

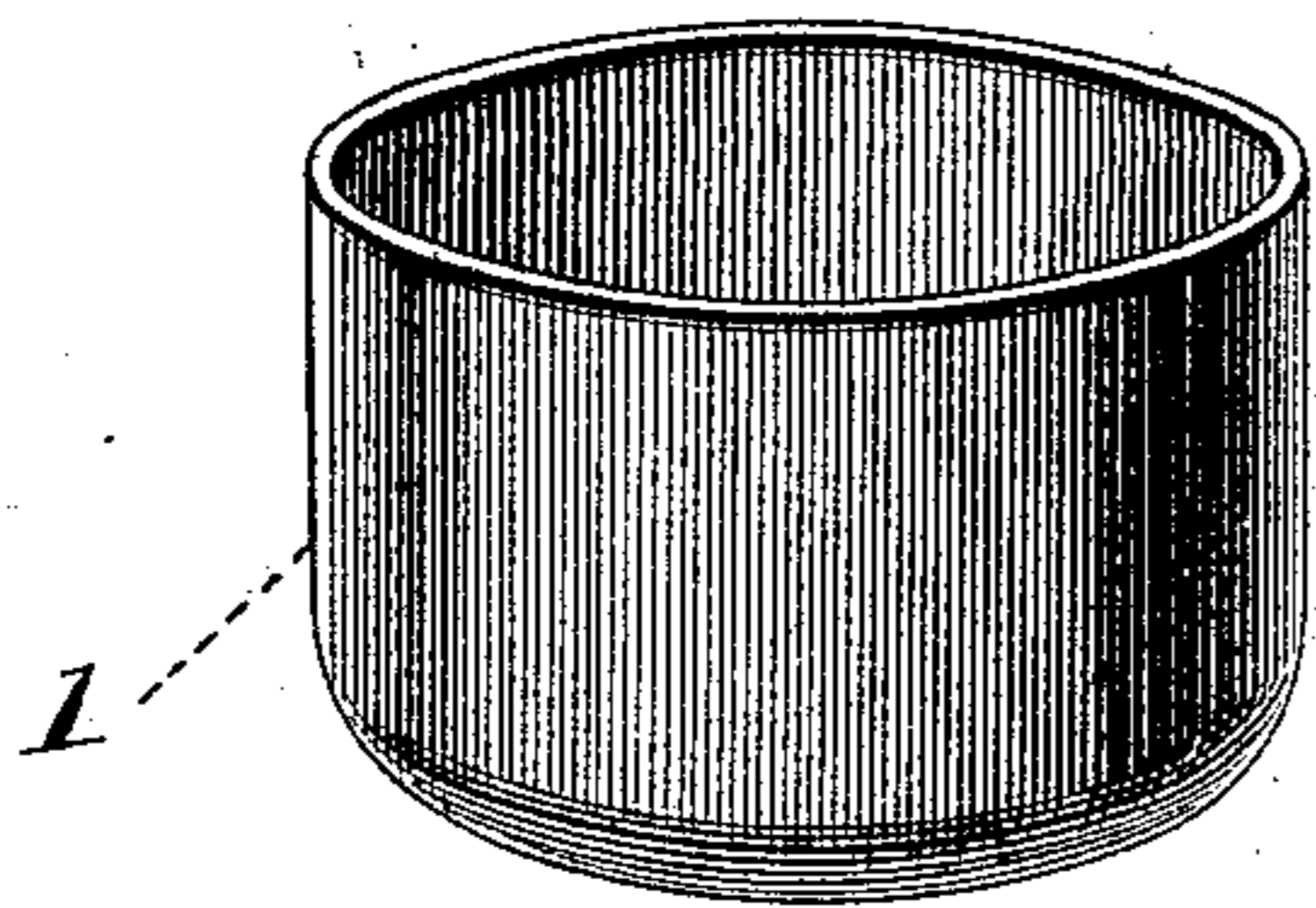
(No Model.)

