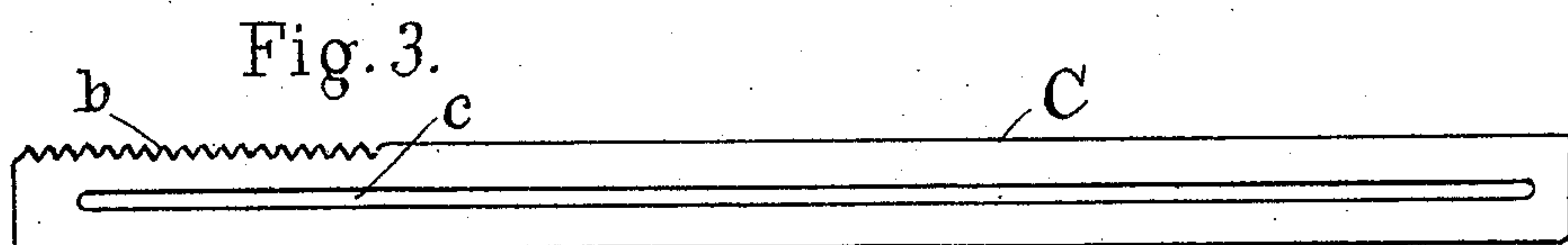
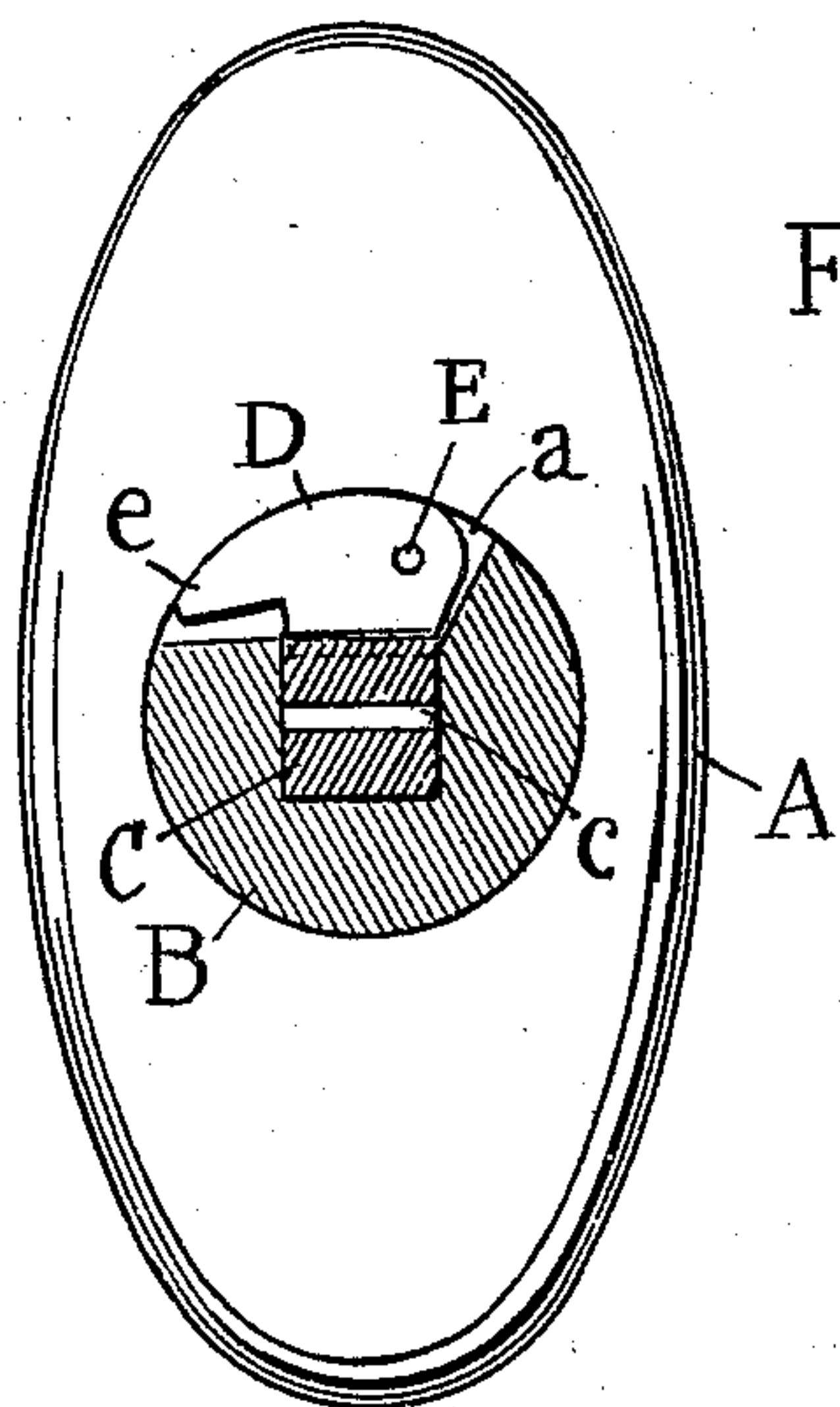
