

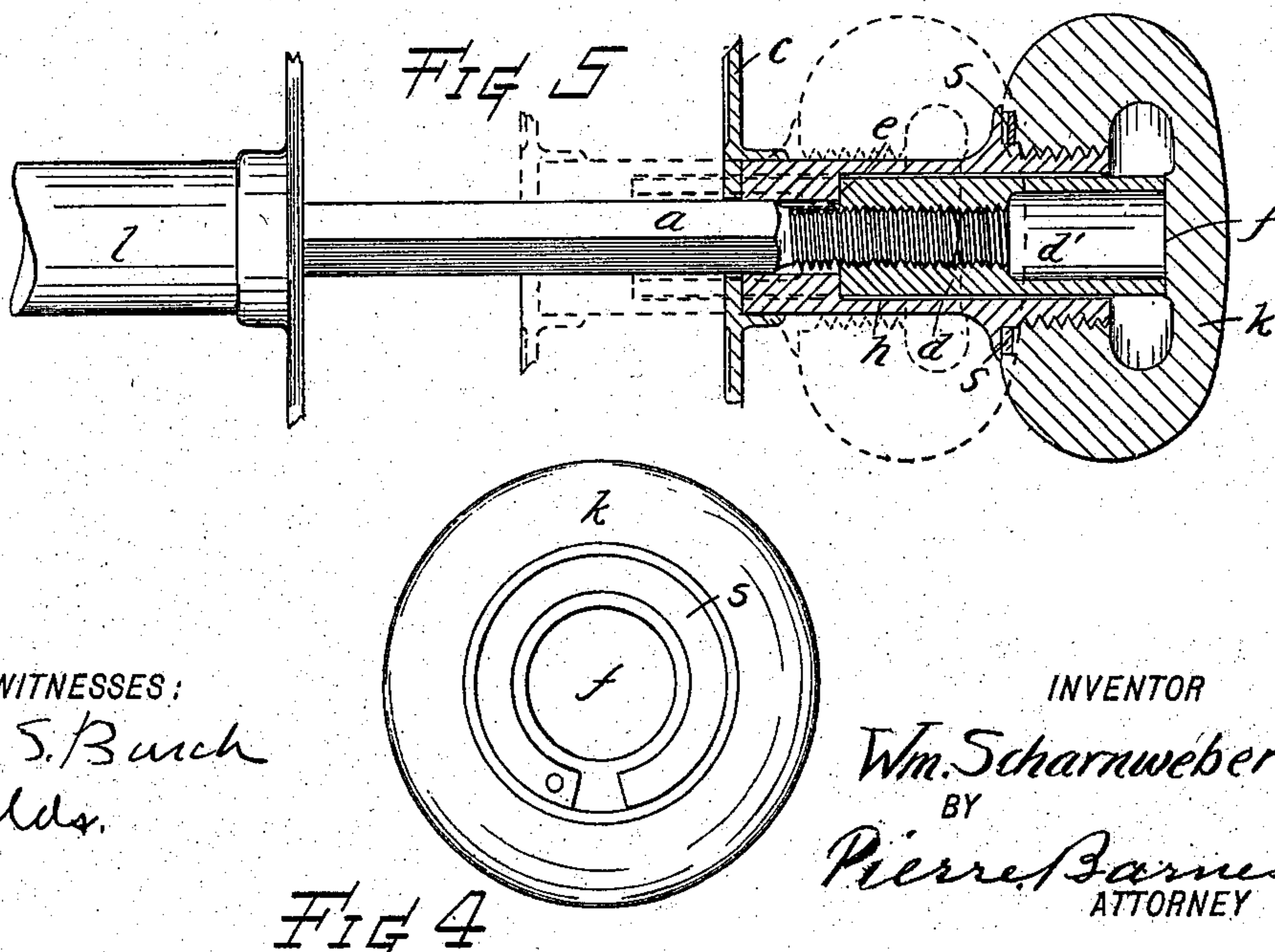
