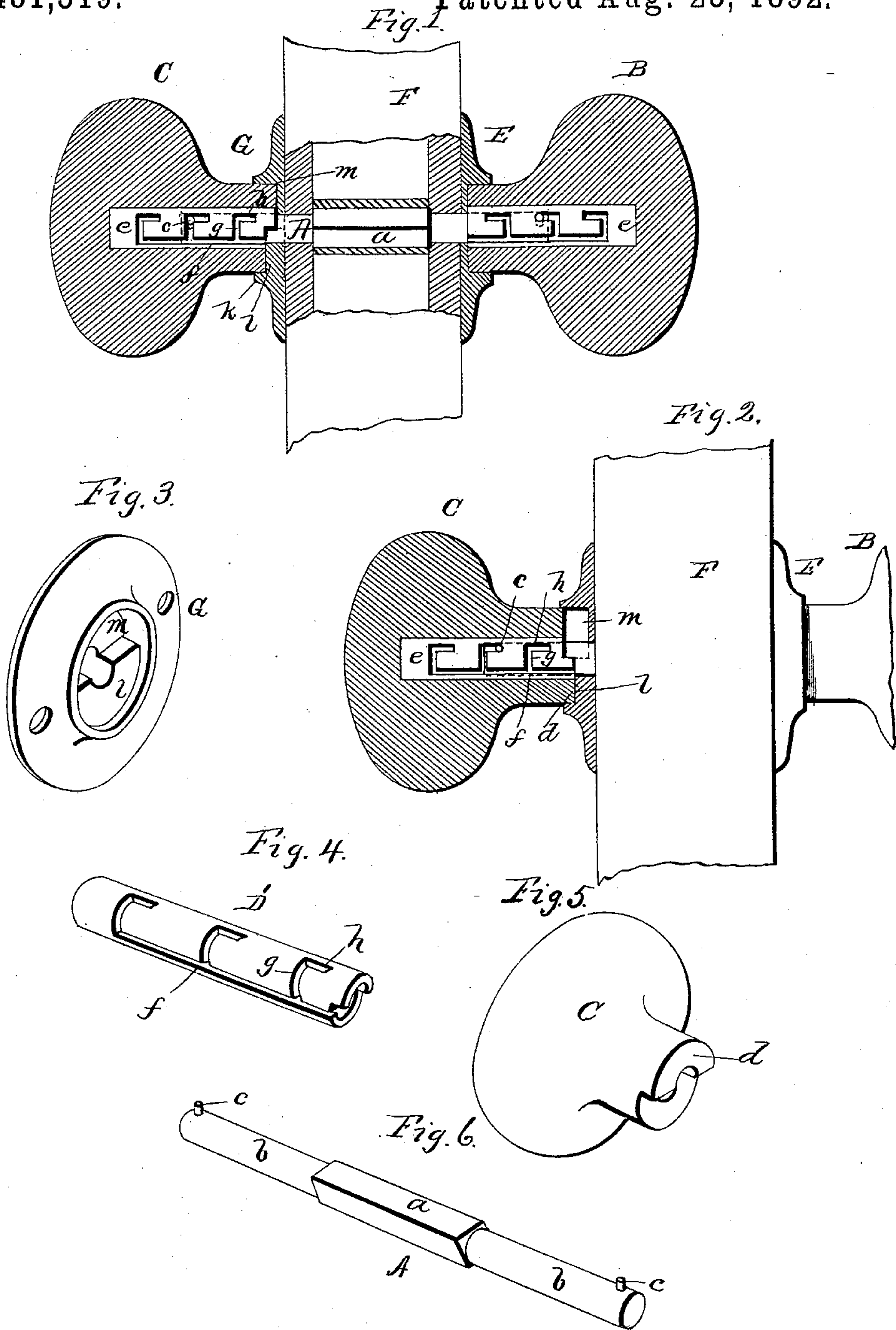


(No Model.)

W. A. G. ASHLEY.
KNOB ATTACHMENT.

No. 481,519.

Patented Aug. 23, 1892.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM A. G. ASHLEY, OF NEW BEDFORD, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO JAMES M. LAWTON, JR., AND AUSTIN T. HOWLAND, BOTH OF SAME PLACE.

KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 481,519, dated August 23, 1892.

Application filed April 14, 1892. Serial No. 429,196. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. G. ASHLEY, a citizen of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Door-Knob Fasteners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in fastening door-knobs to spindles; and, among other things, it has for its object to provide door-knobs and spindles which may be quickly and securely fastened to a door of any thickness, as well as being readily removable in case of injury or for other desired purposes; to lessen the labor in attaching the knobs by facilitating the application of the same; to cheapen the manufacture, and to produce a spindle and knobs to serve in connection therewith which will be durable, simple in construction, and not liable to get out of order.

