a series of notches, *a a*, in combination with the key-pin *e*, knobs A A, and stems B and B', in which are sockets *b b*, for the reception of the outer ends of the bars, substantially as shown and described.

In testimony whereof I hereunto subscribe my name in the presence of two witnesses.

MILLS W. BARSE.

Witnesses:

CLAUDIUS V. B. BARSE,  
HENRY S. MORRIS.

(93)