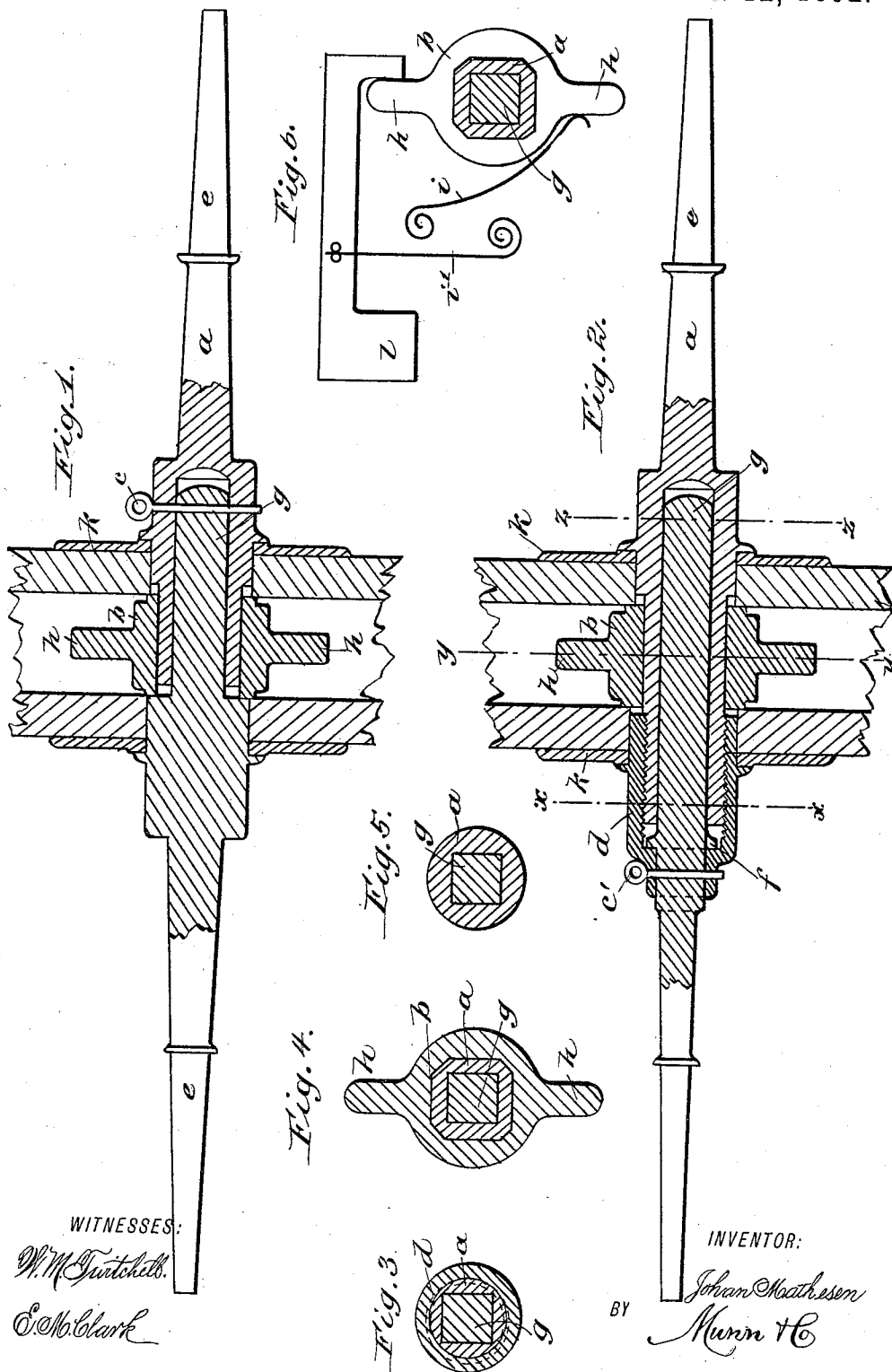


(No Model.)

