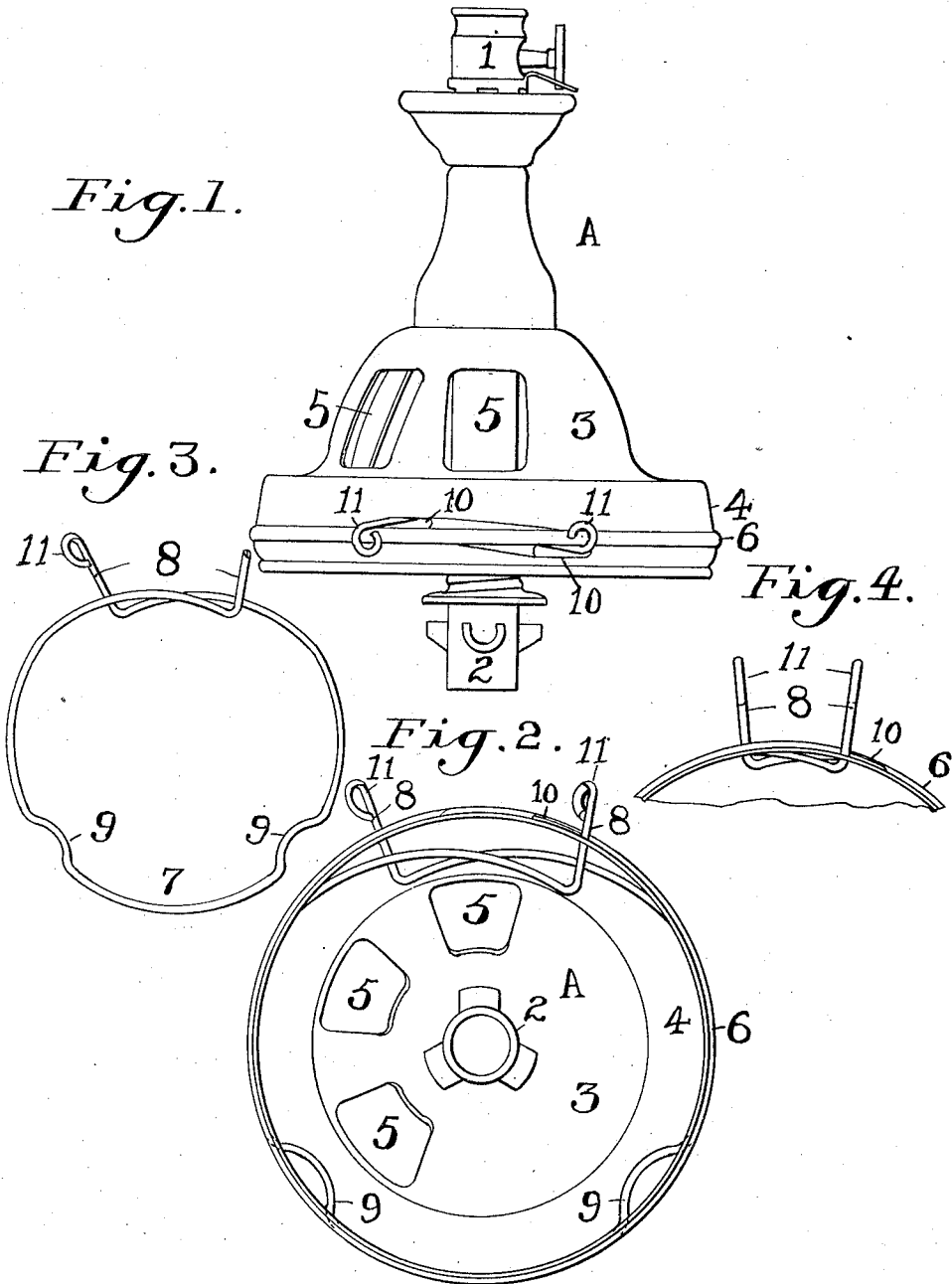


E. E. FREDERICK.
GLOBE HOLDER.
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1,063,673.

Patented June 3, 1913.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWIN E. FREDERICK, OF BRIDGEVILLE, PENNSYLVANIA.

GLOBE-HOLDER.

1,063,673.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWIN E. FREDERICK, a citizen of the United States, and residing in the borough of Bridgeville, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Globe-Holders, of which the following is a specification.

My invention consists in certain new and useful improvements in spring holders for globes, shades and similar articles, and is especially intended for use in connection with depending lights, such as inverted incandescent gas-lights.

The object in view is to improve both the quality and appearance of that class of devices, and also to make the same less expensive of manufacture.

In the accompanying drawings, Figure 1 is an elevation of an inverted gas-light fitted with my invention; Fig. 2 is an inverted plan view of the same; Fig. 3 is a reduced plan view of the wire clamp removed from the holder, and Fig. 4 is a broken inverted plan view, similar to Fig. 2, but showing the spring fingers of the wire clamp expanded to admit of the insertion or removal of the globe.

