W. A. BARLOW.

ATTACHING KNOB-ROSES TO DOORS.

No. 186,194. Patented Jan. 16. 1877.

Fig. 1

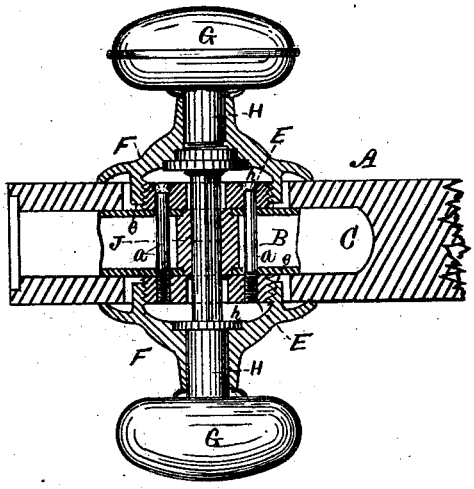


Fig. 6

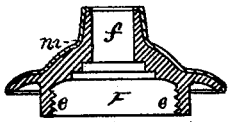


Fig. 5

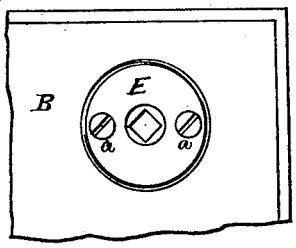


Fig. 2

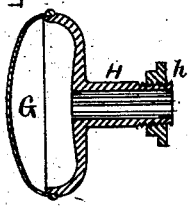


Fig. 3

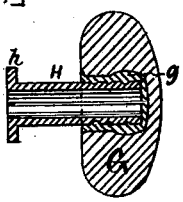
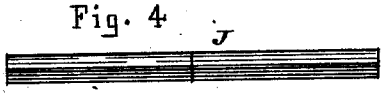


Fig. 4



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UNITED STATES PATENT OFFICE.

WILLIAM A. BARLOW, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN ATTACHING KNOB-ROSES TO DOORS.

Specification forming part of Letters Patent No. **186,194**, dated January 16, 1877; application filed March 4, 1876.

To all whom it may concern:

Be it known that I, WILLIAM A. BARLOW, of Chicago, in the county of Cook and State of Illinois, have invented new and useful Attachments for Door-Knobs; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a transverse section of a portion of a door-lock, cutting the parts constituting my said improved attachments through the center. Figs. 2 and 3 represent detail sections of the knob proper, cutting them through the center. Fig. 4 represents a plan of the spindle. Fig. 5 represents a detail section of the lock, showing the manner of securing the plate employed in connecting the knobs to the lock; and Fig. 6 represents a central section of the rosette arranged between the knob proper and the door.

Like letters of reference indicate like parts.

My invention relates to the means employed in attaching the knobs and roses to the lock or door, so as to render the same more complete, and prevent the knobs from being loosened by continuous use. To that end my invention consists in the arrangement and construction of the several parts, as will more fully appear from the following description and claims.

In illustrating my said attachments, I have shown them in connection with the ordinary mortise-lock; but I do not intend to limit their use with that class of locks only, as they can be used in connection with all kinds of rim-locks, and with the ordinary mortise and rim knob-latches.

In the drawing, A represents a section of a door, and B the lock-case, fitted in the mortise C in the door in the usual manner. E E are annular plates, screw-threaded externally, and secured to the outer sides of the lock-case by screw-bolts *a a*, passing through the plates, as shown in Fig. 1. The plates may rest against the sides of lock, as shown, or may be fitted within apertures formed in the sides of the door, or rest against the outer surface of the door, either manner producing the same result, the object being to connect one plate firmly to the other through the door by the bolts. F F are the rosettes, which are made of any suitable material, preferably of cast metal, and of any desired external configuration, and are each provided, on the end fitting against the door, which I will designate as the inner end, with an annular flange, *e*, screw-threaded internally, and adapted to screw upon the plates E, by which means the plates and rosettes are firmly connected together. G G are the knobs proper, made of any suitable material, and provided with a suitable metal shank, H, adapted to pass through an aperture, *f*, formed centrally through the rosette, as shown in Fig. 1. The end of each shank, opposite the knob, is provided with an annular collar, *h*, which fits into a recess in the inner surface of the rosette, by which means the knob is permanently attached to the rosette, so as to prevent longitudinal movement of the shank within the aperture, and at the same time admit of its being freely revolved. J is the spindle passing through the lock, its ends being fitted into mortises in the ends of the shanks, in the usual manner. The spindle may be fitted loosely within the mortises in the shanks, or it may be made in two parts, as shown in Fig. 4, and its outer ends permanently secured within the respective shanks, as may be preferred, the result being the same.

In Fig. 2 of the drawing I have shown a metal knob with the shank cast as a part of the same, and screw-threaded at its end to receive the collar *h*, by which means the knob is held firmly against the outer surface of the rosette. When the knob is made of clay, porcelain, or other similar material, within which it is necessary to secure the end of the shank by filling the interstice with soft metal or cement, as shown at *g*, Fig. 3, I form the collar as a part of the shank, and pass the shank through the rosette before the interstice is so filled. The outer face of the rosette F may be finished, so as to admit of being plated, or it may be japanned or covered with porcelain, as may be preferred; but I usually provide a sheet-metal facing, *m*, which is spun upon the outer face of the rosettes, and held in position

by its edge being turned against the back of the flange of the cast-metal portion, as shown in Fig. 6, the object of which is to obviate the necessity of finishing the cast metal to receive the plating.

The manner of securing the knobs to the door and lock or latch is as follows: The plates E E are first secured to the door or case of the lock or latch by the bolts *a a*, as previously described. The spindle is then passed through the hub of the latch, and the shank of the knobs fitted upon the ends of the spindle, and the rosettes screwed upon the plates until the inner ends firmly clamp the door, when the attachments are complete.

It will be readily perceived that with the said arrangement of parts the knobs are permanently connected one to the other, in such a manner as to prevent them from being loosened by continuous use, as is the case with that class of door-knobs in which the rosettes are secured to the door by means of the ordinary wood-screws; also, that the parts are adjustable to any thickness of door without the use of washers, or other similar means, and should the door shrink after the parts have once been adjusted, so as to loosen them, they can be readily tightened by simply turning the rosettes on the plates.

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

1. The plates E E, connected each to the other by the screw-bolts *a a*, in combination with the rosettes F F, one or both connected to one or both of said plates, substantially as and for the purpose specified.

2. The combination, with the plates E E, bolts *a a*, and rosettes F F, of the shanks H H and loose spindle J, substantially as and for the purpose specified.

3. The combination, with the rosettes F F, connected each to the other by the plates E E and bolts *a a*, of the shanks H H, and the spindle J made of two parts and disconnected from each other, substantially as and for the purpose specified.

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