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PATENTED JULY 14, 1908.

J. W. LIND.

ILLUMINATED DOOR KNOB.

APPLICATION FILED MAY 1, 1907.

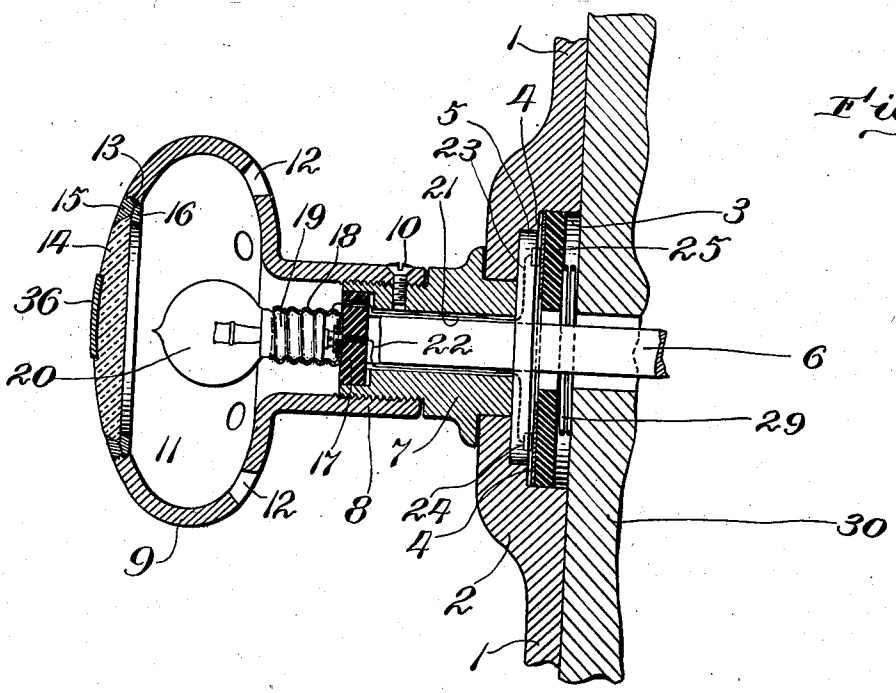


Fig. 1.

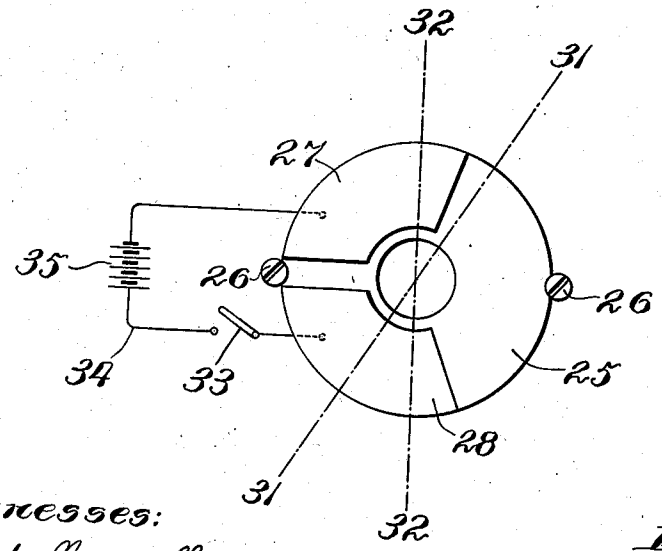


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN W. LIND, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO H. G. WILLIAMS AND J. A. SPIKER, OF SALT LAKE CITY, UTAH.

ILLUMINATED DOOR-KNOB.

No. 893,082. Specification of Letters Patent. Patented July 14, 1908.

Application filed May 1, 1907. Serial No. 371,272.

To all whom it may concern:

Be it known that I, JOHN W. LIND, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Illuminated Door-Knobs, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention is intended to apply to all kinds of door knobs, particularly for outside doors, whereby the door knob is illuminated and capable of throwing light in the directions required.

The constructional details of my invention and the advantages thereof will be pointed out more at length in the following description taken with reference to the accompanying drawings, in which I have shown a preferred embodiment of the invention.

In the drawings, Figure 1 is a central vertical sectional view of the apparatus; and Fig. 2 is a detail of one of the contact members shown in front elevation, indicating also the electric connections.