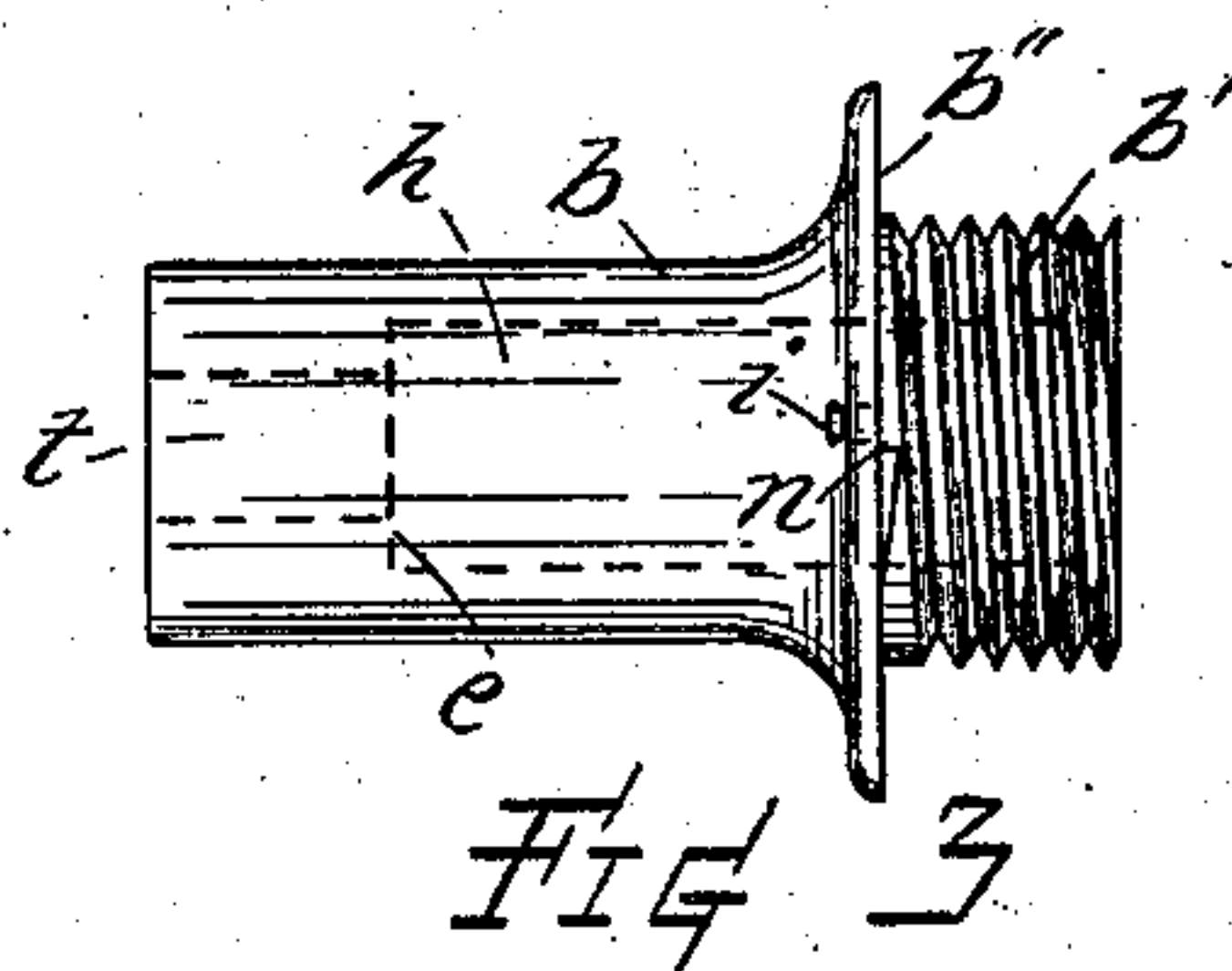