C. A. LINDHOLM.  
DOOR KNOB.

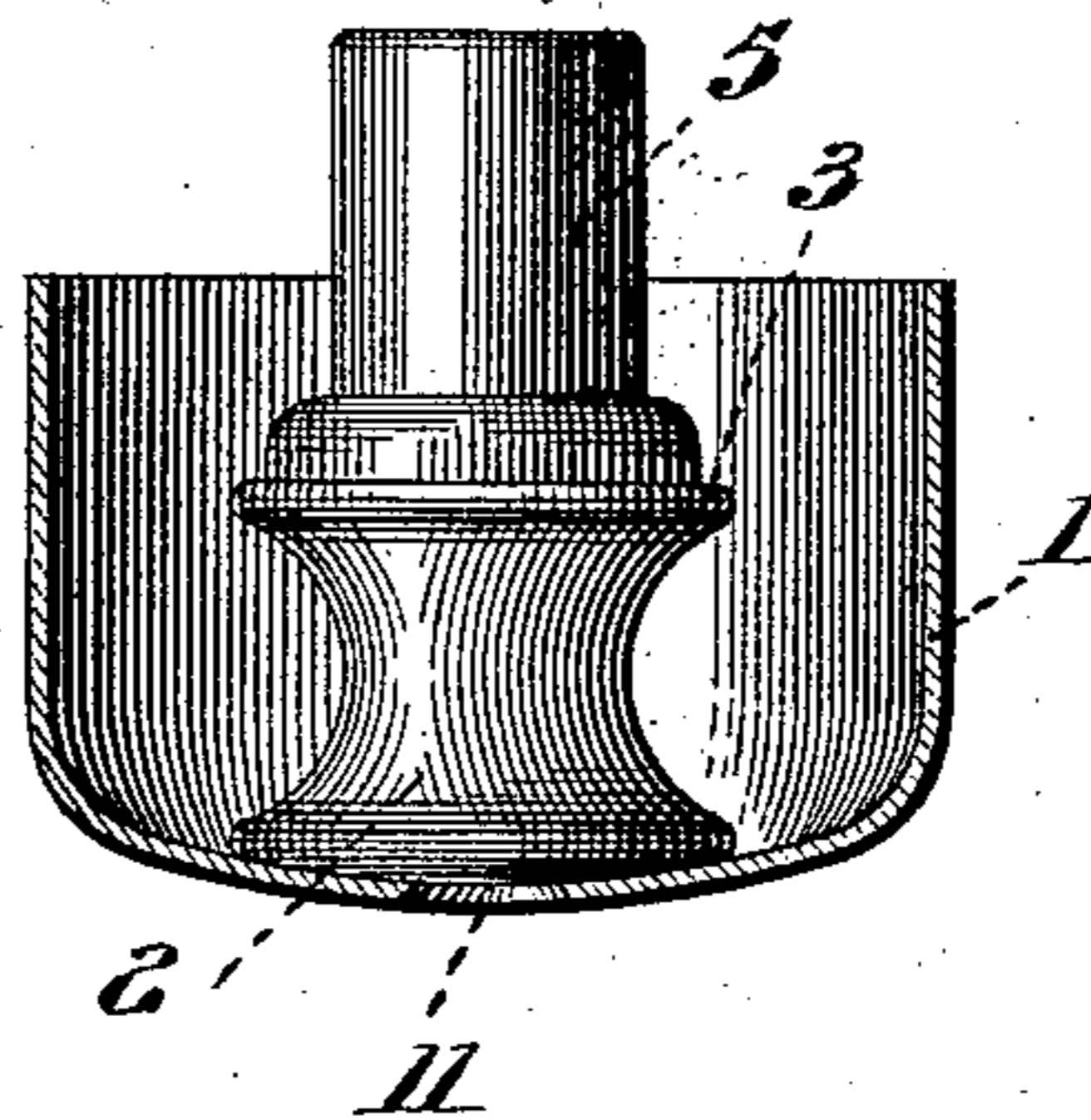
No. 529,180.