In carrying out my invention I provide an escutcheon plate 1 having a central bulge or enlargement 2 provided on its back side with a recess 3 preferably shouldered at 4, and in said recess I mount a plate or disk 5 fast on a door knob spindle 6 carried by a usual stud or hub 7 at the front of the escutcheon. The outer end of said hub is threaded to receive the internally threaded neck 8 of the knob 9 secured by any suitable means as by a screw 10. The knob is hollow, as indicated at 11, and preferably provided with laterally opening perforations 12 for the passage of light rearwardly, and has a front aperture threaded at 13 to receive a lens or translucent portion 14, herein shown as held in a holder 15 threaded to fit the aperture 13 and clamped in position by a ring 16. The outer end of the hub is provided with an insulating block 17 having a usual electric lamp socket 18 for receiving the threaded end 19 of an incandescent bulb 20 or other means of electric illumination. From the electric lamp the usual circuit wires 21, 22 pass to contact studs 23, 24 on the disk 5 in position to coöperate with a non-rotating contact plate or disk 25, which is shown best in Fig. 2, said plate being preferably retained by screws 26 and herein shown as provided with metal contact plates 27, 28, and normally held in positive engagement with the studs 23, 24 by a coiled spring 29 secured to the disk 25 in position to be compressed between the latter and the door 30, to which the escutcheon plate is secured. Preferably the arrangement of the contact studs 23, 24 and the contact plates 27, 28 is such that when the door knob is in normal position the circuit will be open but when the door knob is turned therefrom the circuit will be closed, the open position being indicated by the line 31 in Fig. 2 and the closed position by line 32. A switch 33 is preferably interposed in the electric circuit 34 leading from any source of energy, as a battery 35, said switch being located, in practice, inside the house convenient to the door so that the apparatus may be rendered operative or inoperative for such periods of the day as desired. One purpose of providing the lens or large translucent window or means of externally transmitting the light is to provide means for carrying and displaying to the observer the house number, which is painted or otherwise displayed thereon as indicated at 36.

In use it will be understood that when the circuit is closed the door knob is brilliantly illuminated, a portion of the light being transmitted backwardly through the apparatus 12 to illumine the keyhole, doctor's sign, door plate, or other adjacent object desired, and the main portion of the light being transmitted forward through the lens or window 14, thereby rendering clear and prominent the house number 36. It will be understood that in a small town where the houses are not numbered the window 14 may contain the name instead of the number at 36. I preferably use a lens as shown, in order to make the number more conspicuous. If the lamp should get broken the knob portion 9 is readily unscrewed, thereby permitting free access to the lamp. My construction also permits the entire mechanism to be carried by the escutcheon, thereby avoiding cutting away the door in any special manner to receive any of the parts and also making it practical to use my attachment in connection with any usual lock. In other words, the attachment is practically self-contained, not requiring any special construction of door lock or adjacent parts. It will be understood that if desired the coöperating contacts may be so placed as to maintain circuit

closing position continuously, the switch being then depended upon for opening the circuit in the daytime or whenever desired.

For the use of the general public it is desirable to keep the knob lighted all the time, but when it is used only for the convenience of the house holder, it is desirable to have the knob arranged to become illuminous only when turned. For some purposes it is desirable that the hollow door knob shall be composed entirely of translucent material, this construction affording wide scope for display effects in color and designs.

I am aware that electricity has been applied to the illumination of door knobs, push buttons and the like, and accordingly I do not claim the same broadly, but so far as I am aware I am the first to provide a hollow knob; and to display the house number; and to employ a lens or window in the knob; to provide an attachment which can be wholly carried by the escutcheon; to provide an attachment in which the circuit is open or closed by the turning of the knob, etc.

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

1. The combination with an escutcheon plate having at its rear side a recess, of a door knob mounted in said escutcheon and provided with electric circuit connections, and circuit closing contacts mounted in said recess and operated by said door knob.

2. A door knob, comprising a supporting stud, a lamp support removably mounted centrally lengthwise in said stud and provided with an electric lamp socket, a globular shell of substantially uniform thickness terminating at its rear side in a cylindrical neck fitting externally said stud, said shell at its front side coaxially with the hollow of said neck having an aperture provided with a removable holder, a translucent portion fitting said aperture and retained therein by said holder, and an electric lamp mounted in said lamp socket and projecting centrally within the enlarged hollow globular portion of the knob.

3. An escutcheon plate, having a central enlargement provided on its rear side with a recess, a door knob centrally mounted thereon, illuminating means carried by said door knob, a contact member movable with said door knob, a coöperating contact member non-rotatably carried by said escutcheon plate, and means normally pressing said two contacting members toward each other.

4. A door knob comprising a rotatable supporting stud having a forward chambered end, a hollow globular knob having a translucent portion and terminating at its rear side in a hollow neck rigidly secured to said stud, an insulating block removably seated in the chambered end of said stud within said hollow neck, and a lamp detachably mounted upon said insulating block and projecting into said knob.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JOHN W. LIND.

Witnesses:

GEO. H. MAXWELL,

EDWD. MAXWELL.