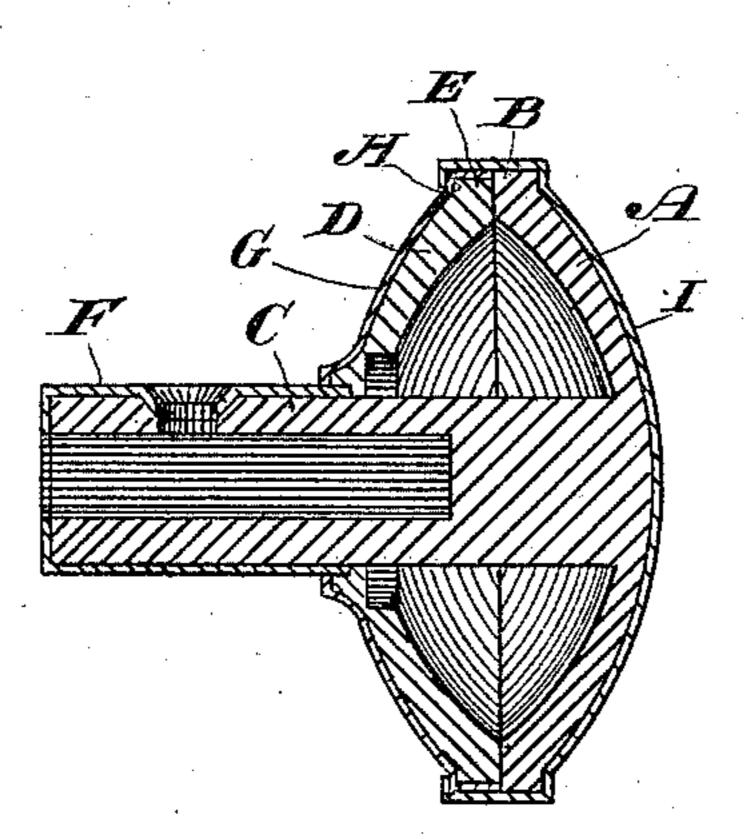
(No Model.)

## W. I. ALVORD.

### MANUFACTURE OF DOOR KNOBS.

No. 305,560.

Patented Sept. 23, 1884.



Witnesses Schilliamson W.J. Handaut

Inventor
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Attys.

# United States Patent Office.

WILLISTON I. ALVORD, OF BRIDGEPORT, CONNECTICUT.

### MANUFACTURE OF DOOR-KNOBS.

SPECIFICATION forming part of Letters Patent No. 305,560, dated September 23, 1884.

Application filed February 4, 1884. (No model.)

To all whom it may concern:

a citizen of the United States, residing at Bridgeport, in the county of Fairfield and | 5 State of Connecticut, have invented certain new and useful Improvements in Door-Knobs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the re art to which it appertains to make and use the same.

My invention relates to certain novel and useful improvements in knobs for doors, &c., and has for its object to provide a knob 15 whose construction shall be cheap and simple, and which shall embody the advantages set forth in applications designated as A and B, and filed on an even date herewith, and also the advantage that any rotary motion applied 20 to the front of the knob is imparted directly to the spindle itself; and with these ends in view my invention consists in the details of construction and combination of elements hereinafter fully and in detail set forth, and then 25 specifically designated by the claim.

In order that those skilled in the art to which my invention appertains may more fully understand its construction and know how to make and use my improvement, I will 30 proceed to describe the same in detail, referring by letter to the accompanying drawing, forming a part of this specification, which shows a central section of my improved doorknob properly assembled.

A is the front shell, of cast metal, having a flange, B, around its edge; and C is a hollow shank, cast integral with said shell, and adapted to receive the spindle.

D is the rear shell, of cast metal, provided 40 at its center with a hole of sufficient size to readily admit the entrance of the shank. The shell D is provided with a flange, E, similar to the flange B.

F is a sleeve of thin sheet metal, adapted to 45 surround the free end of the shank.

G is a sheet-metal cup or sheath, adapted to conform to the contour of the rear shell, D. and provided at its center with a hole of sufficient size to admit the passage of the shank, 50 and with an annular recess, H, in its inner circumference, adapted to fit closely over the flange E.

I is a cap of sheet metal, adapted to the ex-Be it known that I, Williston I. Alvord, I ternal contour of the front shell, A. This cap is so constructed that when the several parts 55 of the knob are assembled the inner edge of said cap will extend beyond the annular recess in the casing of the rear shell, for the purpose presently explained.

In assembling the parts of my improved 60 knob, the sleeve F having been placed in position over the end of the shank, the rear shell, D, is then slipped over the shank until its outer edge abuts against the inner edge of the shell A. The sheath is then placed over the 65 shell D. The cap I is then placed over the front shell, A, and its lower edge turned by spinning beading or otherwise underneath the shoulder of the annular recess H, thus securely binding the rear shell and its covering to the 70 front shell, A.

In applications A and B, filed on an even date herewith, I have shown and described two constructions of knobs, one with the body cast in a single form and the other with the 75 front and rear shells separate, but with the shank forming a part of the rear shell; and I do not wish to be understood as laying claim in this application to either of those constructions.

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

The method herein described of making doorknobs, the same consisting in forming the body 85 of the knob of two independent cast-metal shells conformed externally to the contour of the knob, and with flanges extending around the peripheries of their meeting edges, the shank being cast integral with the front shell 90 and extending through the rear shell, and then adapting a sheet-metal sheath and cap over the rear and front portions, respectively, of the knob, and securing the several parts firmly together by turning the inner edge of the cap 95 underneath the flange and against the sheath, substantially as set forth.

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

#### WILLISTON I. ALVORD.

Witnesses; S. S. WILLIAMSON, WILLIAM J. HAVILAND.