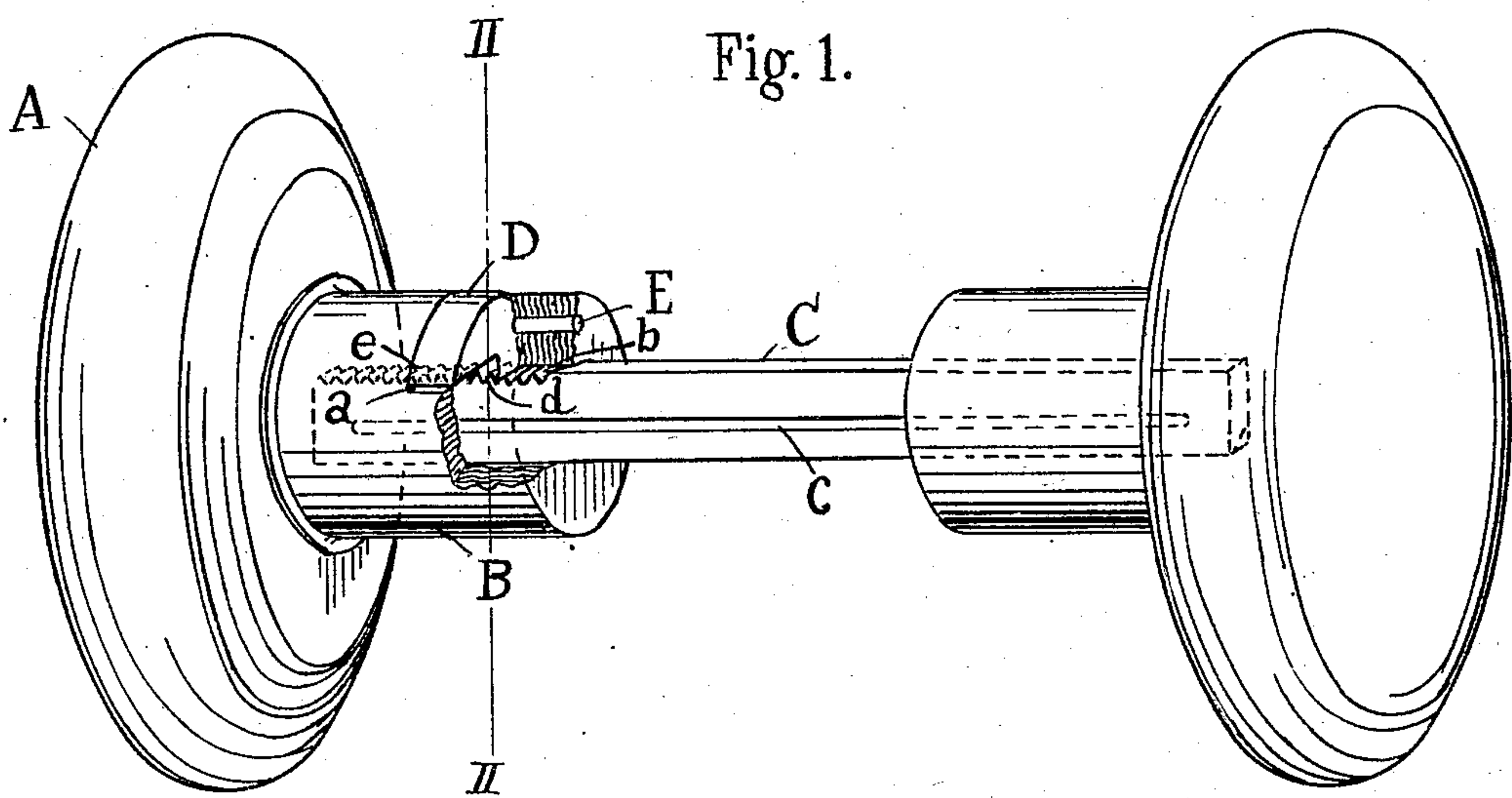