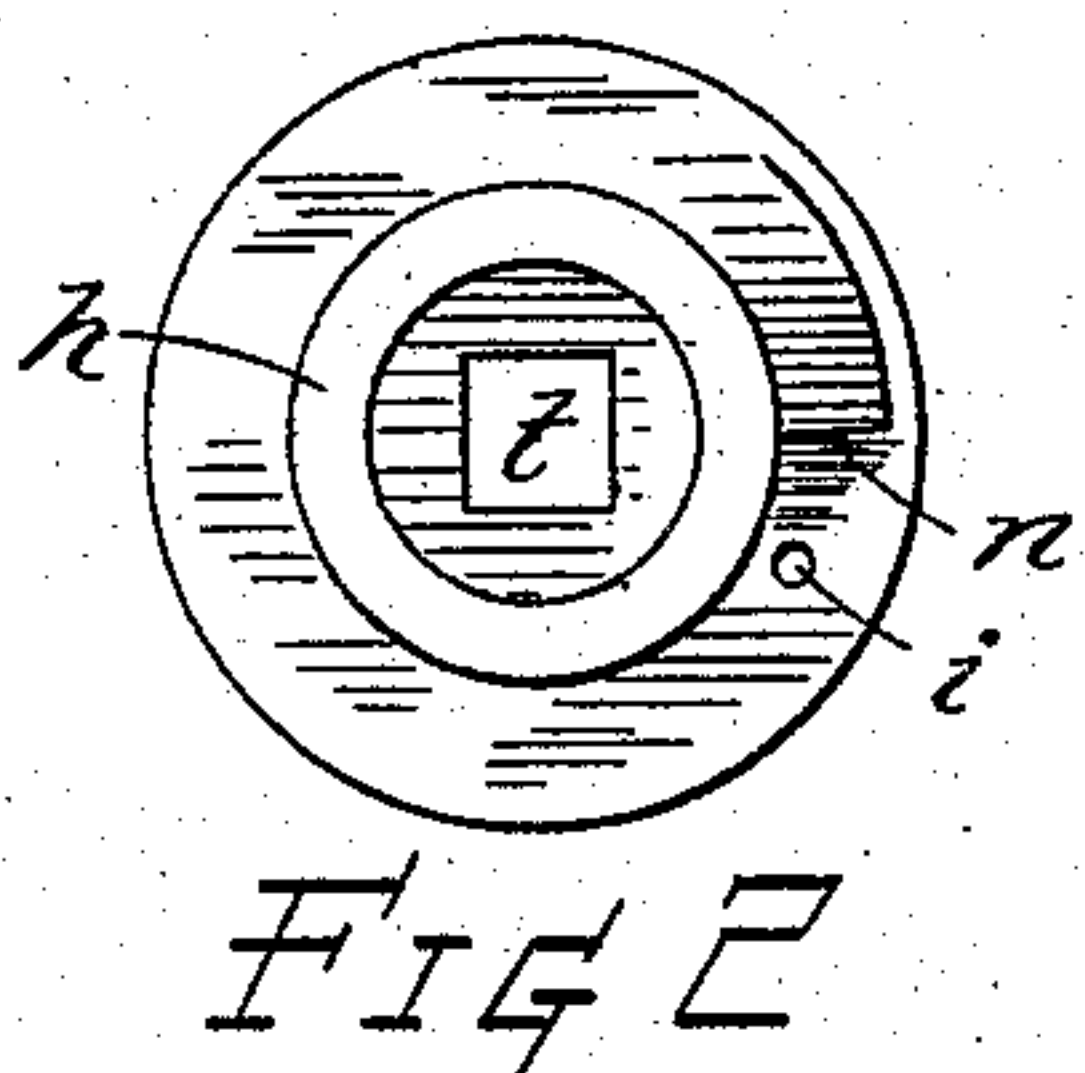
