E. K. HILL.

GLOBE HOLDER.

APPLICATION FILED APR. 13, 1915.

1,166,908. Patented Jan. 4, 1916.

Fig. 1.

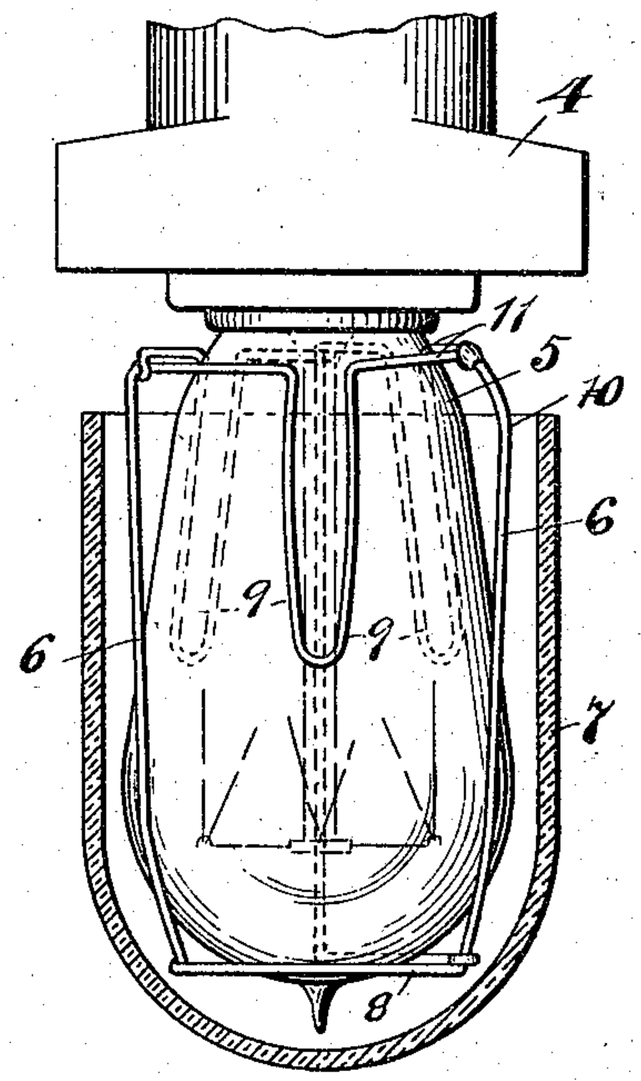



Fig. 2.

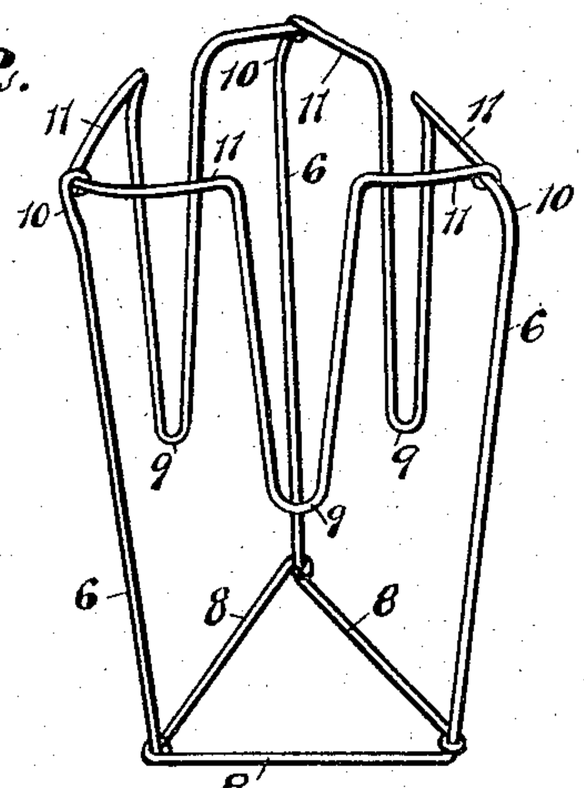
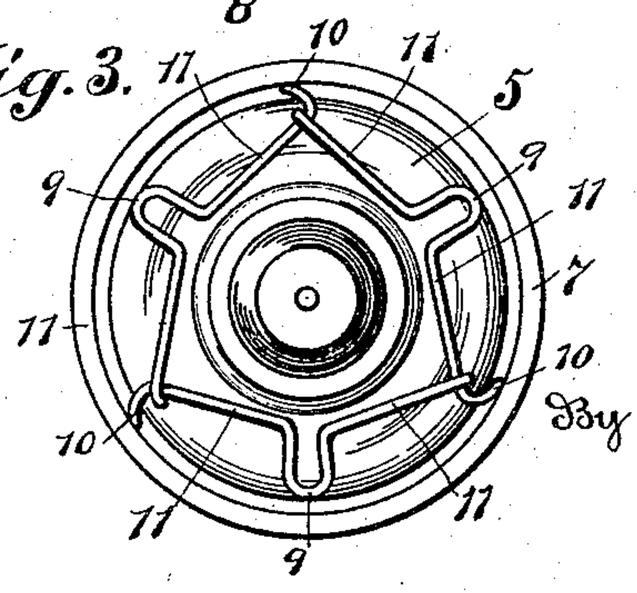



Fig. 3.