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DOOR KNOB.

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929,416.

Patented July 27, 1909.



Witnesses:

Samuel W. Balch  
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# UNITED STATES PATENT OFFICE.

CHARLES EWING, OF TARRYTOWN, NEW YORK.

## DOOR-KNOB.

No. 929,416.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed December 2, 1908. Serial No. 465,736.

*To all whom it may concern:*

Be it known that I, CHARLES EWING, a citizen of the United States of America, and a resident of Tarrytown, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Door-Knobs, of which the following is a specification.

The object of this invention is to provide an improved means of connecting door knobs and spindles of simple construction, which will not come loose with ordinary use, and in which there are no small parts that are liable to become detached and lost.

In the accompanying sheet of drawings which forms a part of this application—Figure 1 is a perspective of two door knobs and connecting spindle, in which the shank of one of the door knobs is broken away and this knob and the spindle are constructed according to my invention. Fig. 2 is a section through the shank on the line II—II of Fig. 1. Fig. 3 is an elevation of the spindle.

A knob A has the usual tubular shank B with a square hole. One side of the shank has a notch *a* which cuts through to the square hole. The hole is engaged by a square spindle C. One side of the spindle along that portion which comes under the notch in the knob-shank has transverse serrations *b*. The spindle is slotted at *c* beneath the serrations in order to give this portion some elasticity. A latch D is located in the notch in the shank and is pivoted to the shank by a pin E which lies parallel to the shank, and opposite one side thereof. The engaging portion of the latch has serrations *d* which engage the serrations of the spindle. These serrations are cut in a flat face of the latch. The pin lies directly over the serrations which are in engagement. The latch has a handle *e* by which it may be operated to bring it into or out of engagement with the spindle. The handle is so formed that it will lie flush with the side of the knob-shank when the latch is in engagement with the spindle.

To attach the knob, the latch handle is first lifted and the knob is slid onto the spindle the required distance and the latch handle is then turned down. By reason of the elasticity of the spindle, owing to the slot under the serrations, the corner of the engaging face of the latch can pass the serrations and the spindle spring up into engagement with the latch; thereby bringing together the engaging serrations and holding the latch in place since the pivot is located directly over the engaging serrations.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination of a knob having a tubular shank and a notch in the side of the shank, a spindle having transverse serrations, a latch located in the notch in the shank and provided with serrations to engage the serrations of the spindle, and a pivot connection between the latch and shank parallel to the axis of the shank, the axis of the pivot being located directly over the serrations, and elastic means independent of the latch which resists its movement into and out of engaging position, substantially as described.

2. The combination of a knob having a tubular shank and a notch in the side of the shank, a spindle having transverse serrations and slotted beneath the serrations, a latch located in the notch in the shank and provided with serrations to engage the serrations of the spindle, and a pivot connection between the latch and shank, the axis of the pivot being located directly over the engaging serrations, and the parts being so constructed that the engaging serrations will be brought together by the elasticity of the spindle, substantially as described.

Signed at New York city, N. Y., this 20th day of November, 1908.

CHARLES EWING.

Witnesses:

EDW. F. HINKLE,  
HAROLD LAWSON.