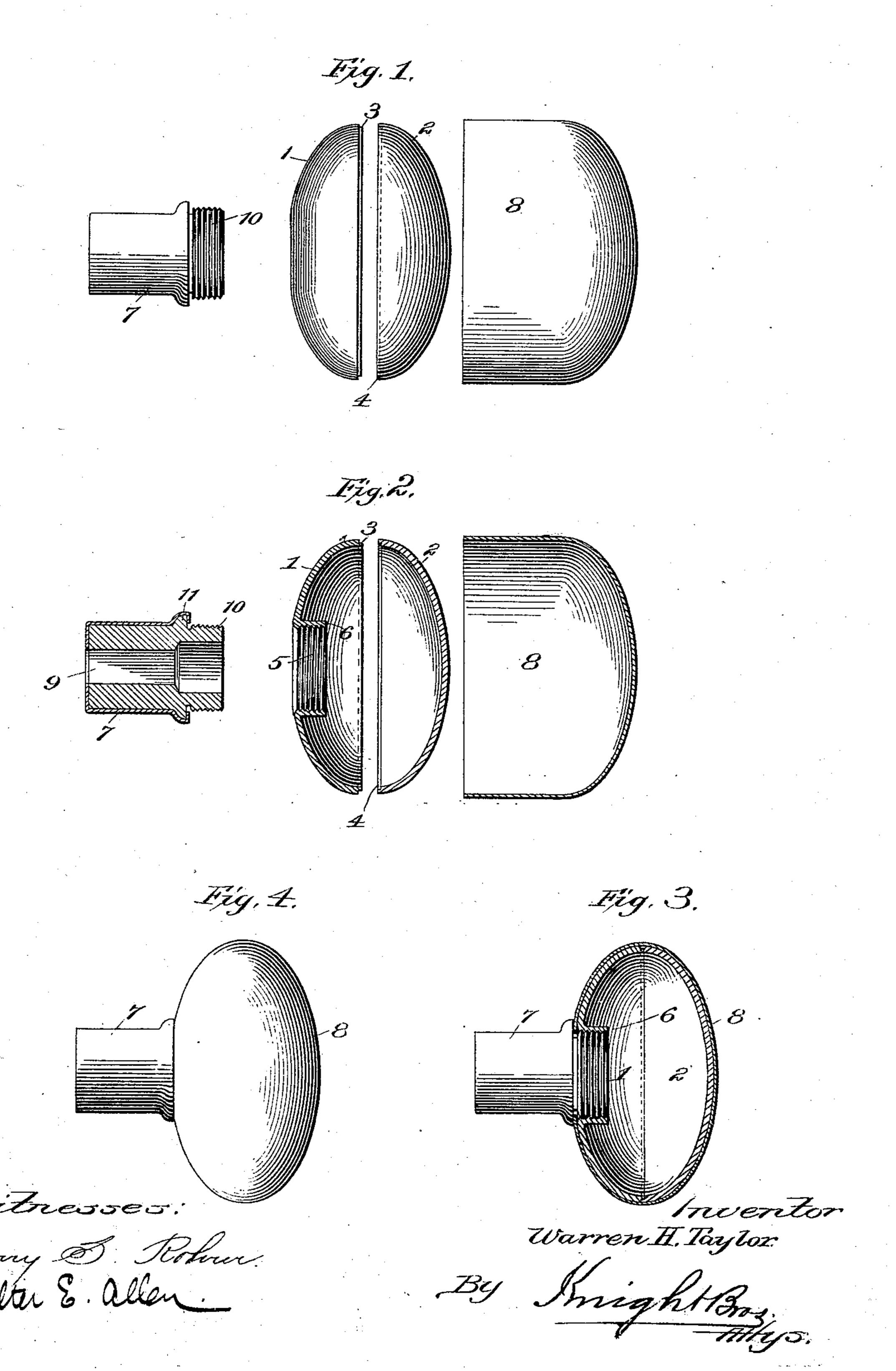
(No Model.)

W. H. TAYLOR. DOOR KNOB.

No. 532,609.

Patented Jan. 15, 1895.



United States Patent Office.

WARREN H. TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE & TOWNE MANUFACTURING COMPANY, OF SAME PLACE.

DOOR-KNOB.

SPECIFICATION forming part of Letters Patent No. 532,609, dated January 15, 1895.

Application filed December 11, 1893. Serial No. 493, 344. (No model.)

