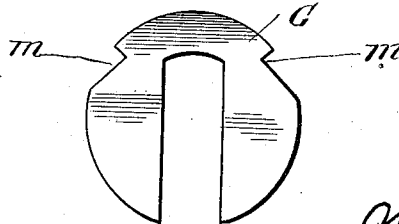
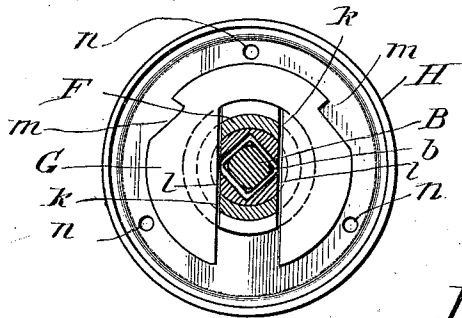
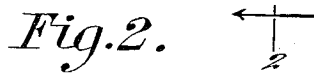
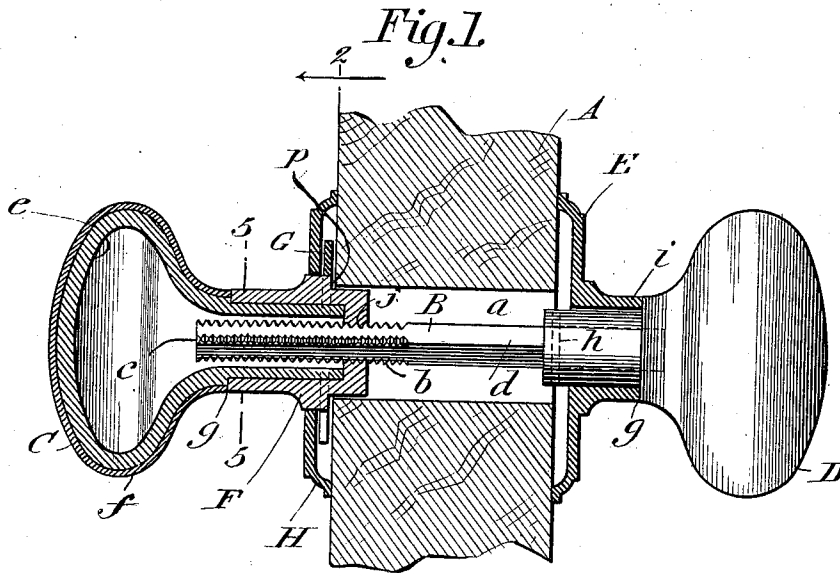


W. CURLETT.
 KNOB AND SPINDLE CONNECTION.
 APPLICATION FILED JAN. 28, 1911.

1,008,790.

Patented Nov. 14, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM CURLETT, OF SAN FRANCISCO, CALIFORNIA.

KNOB AND SPINDLE CONNECTION.

1,008,790.

Specification of Letters Patent.

Patented Nov. 14, 1911.

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To all whom it may concern:

Be it known that I, WILLIAM CURLETT, citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Knob and Spindle Connections, of which the following is a specification.

My present invention has to do with door knob and spindle connections; and it consists in the inexpensive, easily applied and neat combination, hereinafter described and claimed, adapted to be made to nicely fit doors of different thicknesses.

In the drawings which are hereby made a part hereof; Figure 1 is a view showing my improvement applied to a door. Fig. 2 is a vertical section taken in the plane indicated by the line 2—2 of Fig. 1, looking outward. Fig. 3 is a detail view showing the relative arrangement of the knob shank, thimble and coupling plate. Fig. 4 is a detail view of the coupling plate. Fig. 5 is a detail transverse section taken on line 5—5 of Fig. 1.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A is the door in which is a transverse opening *a* that is preferably of circular form in cross-section. B is the spindle, threaded at *b* and angular in cross-section at *c* and *d*, and C and D are the knobs. Each of the said knobs comprises a core *e* of cast-iron, and a skin or covering *f*, of brass or other suitable metal, spun on or otherwise applied to the handle portion of the core and terminating at the point *g* where the knob is shouldered and the said handle portion merges into the shank. I would also have it here understood that the interior of the shank portion of each knob is of angular form in cross-section to receive the adjacent angular portion of the spindle, and that the knob D is fastened to the spindle B by a pin *h* or other suitable means; also, that an escutcheon E having an outwardly extending sleeve *i* is interposed between the shoulder *g* of knob D and the adjacent side of the door. Externally the shanks of both knobs are of circular form in cross-section, as will be noted by comparison of Figs. 1-3.

