(No Model.)

C. O. CASE.

DOOR KNOB.

No. 528,147. Patented Oct. 30, 1894.

Fig. 1.

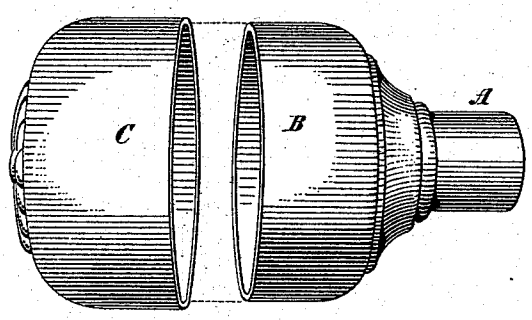


Fig. 2.

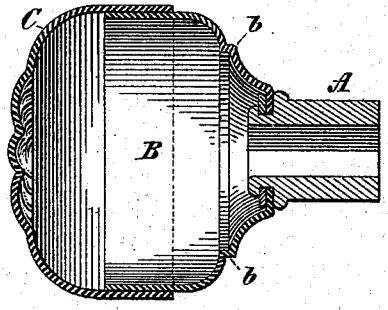
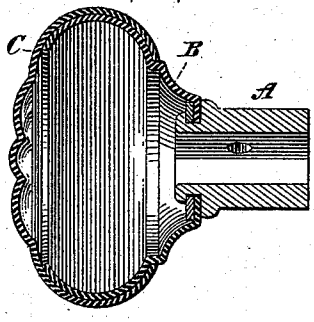


Fig. 3.



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UNITED STATES PATENT OFFICE.

CROMWELL O. CASE, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE P. & F. CORBIN, OF SAME PLACE.

DOOR-KNOB.

SPECIFICATION forming part of Letters Patent No. 528,147, dated October 30, 1894.

Application filed July 25, 1894. Serial No. 518,522. (No model.)

To all whom it may concern:

Be it known that I, CROMWELL O. CASE, of New Britain, county of Hartford, and State of Connecticut, have invented a new and useful Door-Knob and Process of Forming Same, of which the following is a full, clear, and exact specification.

My invention relates to an improved construction and process of forming door-knobs and consists in the construction and method of uniting the parts which constitute the knob, hereinafter fully described.

My invention has for its object the rapid and economic construction of a hollow door-knob hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side elevation in perspective of the parts constituting the knob. Fig. 2 is a longitudinal section through the center of the knob in process of construction, and Fig. 3 is a central longitudinal section of the completed knob.

A is a knob shank.

B is a shell of suitable design and substantially cup-shaped, which constitutes substantially one-half of the knob.

C is another shell of substantially the same outline but slightly larger than the shell B, so that it may slide over, or telescope with, the said shell B. One of these shells, B, is attached to the shank A in any desirable manner, or if preferred, the shank may be formed integral therewith.

The process of forming the hollow door-knob consists in placing the shells B and C together, as shown in Fig. 2, and then forcing them into the position and form indicated in Fig. 3, in which figure the edge of the shell C is illustrated as drawn so that the outer shell securely clasps the inner shell, making the two parts substantially one. The force which drives the shells into this form may be applied by a suitable press, or, if desired, the parts may be spun together in a lathe. If desirable, a shoulder *b* may be formed in one part B, so that by forcing the two parts together until the edge of the outer part abuts against the said shoulder, a smooth exterior surface may be given to the completed knob. The rough edges of the knob are removed in the ordinary manner. In the past it has been customary to form hollow knobs by molding which process is necessarily slow and expensive, inasmuch as a core has to be made for each casting, and the entire outer surface of each knob must be smoothed prior to polishing. By my method, the shells may be automatically spun up, placed together, pressed and finished in a remarkably short space of time, and at the expense of little labor.

It is obvious that by simply alternating the diametric gage of the two parts B and C, the shell B may slide over the shell C, instead of vice versa, as described.

It will be seen that the importance of conforming the inner edge of the inner shell to the curved adjacent surface of the outer shell, as shown in Fig. 3 of drawings, is to prevent any tendency of the parts to telescope by reason of any blow against the outer end of the knob thus formed.

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

1. A door knob consisting of two sheet metal shells or cups, the edge of the inner one being conformed to and by the adjacent inner surface of the outer one to prevent telescoping, the edge of the outer shell or cup being conformed to the adjacent outer surface of the inner one to prevent the separation of the parts, with a knob shank projecting from one of said cups, substantially as described.

2. The process of forming a door-knob consisting of first forming two telescopic shells, from one of which projects a suitable knob shank, and second, forcing said shells together so that the forward edge of the inner one shall be drawn inwardly, and conformed to and by the adjacent inner surface of the outer shell, the edge of which outer shell is drawn around and conformed to the adjacent part of the inner one.

CROMWELL O. CASE.

Witnesses:
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