

S. SELDEN.

Attaching Knobs to Spindles.

No. 134,708.

Patented Jan. 7, 1873.

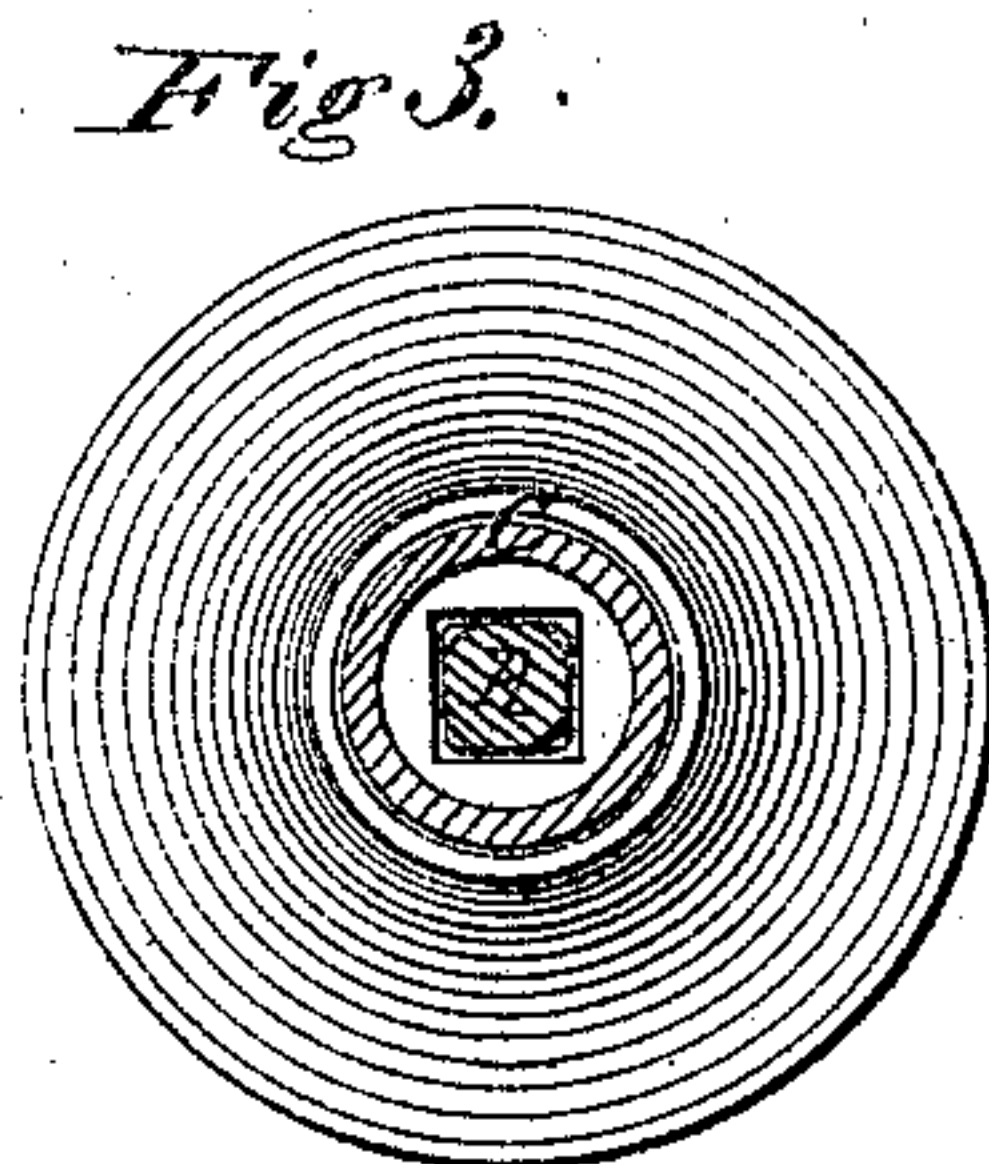