Patented Nov. 13, 1894.

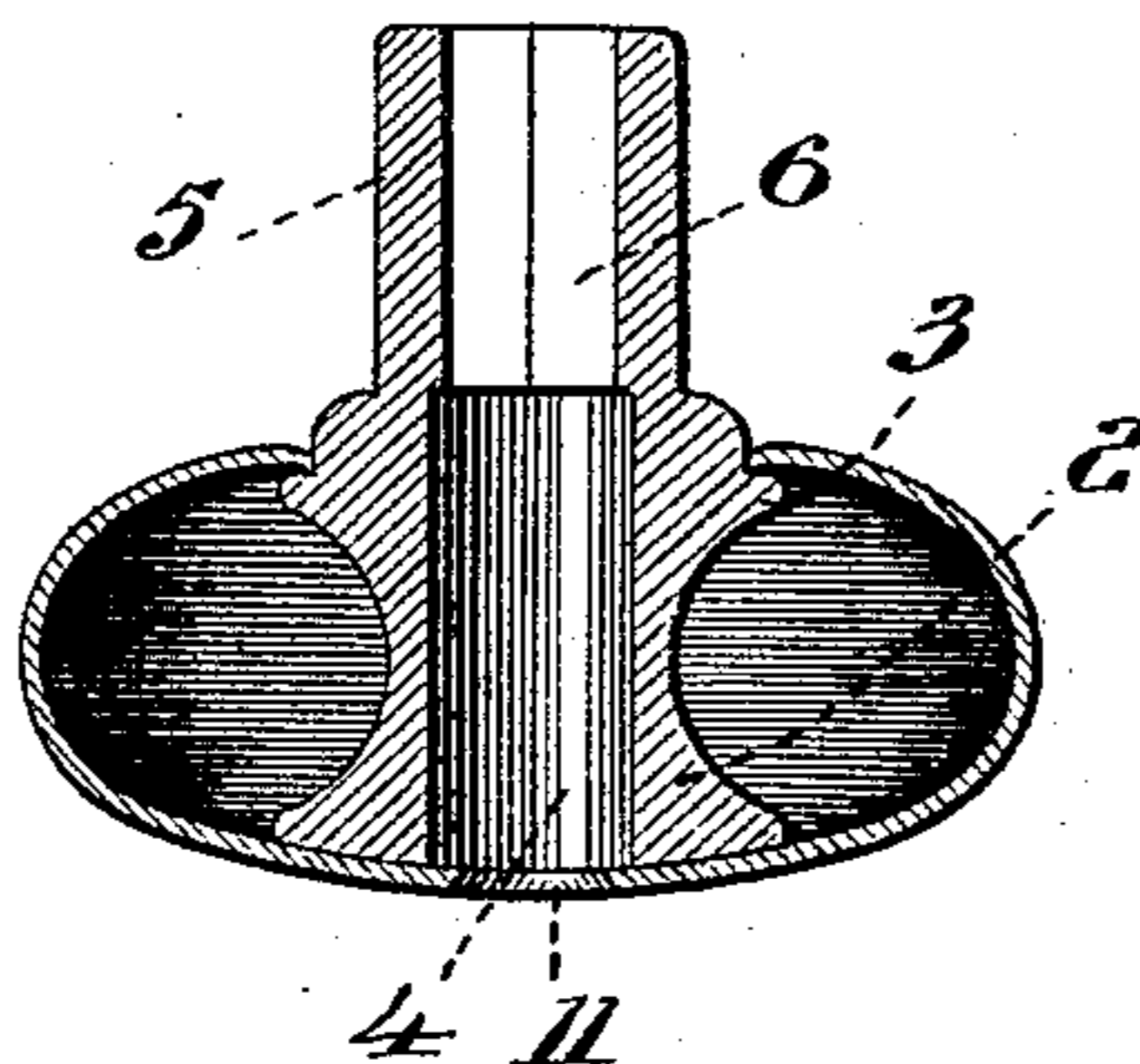
*Fig. 1.*



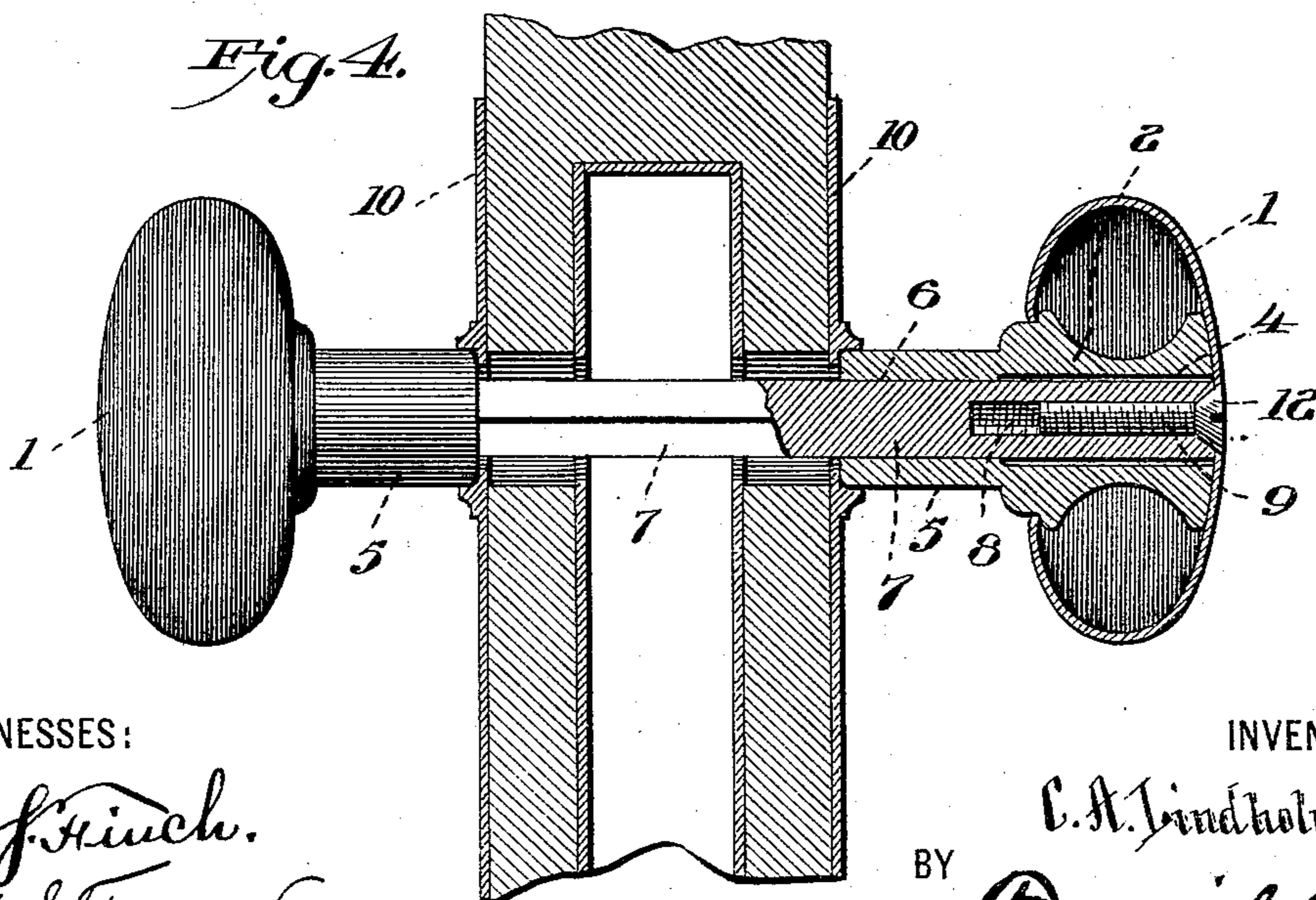
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES A. LINDHOLM, OF BROOKLYN, NEW YORK.