J. MATHESSEN.
KNOB ATTACHMENT.

No. 467,039.

Patented Jan. 12, 1892.



WITNESSES:

W. M. Twitchell.

E. M. Clark

INVENTOR:

Johan Mathesen
BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE,

JOHAN MATHESSEN, OF CHRISTIANIA, NORWAY.

KNOB ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 467,039, dated January 12, 1892.

Application filed August 29, 1891. Serial No. 404,159. (No model.) Patented in Norway June 7, 1888, No. 916, and in Sweden December 6, 1888, No. 1,996.

To all whom it may concern:

Be it known that I, JOHAN MATHESSEN, a subject of the King of Norway, and a resident of Christiania, Norway, have invented a new and useful Improvement in Door-Handles, (for which I have obtained Letters Patent in Norway, No. 916, dated June 7, 1888, and in Sweden, No. 1,996, dated December 6, 1888,) of which the following is a specification.

My invention relates to door-handles; and its object is to provide a divisible handle, both parts of which, when connected, will reach through the catch for the latch-bolt, whereby a more solid connection and a better guidance for the handle may be obtained than is possible in other devices of this character.

The invention consists in the construction, arrangement, and combination of parts, hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference designate corresponding parts in the several views.

Figure 1 is a side elevation, partly in section, of a door-handle of ordinary construction. Fig. 2 is a similar view of a door-handle embodying my invention. Figs. 3, 4, and 5 are vertical transverse sections of the same, taken, respectively, on the lines $x x$, $y y$, and $z z$ in Fig. 2; and Fig. 6 is a detail side elevation of the latch-bolt and its catch, the door-handle appearing in section.

The door-handle proper consists of a hollow portion a , essentially square in cross-section, and a square solid part g , fitting in the part a , both of said parts entering the catch b for the latch-bolt l , and having reduced outer ends e to receive knobs of any preferred form.

In Fig. 1 it will be seen that while both parts of the handle enter the catch b the part g alone projects beyond it, the part a extending only partially through, and that said parts are connected by passing a pin c through them. In this construction the connection of the handle with the catch is unsteady and the guidance for the handle is untrue. To remedy these defects I construct the handle as shown in Fig. 2, wherein it will be seen that the hollow part a extends not only through the catch b , but beyond it and through the door, is slightly reduced beyond the catch, and is exteriorly threaded, and that the part

g has a shoulder f just outside of the mouth of the part a . The catch b is constructed similarly to that shown in Fig. 1, being centrally apertured to snugly receive the part a of the handle, and provided with ears or lugs h to engage the latch-bolt l .

Upon the part a of the handle is an interiorly-threaded sleeve d , which is screwed up thereon, so that an interior shoulder at its outer reduced end bears against the shoulder f on the part g , and an annular flange on its exterior bears against a metal washer k , fixed to the adjacent face of the door, the screwing up of said sleeve also at the same time causing a similar annular flange on the exterior of the part a to bear against a like washer secured to the other face of the door. The handle may thus be adapted to doors of any thickness. The parts being thus connected are further steadied by passing a pin c' through the sleeve d and the part g , as shown in Fig. 2.

To insure a prompt return of the latch-bolt and catch to their normal position, I connect a spring i' to the inner face of the door and to the latch-bolt and arrange a similar spring i adjacent thereto, so that its free end shall bear against the catch, as shown in Fig. 6.

By this construction and arrangement the catch may be turned regularly and the handle is guided steadily in its revolution.

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

The combination, with a door-handle constructed in two parts, the one fitting within the other and the outer part being exteriorly threaded at one end, of an internally-threaded sleeve fitting upon the outer part of said handle and bearing against a shoulder on the inner part of the handle, and a detachable connection between said sleeve and the inner part of the handle, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 4th day of July, 1891.

JOHAN MATHESSEN.

Witnesses:

JOHAN CHRISTOFF SCHNURBUSCH,
OLAF HURTLE.