To all whom it may concern:

Be it known that I, WARREN H. TAYLOR, a citizen of the United States, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Door-Knobs, of which the following specification, taken in connection with the accompanying drawings, is a

full, clear, and exact description.

My invention is designed to produce a knob having a handsome and absolutely durable surface which shall be economical to manufacture, and at the same time be of high mechanical excellence, which, in a knob, involves 15 rigidity combined with lightness. These results have been sought with more or less success in several of the well-known methods of manufacturing door knobs. The usual way of making high grade knobs has been by 20 casting the knob and shank in a single piece, or by casting the knob in one piece and the shank in another and then joining them. Knobs of sheet metal have also been made by making an inner core of two hollow pieces, 25 applying to each core piece a separate finishing piece of metal of finer quality, and then fastening together the two finished pieces in any suitable manner. Knobs have also been made to a considerable extent of an inner 30 core of a single piece of metal, and an outer covering of a single piece of finishing metal. The inner core can be made more cheaply in two pieces than in one, while a much handsomer knob can be produced by making the 35 finishing metal covering in a single piece. In my invention therefore, I employ an inner core of two sections, and an outer covering of a single piece of finishing metal which is formed around the sectional core and serves 40 to hold them together. The knob-shank is fastened to the core of the knob by a screwthread, and may be made solid and of the same metal as the finishing metal of the knob, or it may be made of a metal core with the 45 covering of finishing metal on its exterior.

In order that my improvements may be fully understood, I will first describe the same with reference to the accompanying drawings, and afterward particularly point 50 out the novelty in the annexed claim.

Figure 1 shows in side elevation the knob-

shank, the sectional knob core, and the prepared cup shaped finishing covering. Fig. 2 shows the same parts in section. Fig. 3 is a sectional view of the knob completed. Fig. 55

4 is a side elevation of the same.

In carrying my invention out, as shown in the drawings, I employ an inner hollow core for the knob constructed of two steel cups 1, 2, which may be struck up into shape by 50 suitable dies or formed in any other manner. For convenience in manipulation and insuring the proper relative position of these cups 1 and 2, so that their exterior surface will be flush, I form their meeting edges with engag- 65 ing lips or rabbets 3, 4. The part or cup 1, is formed with the central shank opening 5, and the inturned screw collar 6, for the attachment of the knob shank 7. The screw collar is thus flush with the surface of the cup into 70 which it projects. When the sections of the hollow core are brought together in any suitable manner, the finishing covering 8 of finer metal is formed around them by means of dies or by spinning, or other suitable means. 75 The finishing covering is first formed into a cup as shown in Figs. 1 and 2, so that the core will fit into it, and the sides of the cup are afterward made to closely conform to the shape of the core. The finishing sheet of 80 metal having been formed over the core is carefully cut around the shank opening of the collar, and the shank is screwed or otherwise fastened in place. The shank is formed with the customary spindle opening 9, the 85 screw-threaded head 10, and an annular lip or shoulder 11, which overlaps and covers the edge of the finishing metal surrounding the core, so that only the finishing metal is visible from the outside. If desired, the shank 90 may be formed with the inner core of some cheap metal covered with the finishing metal, as shown in Fig. 2. In this case the edge of the finishing metal is spun around the lip 11 so as to be concealed when the shank is 95 screwed in place.

The finishing metal may be of any preferred kind, as for instance, bronze, brass,

aluminium, &c.

This construction is particularly advanta- 100 geous for the reason that shanks of various forms can be readily fastened to a knob, so

that any form of shank and spindle may be employed, and the knobs can be thereby adapted cheaply to any make of lock, rendering it unnecessary to carry in stock so large a line of knobs as is ordinarily necessary to meet the various demands of the trade.

Having thus described my invention, the following is what I claim as new therein and

ro desire to secure by Letters Patent:

As a new article of manufacture a door knob comprising an inner core formed of two cups 1, 2, having flush exterior surfaces and connected by a rabbet joint 3, 4, at their meeting edges, the inner cup being formed

with a central shank opening 5, and an inturned screw collar 6 located wholly within the cup, the shell 8 enveloping the core having a central shank opening surrounding the shank opening of the collar, and the shank 7 20 having the screw threaded head 10 engaging the screw collar within the inner cup and the annular shoulder 11 bearing against the edge of the enveloping shell and binding the edges of the core and shell together around the 25 shank-opening; substantially as described.

WARREN H. TAYLOR.

Witnesses:

GEO. E. WHITE, SCHUYLER MERRITT.