Witnesses

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# UNITED STATES PATENT OFFICE.

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## GLOBE-HOLDER.

1,166,908. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed April 13, 1915. Serial No. 21,077.

*To all whom it may concern:*

Be it known that I, ELWIN K. HILL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Globe-Holders, of which the following is a specification.

This invention relates to globe holders for incandescent electric lamps, and has for its object to provide an improved device for holding a globe on a lamp bulb. The globe is of that type used especially for changing the color of the lamp. Instead of using different colored bulbs according to the different requirements of a sign or the like, clear or white bulbs may be used on all the lamps, and globes of various colors can be placed thereon according to the requirements of the colors desired. The holder is intended to enable the globe to be easily slipped on or off, and to hold the globe securely in place when on the bulb.

In the accompanying drawings, Figure 1 is a side view of the lamp provided with the globe holder, the globe being shown in section. Fig. 2 is a perspective of the holder. Fig. 3 is an inner end view of the bulb and globe thereon.

Referring specifically to the drawing, 4 indicates the lamp socket, 5 the bulb, and 7 the cup-shaped globe, which will ordinarily be made of colored or translucent glass.

The holder is made of wire, and fits over the bulb and slides in the globe. As illustrated, it has a triangular outer end part or frame 8 from the corners of which extend arms 6 which connect at their inner ends to a frame which comprises spring fingers 9 and connecting parts 11, the fingers extending lengthwise and the connecting parts 11 extending transversely to connect the fingers to the inner ends of the arms or bars 6. The fingers 9 are produced by bending the wire in substantially V shape as shown, the ends of the branches being connected by the parts 11 to the inner ends of the arms 6, the whole forming what may be termed a cage having spring fingers which will frictionally engage the bulb, and spring arms which will frictionally engage the interior of the globe. It will be noted that at their inner ends the bars 6 are bowed out slightly as indicated at 10, and the fingers 9 normally extend at an angle with their ends projecting inwardly within the circumferential line of the bars 6. The whole device may be made of two or three pieces of wire soldered or otherwise secured together at the joints.

In the use of the device, the cage is slipped over the bulb, the large end of the bulb passing through the open or inner end of the cage which expands to permit the same, by the opening or spreading of the branches of the fingers 9, which then close or contract around the neck of the bulb, as shown in Figs. 1 and 3, the tips of the fingers being sprung slightly outwardly and pressing with a gripping contact against the wall of the bulb behind the greatest diameter thereof. Then the globe may be slipped on to the cage. It passes over the same and engages at its inner ends against the bowed parts 10 of the arms 6, producing a slight distortion or bending of such arms, and causing them to press against the inner surface of the globe with sufficient force to hold the globe against accidental displacement. Stated in other words, the upper ends of the arms 6 are normally spread to a larger size than the diameter of the globe, and when the globe is pushed thereon said arms contact at their upper ends, the intermediate portions of the arms bending over the bulge of the bulb, as will be observed in Fig. 1, which assists the spring action and increases the friction pressure of the arms against the inside of the globe near the rim thereof. The globe and holder may be slipped off of the bulb in an obvious manner, and since the globe and holder are separate the latter can be used with a globe of any color.

What I claim as new is:

1. A globe holder for incandescent lamps, comprising a cage adapted to fit between the globe and the lamp bulb, said cage having longitudinal spring arms adapted to press outwardly against the inside of the globe and longitudinal spring fingers adapted to press inwardly against the outside of the bulb.

2. The combination with a lamp bulb and a globe inclosing the same, of a holder fitting between the bulb and globe, said holder having spring arms extending lengthwise of and pressing against the inside of the globe and spring fingers extending lengthwise of and pressing against the outside of the bulb.

3. A globe holder for incandescent lamps,

comprising inner and outer end frames, the former being expansible to slip over the lamp bulb and having spring fingers adapted to press against the bulb, and longitudinal spring bars connecting said frames and bowed outwardly to press against the inside of the globe.

4. A globe holder for incandescent lamps, comprising an outer end frame, spring arms projecting therefrom, expansible spring fingers spaced circumferentially between the arms, and connections between the inner ends of the fingers and the inner ends of the arms.

5. A globe holder for incandescent lamps, comprising a wire cage having an outer end frame 8, spring arms 6 projecting inwardly therefrom, V shaped fingers 9 located circumferentially between the arms, and connections 11 between the branches of said fingers and the inner ends of the arms.

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

ELWIN K. HILL.

Witnesses:
JOHN A. BOMMHARDT,
J. B. DAVIS.