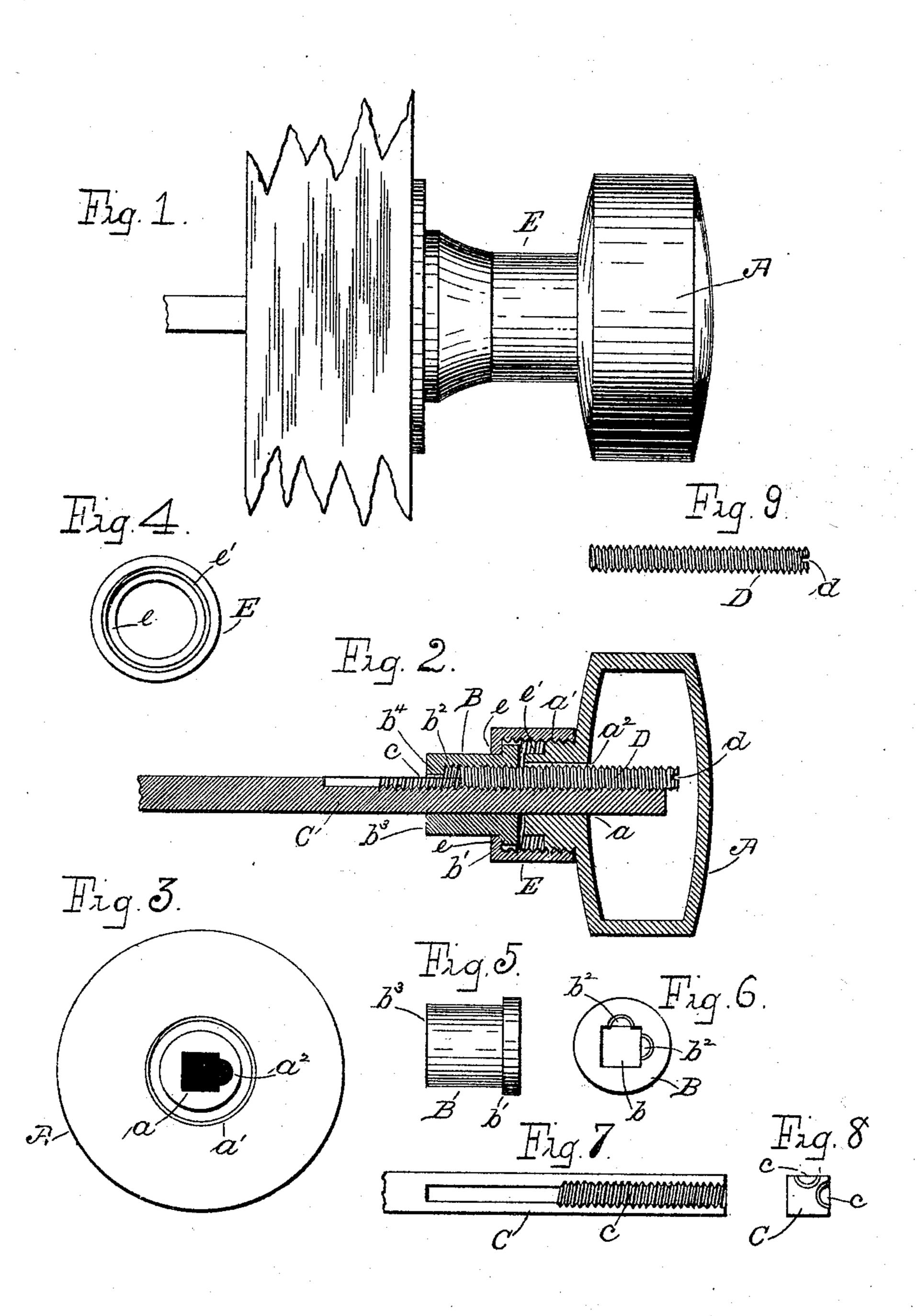
No. 638,940.

Patented Dec. 12, 1899.

## J. B. SARGENT. KNOB ATTACHMENT.

(Application filed Oct. 4, 1899.)

(No Model.)



WITNESSES:

E. K. Benalitan.

Joseph B. Sargent

By Beach Fisher

## United States Patent Office.

JOSEPH B. SARGENT, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE SARGENT & COMPANY, OF SAME PLACE.

## KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 638,940, dated December 12, 1899.

Application filed October 4, 1899. Serial No. 732,515. (No model.)