Surrounding the shank of the knob C is a thimble F having a bore of circular form in cross-section that receives the said

shank and also having a threaded aperture *j* in its inner end that receives and engages the thread *b* of the spindle. It will also be observed by comparison of Figs. 2 and 3 that the thimble F is provided in opposite sides with slots *k* and that the shank of knob C is provided in opposite sides with kerfs or grooves *l*, designed to be registered with the slots *k* as best shown in Fig. 3. The said slots *k* and kerfs or grooves *l* when relatively arranged as shown, receive the legs of the bifurcated coupling plate G which, as its name imparts, has for its office to connect the shank of knob C and the thimble F and prevent the knob shank from being pulled off the spindle or out of the thimble. At the points *m* the plate G is preferably notched to facilitate withdrawal thereof from the slots and kerfs mentioned.

H is an escutcheon designed to be attached to the door by nails or screws passed through its apertures *n*. The said escutcheon H incloses the coupling plate G and is designed to prevent displacement of said plate when the same is turned with the knob C and thimble F, or at any other time. It will be noted by reference to Fig. 1 that the outer side of the thimble F is arranged flush with the outer side of the skin or covering *f* of the knob C, while the outer side of the escutcheon sleeve *i* is arranged flush with the outer side of the skin or covering on the knob D. In this manner notwithstanding the cheapness of the construction of the exterior appearance of the device as a whole is rendered neat and finished.

In assembling the parts of my improvement, the knob D is fastened on spindle B, and the escutcheon E is mounted on the shank of said knob, after which the spindle is passed through the opening in the door until the escutcheon E brings up against the adjacent side of the door. The thimble F is then screwed on the threaded portion of the spindle until its shoulder *p* is adjacent the side of the door remote from the escutcheon E, and its slots *k* are in vertical position. With this done, the escutcheon H is placed on thimble F, and the knob C is pushed to position on the spindle and in the thimble, and then the plate G is dropped to position in the slots *k* and grooves *l*, after which the escutcheon H is fastened to the door.

In the simple and expeditious manner just described, the knobs and spindle are

permanently connected together without the possibility of the knobs being removed or the connection rendered loose until after the escutcheon plate H is detached from the door. It will also be gathered from the foregoing that my novel combination is readily adapted to doors of different thicknesses, and that notwithstanding its cheapness it is neat and finished in appearance.

10 Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. In a knob and spindle connection, the combination of a spindle; knobs respectively comprising a metallic core having a handle portion and a shank and also having an exterior shoulder between the two, and a skin or covering of metal arranged on said handle portion and terminating at said shoulder; means fixing one knob on one end portion of the spindle; an escutcheon having an outwardly-directed sleeve receiving the shank of said knob and arranged with its outer side flush with the outer side of the skin or covering on the knob and adapted to be interposed between the knob shoulder and the adjacent side of a door; a thimble surrounding the shank of the other knob and connected with the spindle and arranged with its outer side flush with that of the skin or covering on the other knob; and an escutcheon surrounding said thimble and

adapted to be opposed to the other side of the door.

2. In a knob and spindle connection, the combination of a threaded spindle having an end portion of angular form in cross-section; a knob having a shank the interior of which is angular and the exterior circular in cross-section, and also having kerfs in opposite sides of said shank; a thimble having an interior of circular form in cross-section receiving and adapted to be turned about the shank of the knob, and also having a threaded aperture in its inner end, of less diameter than said interior, receiving and engaging the threaded portion of the spindle, and further having slots in its opposite sides and extending through its wall and registered with the kerfs in the knob shank; an escutcheon surrounding said thimble; and a bifurcated coupling plate inclosed in said escutcheon and having legs extending through the slots in the thimble and resting in the kerfs of the knob shank.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM CURLETT.

Witnesses:

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C. E. GOTTSCHALK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."