## DOOR-KNOB.

SPECIFICATION forming part of Letters Patent No. 529,180, dated November 13, 1894.

Application filed November 18, 1893. Serial No. 491,342. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. LINDHOLM, a citizen of the United States, residing at 87 Rutledge street, Brooklyn, in the county of Kings and State of New York, 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 art to which it appertains to make and use the same.

My invention relates to door knobs, and has for its objects to provide an economical device of this description which shall be very durable and readily attachable to doors of various thicknesses.

In the accompanying drawings, which form a part of this specification—Figure 1 is a detail perspective of my knob shell before it is shaped; Fig. 2, an elevation showing the shell in section and the core in proper position relative thereto prior to the shaping and crimping of such shell; Fig. 3, a sectional elevation showing the shell properly shaped and crimped to the core, and Fig. 4 an elevation partly in section showing my improved knob attached to a door.

Similar numerals of reference denote like parts in the several figures of the drawings. 1 is a steel shell which is primarily drawn up into a cup shape as shown at Fig. 1. 2 is a core cast from iron and having at the inner end an annular flange 3. 4 is an opening which extends through the core, and 5 is a shank projecting inwardly from the core and having an interior opening 6 which is square in cross section and leads into the opening 4.

In the manufacture of my improved knob the core is placed within the shell, as shown at Fig. 2, and by means of suitable dies (not shown) the shell is formed and shaped and its edge firmly crimped down against the flange 3, as shown at Fig. 3. This secures the shell and core together so that they constitute a single rigid element, while at the same time the knob shell is reinforced at its outer face

by the core, thus rendering it impossible to indent or otherwise disfigure the knob on its face.

In attaching my improved knobs to doors I form in the end of the ordinary square spindle 7, which operates the latch, elongated threaded socket 8, and insert said spindle within the openings 6, 4, the former of which openings is adapted to the shape of the spindle, and I drive a screw 9 through the face of the shell into the threaded socket whereby the shanks 5 are drawn snugly against the usual escutcheon plate 10.

In adjusting the knob on doors of various thicknesses, it is merely necessary to manipulate the screw 9 in order to lengthen out or shorten that part of the spindle which extends between the shanks 5.

For the accommodation of the screw 9 I cut a perforation 11 through the face of the shell, the wall of this perforation being countersunk to admit the beveled head 12 of the screw so that the latter will always be flush with the outer face of the shell. If desired, raised patterns or ornamentations may be formed on the face of the shell, and in this instance the head of the screw 9 may be projected beyond the face of the shell and may be of any form or shape to harmonize with the surrounding ornamentations.

My present invention, however, has nothing to do with any special manner of attaching the knobs to the latch operating devices of the door, and I have shown and described such manner of attaching the knob merely for the purpose of affording a clear understanding of the application of my improved knob.

I therefore make no claim herein to the manner shown and the devices and construction employed for the purpose of attaching knobs to doors, since the same is made the subject of a separate application for patent filed by me on even date herewith. Moreover I do not wish to be limited to any particular manner of securing my improved knob to the latch operating spindle, since this may be accomplished in any well known

and ordinary manner, as for instance by driving a screw through the shank 5 into said spindle.

I claim—

- 5 The door knob described, consisting essentially of a metallic core with a rounded end and an annular flange projecting from the side, and an oblate spheroidal metallic shell inclosing and resting on the rounded end and

turned in over the flange, said core projecting beyond the flange and forming a shank, substantially as described.

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

CHARLES A. LINDHOLM.

Witnesses:

W. S. ARCHER,

W. B. PERRY.