To all whom it may concern:

Be it known that I, Joseph B. Sargent, of the city and county of New Haven, State of Connecticut, have invented a new and useful Improvement in Knob Attachments, of which the following is a full, clear, and exact description, when taken in connection with the accompanying drawings, which form a part thereof, and in which—

Figure 1 represents a side elevation of a knob attachment embodying my invention; Fig. 2, a longitudinal vertical section of the same; Fig. 3, an end view of the knob; Fig. 4, an end view of the coupling-sleeve; Figs. 5 and 6, a side and an end view of the independent shank; Figs. 7 and 8, a top and an end view of the spindle; Fig. 9, a side elevation of the checking-screw.

In all figures similar letters of reference

20 represent like parts.

This invention relates to door-knobs, and more particularly to the method of attaching the knob to the spindle, whereby the knob may be accurately adjusted longitudinally on the spindle to fit snugly against the escutcheon or frame of the door and at the same time be prevented from any disadjustment in the ordinary movements of the knob in operating the lock to which the spindle is connected or in opening and closing the door.

To this end the invention consists in the improvements and novel combinations of parts set forth and claimed hereinafter.

Referring to the drawings, the part desig-35 nated by the letter A represents the knob of a door, the shank B (or portion thereof) of which is formed separate or independent of the knob. Both the knob and shank are provided with angular axial perforations a and 40 b, respectively, corresponding to and adapted to receive the angular spindle C. The knob is further provided on the integrally-formed portion of the shank with an external screwthread a'. The shank B has formed at one 45 end an annular flange b' and on one or more of the sides of the angular perforation b a longitudinal slot or groove  $b^2$ , internally threaded. The spindle Chas on one or more of its sides a longitudinal slot or groove c, 5° corresponding to the groove  $b^2$  in the shank B, also threaded.

D represents a checking-screw which may be provided with the usual slot d and which is adapted to be screwed into the two slots c and  $b^2$  of the spindle C and shank B when in 55

proper juxtaposition.

E represents a hollow cylindrical couplingsleeve which is provided at one end with an inwardly-extending flange e and at the other end with an internal thread e', the flange e 60 being adapted to engage when in proper position with the annular flange b' of the shank B and the thread e' to engage the external

threading a' of the knob A.

The parts are assembled by first slipping 65 the coupling-sleeve E over the shank B, whereupon the shank B is fitted on the spindle C until its end  $b^3$  is in contact with the door or escutcheon, the slot  $b^2$  corresponding with the slot c of the spindle. The screw D is there- 70 upon screwed into the slots  $b^2$  and c, thereby engaging both the shank and spindle and preventing any longitudinal movement of the shank on the spindle. The shank may be further provided with a shoulder or stop  $b^4$  75 at the end of the slot  $b^2$  to limit the movement of the screw D, if desired. The knob A is brought on the spindle and forced as close as desired to the shank B, and if the screw is so long as to extend beyond the end of the shank 80 B a slot  $a^2$  may be provided in one side of the axial perforation a in the knob to permit the entrance of the end of the screw into the interior of the knob. Finally, the couplingsleeve E is screwed onto the end of the knob 85 until the flange e engages the flange b' of the shank B and holds the parts fast in their proper position.

By this construction the shank B may be adjusted to any desired position on the spin- 90 dle C, and when the screw D is in place the shank B is necessarily held in its adjusted position on the spindle. The knob A, shank B, and coupling-sleeve E, when in position, entirely inclose the screw D and prevent access thereto, so that accidental movement of

the screw is prevented.

Having described my invention, the details of which may vary without departing from the spirit thereof, what I claim, and desire to secure by Letters Patent, is—

1. A knob attachment, consisting of the

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knob with a portion of the shank formed separate therefrom; of an independent spindle on which said knob and shank are capable of longitudinal movement; a checking-screw 5 adapted to be screwed into a longitudinallyextending slot or groove in said spindle to engage said shank and prevent the movement of said shank on said spindle; and a coupling device for locking together said shank and 10 knob, substantially as described.

2. A knob attachment, consisting of the knob with a portion of the shank formed separate therefrom, said knob and shank having angular axial perforations; of an independ-15 ent angular spindle adapted to fit into said

axial perforations, said spindle and shank hav ing longitudinally-extending threaded slots or grooves corresponding to each other; a checking-screw adapted to enter said slots and grooves on said spindle and shank to prevent 20 the movement of said shank on said spindle; and a coupling device for locking said shank and knob together.

In witness whereof I have hereunto set my hand this 27th day of September, 1899.

JOSEPH B. SARGENT.

Witnesses:

SAMUEL H. FISHER, ELIZABETH K. PENDLETON.