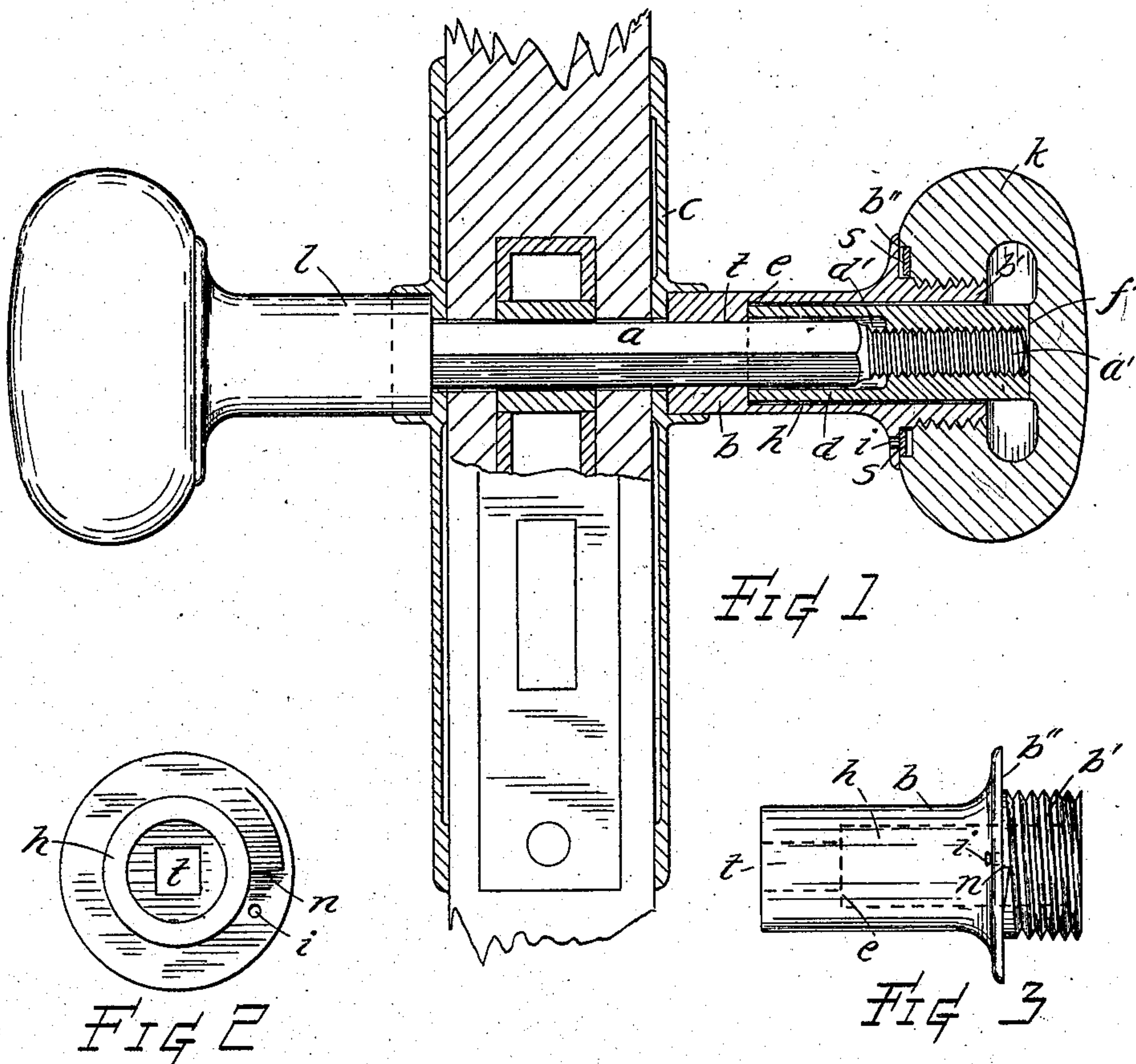
No. 692,550.

