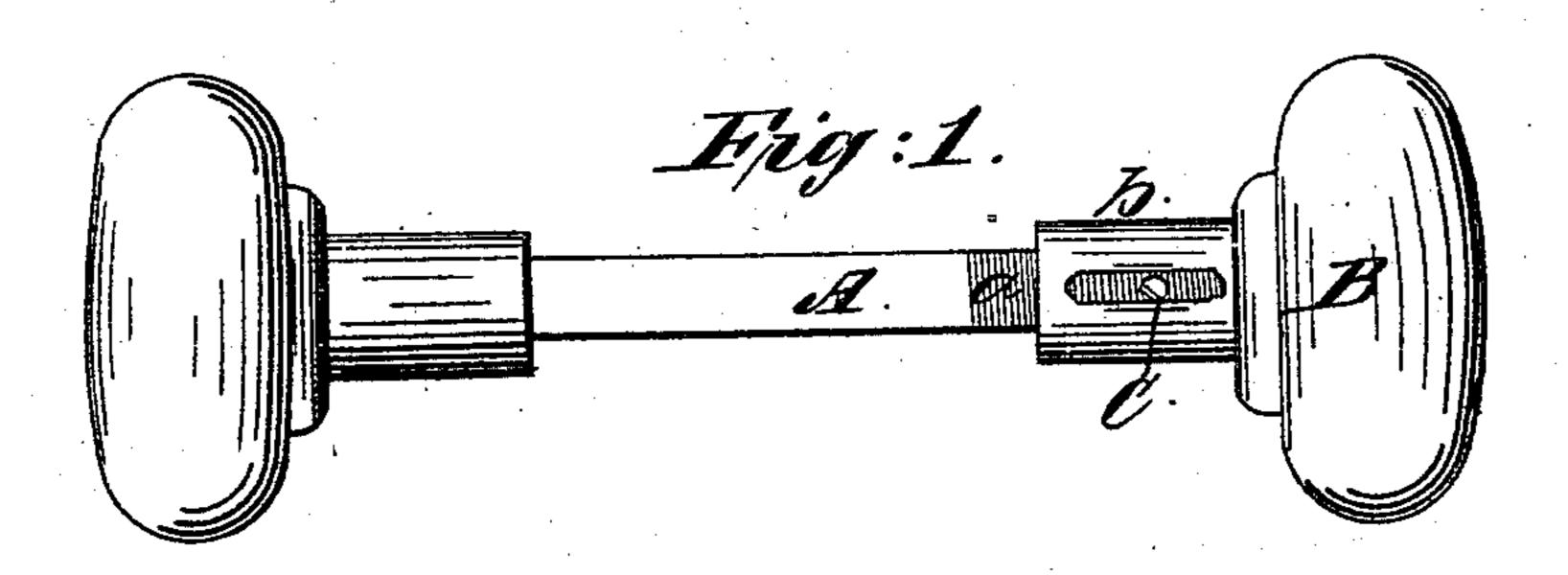
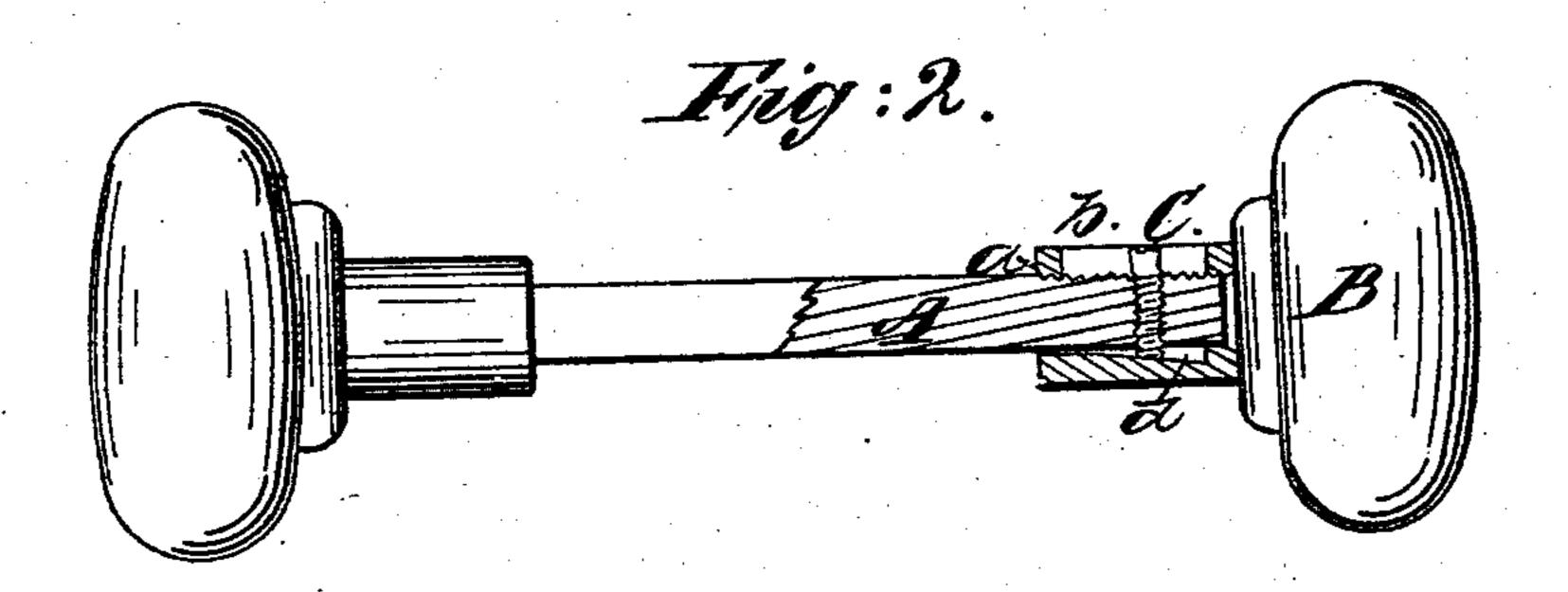
No. 84,868.