The following is a detailed description of the drawings:

A is an inverted incandescent gas-light wherein 1 is the gas check, 2 the mantle support and 3 the depending canopy from which the globe is to be suspended. Said canopy is usually stamped of sheet brass or other suitable material and is provided with a depending annular flange 4. 5—5 are the ports in said canopy for the escape of the products of combustion. The flange 4 is provided with a circumferential seat or recess on its inner surface, formed by rolling in said flange the exterior bead 6.

The clamp member is formed by bending up a length of stout resilient wire, 7, into an annulus having overlapping ends. The said ends are bent inwardly and then outwardly to form the inwardly extending spring fingers 8—8. The body of the annulus is provided with two inwardly extending loops forming teeth 9—9. The body of the annulus is sprung into the seat formed by the bead 6 and firmly maintains its position therein, as shown in the drawings. The body of said annulus is concealed in said seat while the teeth 9—9 and the spring fingers 8—8 extend into the interior

of the fixture. The ends of the wire 7 extend through slots 10—10 in the flange 4 and are formed, exterior to said flange, into finger loops 11—11.

The flaring neck flange of the globe is supported by the teeth 9—9 and the spring fingers 8—8 which press the globe against said teeth. To permit the insertion or removal of the globe, the end loops 11—11 are pressed toward each other by the fingers of the hand, thus drawing the spring finger outwardly toward the flange 4, as shown in Fig. 4, and permitting the passage of the neck of the globe through the annulus. The only portions of the wire which move during such operation are the two fingers 8—8, the body of the annulus remaining stationary and immovable in its seat formed by the bead 6.

The advantages of my invention are manifold. Among them may be mentioned the following: The annulus maintains its position in the flange 4 without the aid of a holding device such as a rivet or the insertion of a secondary loop of the wire in a slot cut in the canopy flange. This greatly cheapens the cost of manufacturing the goods which are sold at a small profit under close competition. It also preserves the symmetry of the fixture, no rivet heads, slots or protruding loops existing to mar its appearance. The body of the annulus being stationary, the centering of the globe in relation to the canopy is more accurate, the teeth 9—9 being fixed and the globe being pressed against the same by the spring fingers. As the relatively short fingers are alone expandible, the device is more readily and easily operated than would be the case if the entire annulus expanded or contracted. In case the entire annulus expanded and contracted when a globe is inserted or removed, it would be necessary to provide additional means for securing the annulus in place in the canopy. Where the entire annulus expands and contracts the support is at two points, the center of the annulus and the slots through which the spring fingers pass through the canopy. This is insufficient to prevent the intermediate portions of the annulus sagging, thus holding the globe loosely and permitting the wire to appear below the canopy flange. The globe therefore rattles and is likely to fall. Again in my device the wire annulus is protected by its seat from the direct heat so that its temper is not de-

stroyed, the bases of the fingers 8—8 being protected by the flange 4.

What I desire to claim is:—

1. In a globe holder, a depending annular flange provided with an interior circumferential seat and a pair of adjacent slots, a length of wire bent up into an open annulus having its body held against flexing in said seat and provided with fixed inwardly extending teeth, and overlapping spring fingers formed of the end portions of wire extending inwardly and cooperating with said teeth to support the globe, the extreme ends of said wire extending through said slots to the exterior of said flange to form handles whereby said fingers may be expanded, for the purposes described.

2. In a globe holder, a depending annular flange provided with an interior circumferential seat and a pair of adjacent slots, a length of resilient wire bent up into an open annulus and sprung into said seat and held against flexing therein, said body being provided with fixed inwardly extending teeth, annular overlapping spring fingers formed of said wire at the ends of the body extending inwardly to cooperate with said teeth to support the globe and adapted to be expanded outwardly to release the globe, and

handles for actuating said fingers extending through said slots to the exterior of said flange, for the purpose described.

3. In a globe holder having a depending flange provided with an interior circumferential depression and a pair of adjacent slots at one side of said flange, a globe clamping device formed by bending up a length of resilient wire in the form of an open annulus with overlapping ends, the body of said annulus being sprung into said depression and held immovably in said depression when said overlapping ends are compressed together, inwardly extending teeth formed by loops in the body of said annulus, the overlapping ends of said annulus being first bent to form inwardly extending spring fingers, adapted to cooperate with said teeth to grip the globe, and then bent sharply in an outward direction to pass through said slots to form operating handles, substantially as and for the purpose set forth.

Signed at Pittsburgh, Pa., this 23rd day of September, 1912.

EDWIN E. FREDERICK.

Witnesses:

EDWARD A. LAWRENCE,
W. S. WALSH.