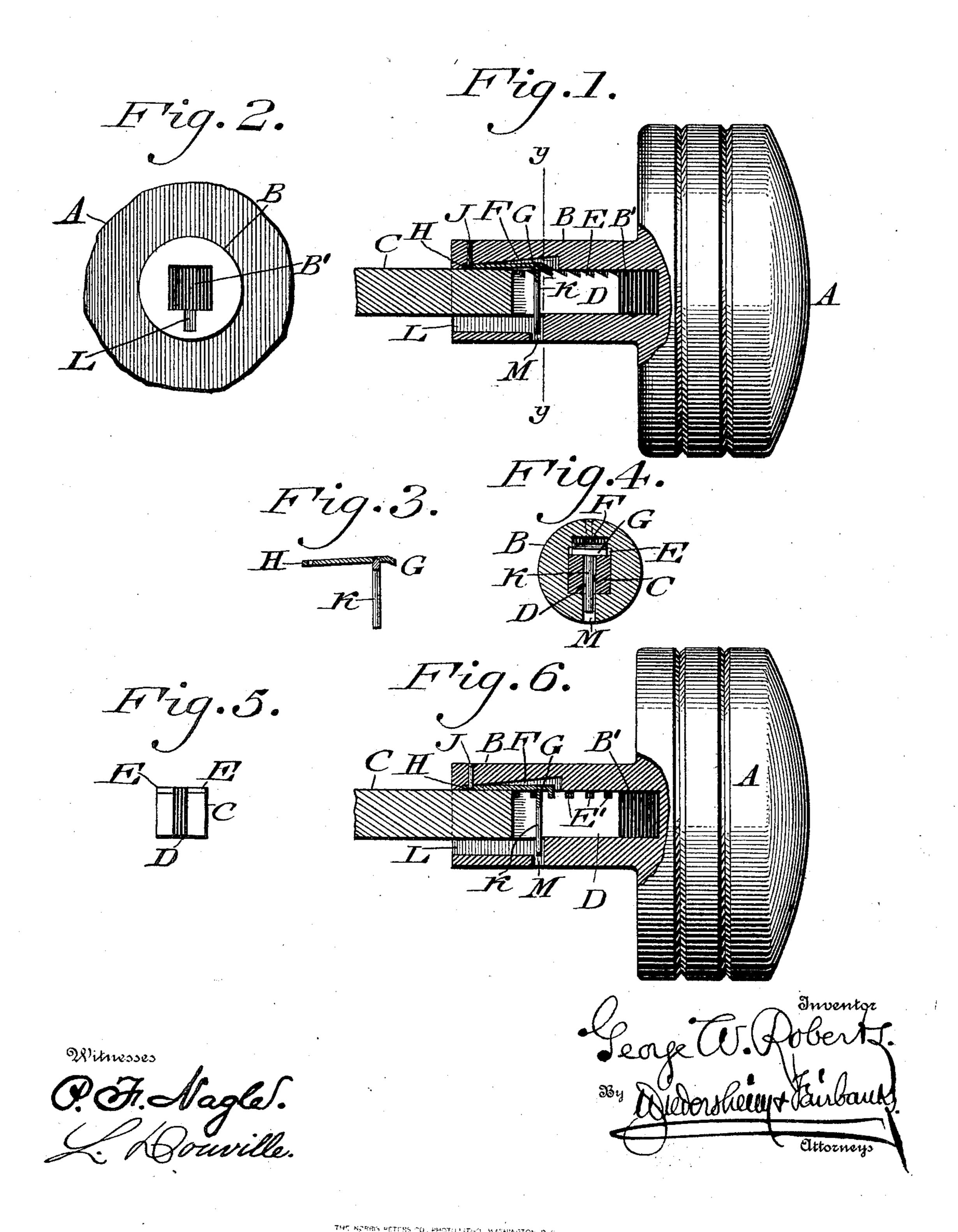
## G. W. ROBERTS. KNOB FASTENING. APPLICATION FILED APR. 22, 1902.

NO MODEL.



## UNITED STATES PATENT OFFICE.

GEORGE W. ROBERTS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO WINFRED W. NUSS, OF PHILADELPHIA, PENNSYLVANIA.

## KNOB-FASTENING.

SPECIFICATION forming part of Letters Patent No. 719,261, dated January 27, 1903.