Other objects and advantages will appear from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a horizontal sectional view of a pair of knobs and spindle connecting the same to a portion of the door with the roses in position. Fig. 2 is an edge view of a part of a door with my improvements applied and illustrating one of the knobs in section and in a position which it assumes when properly secured. Fig. 3 is a perspective view of one of the roses. Fig. 4 is a perspective view of a tube designed to be inserted and fixed in the knobs when said knobs are provided with plain bores. Fig. 5 is a perspective view of one of the knobs, and Fig. 6 is a perspective view of the spindle removed.

Referring by letter to said drawings, A indicates a spindle, which is usually formed of metal, although it may be formed of other suitable material. This spindle is of an angular form in cross-section about midway of its length, as at *a*, and extends in such a manner for a sufficient distance toward each end from the center, terminating at opposite ends in round portions *b*, and each end of said

spindle is provided on corresponding sides with a stud or lug *c*, for a purpose which will be presently explained.

B and C indicate the knobs on each end of the spindle. These knobs differ from each other in construction in that one of them has its shank terminating in a shoulder *d*, which is about one-half the diameter of said shank and bears one-half of the hole or aperture which receives the spindle. These knobs are mainly of the ordinary construction, although they may be of any approved pattern having the socket *e* to receive the spindle.

D indicates a bore, there being one provided in the socket of each knob-shank. These tubes which receive the ends of the spindle are provided in one side with a longitudinal slot *f*, and from these slots extend a series of slots *g*, which are in a plane relatively at right angles to the longitudinal slot *f*, and these transverse slots *g* terminate in slotted offsets or short longitudinal slots *h*, which may assume a position parallel to the long slot *f* and are directed toward the terminal ends of the knob-shank. In some cases, instead of forming the slots *f* and *g* and the offsets or slots *h* in the wall of the bores D of the knobs, I may provide such slots and offsets in a metallic or other tube D', (shown in Fig. 4,) which may be fixedly connected to the knobs in any approved manner.

I deem it insufficient to illustrate or describe any form of lock, as the spindle may be shaped according to the fancy or dictation of the mechanic and adapted for any lock which it may be found desirable to use.

E indicates a rose on one side of the door F. This rose may be of any ordinary or approved construction—such, for instance, as those at present in use—and may receive the knob-shank and spindle in the usual manner.

G indicates the rose used on the opposite side of the door. This rose has the usual aperture for the passage of the spindle and the usual flange *k* to receive the end of the knob-shank. Within this flange the rose is provided with a shoulder *l* and a depressed part *m*, the depression and shoulder being about equal in diameter, or, in other words, the rose is divided centrally, so that one half of the spindle-aperture will remain in the shouldered

portion *l* and the other half in the depressed portion *m*, and the shoulder *d* of the knob-shank is of a slightly less length than the short longitudinal or offset slots *h* of the tube D, so
 5 that the knob C might be allowed a part revolution when drawn out while securing it to the spindle.

In operation the rose E may or may not be first fastened to the door. The knob B is then
 10 placed on one end of the spindle, the knob having been turned so that the stud or lug *c* on the spindle may pass from the longitudinal slot *f* of the bore into the transverse slot *g* and the desired offset slots *h*. The spindle is
 15 then drawn through the door to the proper position in the lock, when the rose G is placed on the spindle, but is not as yet fastened to the door. The particular offset *h* is then used that may be required by the thickness of the
 20 door, small washers (metallic or of other material) being used, if necessary, to take up any slack between the shank of the knob B and the door. The knob C is then placed on the opposite end of the spindle and turned in a
 25 similar manner until the lug or stud on said spindle end is brought into the desired offset notch in the bore. The knob C in this position has the shoulder on the end of its shank seated in the depression of the rose G, and the
 30 stud or lug on the adjacent end of the spindle is in a position ready to enter the short longitudinal slot or offset of the bore. The knob C is then drawn out on the spindle until the stud thereon enters the desired slot *h* of
 35 said bore, after which the rose G is given a half-turn, taking up the slack and bringing the shoulder on the end of the knob-shank over and snugly upon the shoulder in the rose,

so that the knob will be firmly secured to the spindle and the parts assume the position 40 shown in Fig. 2 of the drawings. The rose G is then fastened in that position to the door. To remove the knobs, the rose G has to be first loosened from its position.

While I have described specifically and in 45 detail the parts of the precise construction shown, yet I am aware that many modifications might be made in some of the parts without departing from the spirit of my invention.

Having described my invention, what I 50 claim is—

1. The knob-spindle having a stud or lug near opposite ends, in combination with knobs having the interior of their shanks provided with a longitudinal slot and a series of trans- 55 verse slots communicating therewith, and the transverse slots each terminating in an offset, substantially as specified.

2. A knob-spindle provided with a stud or lug on one side, in combination with knobs 60 having the interior of their shanks provided with a longitudinal slot and a series of transverse slots communicating therewith and each terminating in an offset, one of the said knobs having the end of its shank provided with a 65 shoulder, and a rose provided with a shoulder adapted to engage the shoulder of the knob-shank, substantially as and for the purpose specified.

In testimony whereof I affix my signature in 70 presence of two witnesses.

WM. A. G. ASHLEY.

Witnesses:

HOMER W. HERVEY,
 WILLIAM B. SMITH.