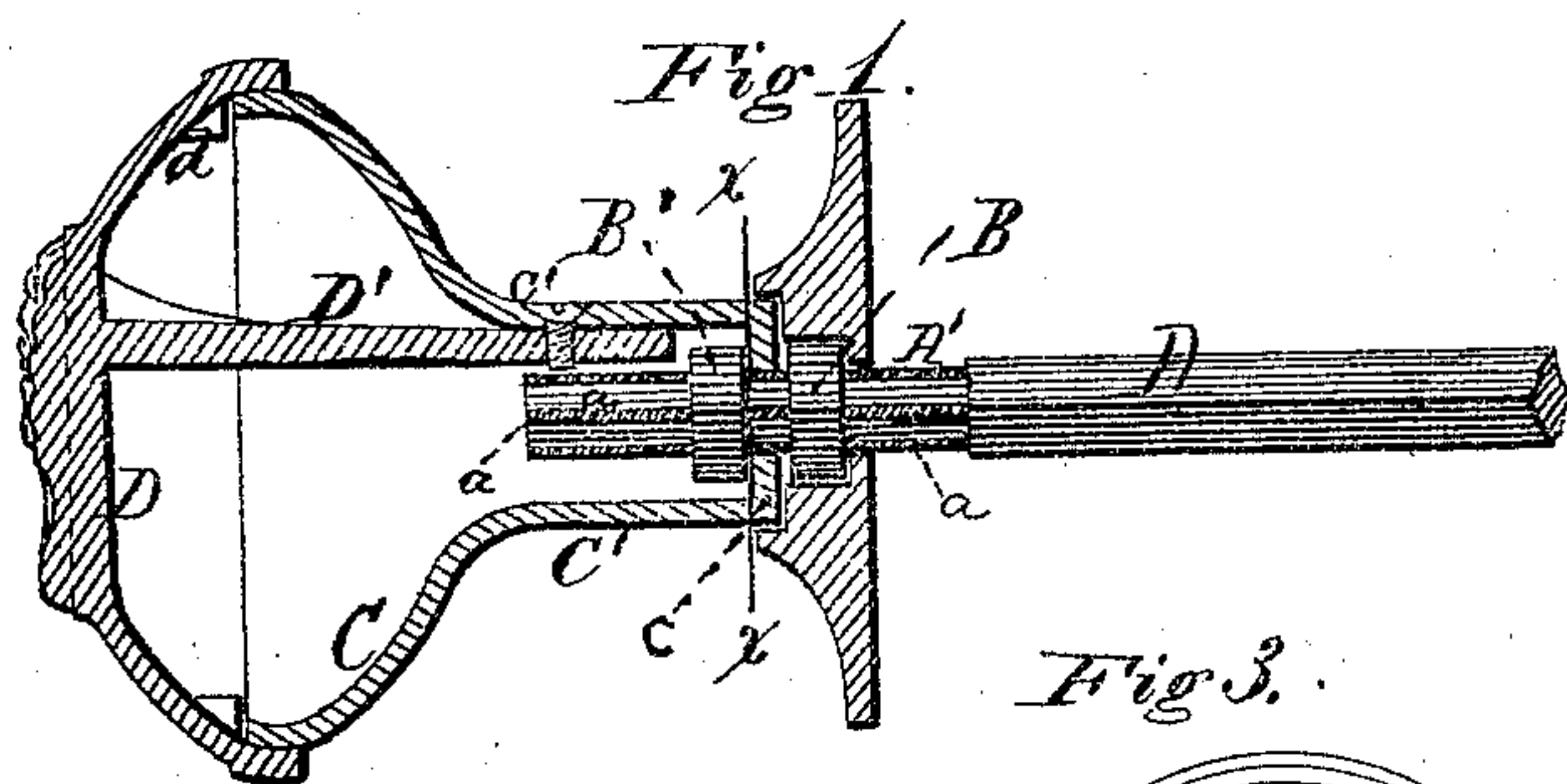
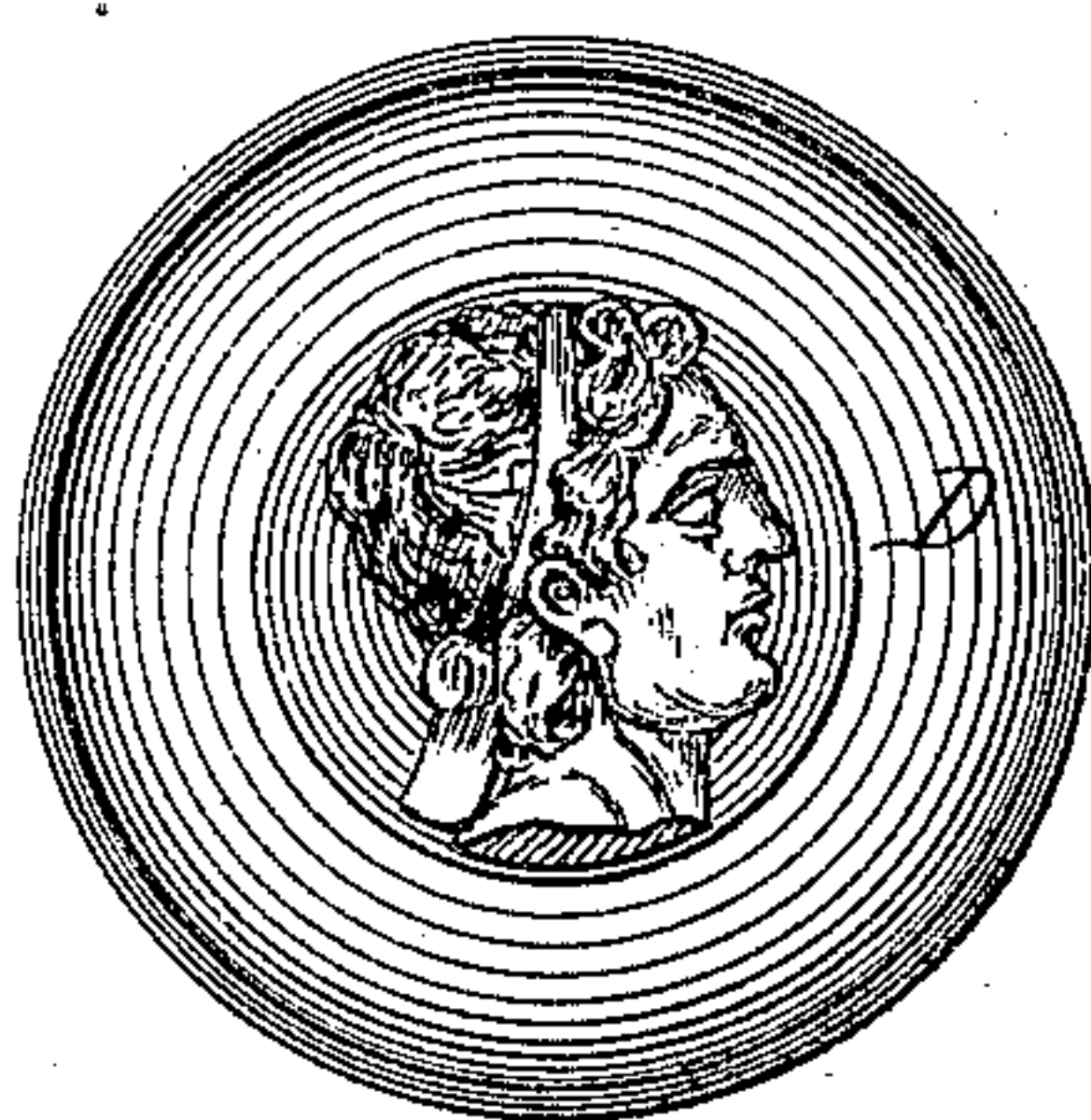