Application filed April 22, 1902. Serial No. 104,139. (No model.)

To all whom it may concern:

Be it known that I, George W. Roberts, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented new and useful Improvements in Knob-Fastenings, of which the following is a specification.

My invention consists of improvements in knob-fastenings, as will be herein described, to the novel features of the same being pointed

out in the claims.

Figure 1 represents a partial side elevation of a knob and a longitudinal section of the fastening therefor embodying my invention.

Fig. 2 represents an end view thereof. Fig. 3 represents a longitudinal section of a detached portion. Fig. 4 represents a transverse section on line y y, Fig. 1. Fig. 5 represents an end view of the knob-spindle.

Fig. 6 represents a longitudinal section of a modification.

position. Then the detentengages with the respective teeth of the ratchets and firmly secures the knob on the spindle, as above stated.

It will here be noticed that the detent is secured to the neck B near the outer end of the latter, and its nose or inner end points toward the knob. By this provision when the spindle is disconnected from the neck of the knob the bore of the latter is free to permit the in-

Similar letters of reference indicate corre-

sponding parts in the figures.

Referring to the drawings, A designates a knob, and B designates the neck thereof. C designates the spindle with which said knob is connected, the same having in the forward end thereof the longitudinally - extending channel or slot D, having on one of its faces at a right angle to said slot the ratchets E.

F designates a recess on the inner wall of the neck B, the same containing the detent G, one end H of which is connected with the neck B, in the present case by means of the 35 rivet J, and has at the other end the handle or pin K, which is firmly connected with it and extends at a right angle therefrom. In the inner wall of the neck is the longitudinally-extending recess L, which is in commu-40 nication with the bore B' of the neck and with an opening M, that extends at or about a right angle to said recess, it being noticed that the end of the pin K opposite to the detent G registers with the opening M, so that 45 it is accessible to be pushed in any suitable manner, so as to lift the detent G, it being noticed that in the locking condition of the detent it occupies the proper teeth of the ratchets E, thus preventing disengagement 50 of the knob from the spindle.

When it is desired to remove the knob, the

pin K is pressed, whereby the detent leaves the teeth of the ratchets, and the knob may be withdrawn from the spindle by pulling it outwardly, in which case the free end of the 55

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pin plays through the recess L.

In the application of the knob to the spindle the end of the latter is inserted into the bore B' of the neck, the free end of the pin K introduced into the recess L, and the knob 60 pressed inwardly, when the detent rides over the ratchets until the knob is in its proper position. Then the detent engages with the respective teeth of the ratchets and firmly secures the knob on the spindle, as above 65 stated.

It will here be noticed that the detent is secured to the neck B near the outer end of the latter, and its nose or inner end points toward the knob. By this provision when the spindle 70 is disconnected from the neck of the knob the bore of the latter is free to permit the insertion of the detent and the riveting or securing of the detent through said neck. In the introduction of the detent into the bore 75 of the neck the recess L permits the pin K to slide through the same, after which the riveting or other means of securing the detent to the neck may be readily accomplished.

In Fig. 5 I show a modification in which 80 the ratchet E as such is dispensed with and in lieu thereof depressions or openings E' are formed in the spindle and the detent has a nose of angular form, the same being adapted to enter either of said depressions without, 85 however, producing different results from those hereinbefore described.

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

1. In a knob-fastening, a detent on the inner wall of a knob, a handle-piece on said detent, and a spindle provided with means of engagement with said detent and having a longitudinally-extending channel in which 95 said handle-piece is received.

2. In a knob-fastening, a detent in the neck of the knob, a handle-piece on said detent, and a spindle provided with means of engagement with said detent, said neck having therein an opening at the free end portion of said handle-piece and in the wall of the bore, a

longitudinally-extending recess which is in communication with said bore.

3. In a knob-fastening, a detent in the neck of the knob, a handle-piece on said detent, 5 and a spindle provided with means of engagement with said detent, said neck having therein an opening at the free end portion of said handle-piece and in the wall of the bore, a

longitudinally-extending recess which is in communication with said bore, and said spin- 10 dle having a longitudinally-extending channel for the reception of said handle-piece. GEORGE W. ROBERTS.

Witnesses:

John A. Wiedersheim, C. D. McVay.