Patented Feb. 4, 1902.

W. SCHARNWEBER.
KNOB ATTACHMENT.

(Application filed Apr. 24, 1901.)

(No Model.)



WITNESSES:
Char. E. S. Burch
D. W. Olds.

INVENTOR
Wm. Scharnweber
BY
Pierre Barnes,
ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM SCHARNWEBER, OF SEATTLE, WASHINGTON, ASSIGNOR OF ONE-HALF TO ALFRED S. GROSS, OF SEATTLE, WASHINGTON.

KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 692,550, dated February 4, 1902.

Application filed April 24, 1901. Serial No. 57,311. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SCHARNWEBER, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Knob Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in knob attachments; and it consists in door-knob attachments whereby the knob may be securely locked to the spindle to fit any thickness of door. These objects are attained in the construction hereinafter fully described, and illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a door-lock with my invention, shown partly in section, applied thereto. Figs. 2, 3, and 4 are detail views; and Fig. 5 is a similar view to Fig. 1, but with parts attached to a thicker door.

The spindle *a* is provided at one end with a fixed outer door-knob, the shank being secured to the spindle in any suitable manner. A knob-shank *b* has a thread *b'* cut from the end thereof to a collar or shelf *b''*, upon the face of which I provide a projecting tooth *n*, and extending through the entire length of the shank is an opening, one end *t* being rectangular or of corresponding shape to the cross-section of the central portion of spindle *a*. At the other end the opening is enlarged to form a cavity or chamber *h*, terminating in a jog or shoulder *e*. To hold the shank in place, I use a sleeve-nut *d*, the female thread of which extends one-half its length, approximately, to register with the thread *a'* of the spindle, and the remainder of its length is counterbored to permit that portion of the sleeve being slipped loosely over the polygonal section of the spindle.

The knob *k*, having an internal thread for screwing upon the aforesaid shank-thread *b'*, is chambered to a depth so that when screwed tight down the bottom *f* of the chamber will at any and all adjustments bear against the end of the sleeve *d* when the latter is screwed on the spindle and seated upon the shoulder *e* within the shank, which locks these parts, and the knob is itself locked to the shank by

a spring-catch *s*, engaging with the aforesaid tooth *n* of the shank.

To assemble the several parts, the spindle is passed through the lock and escutcheons from the outside of the door, when the shank *b* is placed upon the spindle, so as to rest against the escutcheon *c* and the sleeve *d* screwed on the shank until the end thereof will bear against the shoulder *e* or bottom of shank-cavity *h*, which in thin doors would be done by screwing on the sleeve with the counterbored end leading, as shown in Fig. 1, whereas with thick doors the sleeve would be reversed—that is, the nut end would lead, as in Fig. 5, and between these extreme adjustments minor changes or adjustments may obviously be made by screwing the sleeve in or out, and the whole is securely locked by the knob being screwed upon the shank, the spring-catch *s*, in connection with tooth *n*, preventing the same from unscrewing. However, the knob may be removed by inserting a wire or the like through an aperture *i*, positioned in the flange *b''*, so as to come beneath the catch *s* and adjacent to the tooth *n*, when by pressure the catch is disengaged from the tooth to allow the knob to be freely turned to unscrew the same.

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

1. In a knob attachment, the combination with a spindle having a screw-threaded end, of a shank having an opening extending there-through one end of which registers with the polygonal cross-section of the spindle and counterbored from the other end, a sleeve-nut of less outside diameter than the aforesaid counterbore of the shank having a female thread extending a portion of its length adapted to engage with the thread upon the said spindle and counterbored from the other end, a chambered knob adapted to lock the said sleeve-nut in place and be itself locked by a spring-catch connected thereto engaging with a tooth upon a flange of the said shank, substantially as described.

2. In a knob attachment, the combination with a polygonal spindle having a threaded end, and a chambered knob having an inter-

nal thread cut therein and adapted to engage
with the thread upon the shank, of said shank
having an external thread at one end and an
opening extending through the entire length
5 of the shank, one end of which opening adapt-
ed to register with the polygonal cross-section
of the spindle and counterbored from the
other end, and a sleeve-nut having an inter-
nal thread extending from one end for a por-

tion of its length and counterbored the re- 10
mainder, substantially as and for the purposes
described.

In testimony whereof I affix my signature
in presence of two witnesses.

WILLIAM SCHARNWEBER.

Witnesses:

PIERRE BARNES,
J. W. FUGLER.