Fig 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

SAMUEL SELDEN, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN ATTACHING KNOBS TO SPINDLES.

Specification forming part of Letters Patent No. 134,708, dated January 7, 1873.

To all whom it may concern:

Be it known that I, SAMUEL SELDEN, of Erie, county of Erie, State of Pennsylvania, have invented a new and useful Improvement in Door-Knobs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 represents a longitudinal section through my improved divided knob, showing the manner of attaching the two parts to each other and to the spindle; and Fig. 2 is a front elevation of the cap. Fig. 3 is a transverse section on line *x x*.

Similar letters of reference denote corresponding parts in the figures.

The invention consists in attaching the knob to the spindle by means of two screw-nuts, one of which is screwed to its place before the knob is applied and the other afterward in such manner that they shall gripe or clasp the shank of the knob between them, as will be hereinafter explained.

In the accompanying drawing, A represents the spindle, made square in its central portion so as to act upon the bolt or latch in the usual manner, and substantially square throughout its entire length, or may be slightly rounded at the corners on the end or ends A', to prevent the rotation of the knob, and at the same time to adapt it to receive a screw-thread, *a*, on its rounded portion for the reception of jamb-nuts B B'. C is the shank portion of the knob, the shank C' of which is made hollow and is provided at its end with a web, *c*, having a square central perforation corresponding in size to, and adapting the shank to receive, the end A' of and to rotate spindle A. D is the cap or front portion of the knob, represented in this instance as dished or semi-spherical in form and of an internal diameter equal to the external diameter of the shank portion C, adapting it to receive and fit snugly over the open end of the latter, and to give to the knob, when the two parts are thus united, substantially the usual or any desired form. The front or cap portion D is provided with a metal prong or tongue, D', which, where the knob or cap is made of metal, may be cast with it, but where the knob or cap is made of porcelain or other similar material the prong or tongue D may be fastened in a manner sim-

ilar to that usually employed for fastening the shank or neck to mineral or porcelain knobs. The prong or tongue D extends within the neck or shank C', and is fastened thereto by a screw, *c'*, passing through neck or shank C', and which, in connection with a shoulder or lug, *d*, in part D, against which the open end of part C rests, serves to prevent any end movement of the cap or front D.

In applying the knob, the spindle is passed through the lock or door in the usual way, one knob having previously been secured firmly to one end. The jamb-nut B is then applied and turned up until it rests against the rose or within the perforation in the door. The shank portion C is next placed upon the spindle, with web *c* resting against nut B, and nut B' is then applied through the open end of the shank portion C, and turned up until it clamps the web *c* against either the rose or nut B. The cap or front D is now applied as explained, and the knob is thus firmly and accurately secured in place. Where it is desired to allow considerable adjustment, so as to provide for all thicknesses of doors, both knobs may be applied to the spindle as explained, but ordinarily it will, perhaps, be found sufficient to fasten one of them in this manner, the other being permanently attached in any usual manner.

In the construction above described the neck C' may be made to overhang the web *c* to a depth corresponding to the thickness of the nut B, or the latter may be covered within the usual socket in the rose or knob-plate. The shank portion C of the knob performs the function of turning the spindle, operating the bolt, and opening the door, and this, as will be seen, without the aid or use of the perforated spindle and small screw ordinarily employed for connecting the shank with the spindle; and at the same time the knob is accurately adjusted to the door by means of the jamb-nuts B B', which take the strain in opening or closing the door, and without the aid of the loose rings or washers usually employed for tightening the knob.

The cap D simply covers the open end of the shank portion C, without being subjected to strain, and may be made of any suitable material and with any desired degree or character of ornamentation, as illustrated in Fig. 2.

I am aware that knobs have been made in

two parts, with a front or cap secured to the body of the shell by means of various devices, and also that knobs have been secured to their spindles by nuts; yet my present construction is the only one, so far as I am aware, in which a knob can be accurately adjusted to any required thickness of door, and at the same time dispense with the drilled spindle and retaining set-screw. This I accomplish by combining with the threaded spindle the divided knob and jamb-nuts, and it will be readily seen that, so far as operating the spindle is concerned, the knob is securely fastened by the two nuts B B', and that the knob cannot be readily loosened by the ordinary use required of it.

As this method of fastening the knob to the spindle is independent of and not affected by

the means shown for attaching the cap or front of the knob to the part C, I do not wish to be limited to the use of the spur or tongue D'.

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

In combination with the threaded spindle A A', the knob C D having the removable front and being secured to the spindle by the nuts B B', one on each side of the web c, substantially as described.

In testimony whereof I have hereunto set my hand this 12th day of October, A. D. 1872.

SAMUEL SELDEN.

Witnesses:

MATTHEW GRISWOLD, Jr.,
F. CURTZE.