PATENTED DEC. 15, 1868.

W. A. FENN.
ATTACHING KNOBS TO THEIR SPINDLES.





Mitnosses: Abut Graves A. alleveley

Montantor:

## United States Patent Office.

WILLIAM A. FENN, OF WOLCOTT, NEW YORK.

## IMPROVEMENT IN ATTACHING KNOBS TO THEIR SPINDLES.

Specification forming part of Letters Patent No. 84,868, dated December 15, 1868.

To all whom it may concern:

Be it known that I, WM. A. FENN, of Wolcott, in the county of Wayne and State of New York, have invented a new and Improved Method of Attaching Door-Knobs to Spindles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is

a sectional view.

Similar letters of reference indicate like

parts in all the figures.

This invention consists in roughening the contact-surfaces of a spindle and its adjustable knob and providing the wrist of the knob with an inclined-plane bearing surface for the end of the screw, whereby the knob is fixed to the spindle with additional security, as hereinafter more fully explained.

In the accompanying drawings, A is the spindle, B the adjustable knob, and C is the set-screw. One side of the spindle is serrated or roughened, as shown at a, and the wrist of the knob, where it comes in contact with the roughened surface of the spindle, is also rough-

ened, and these surfaces are made to engage by the screw C, which binds said roughened faces together. The wrist is also formed with an inclined surface, d, Fig. 2, for the end of the screw to bear against, which gives the knob entire security at any desired point on the spindle. In Figs. 1 and 2 the screw passes through the spindle and uses it for the fulcrum, the wrist of the knob having a slot, b, so as not to interfere with the head of the screw. By this method of adjustment the knob is fastened to fit the thickness of the door with accuracy, and a longitudinal play of the spindle is avoided.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

The jamming set-screw c, in connection with the serrated contact surface or surfaces a, when the knob-socket is formed with a slot, b, and inclined surface d, substantially as herein shown and described, for the purpose set forth.

The above specification of my invention signed by me this 22d day of April, 1868.

WM. A. FENN.

Witnesses:

ALBERT GRAVES, F. A. MORLEY.