

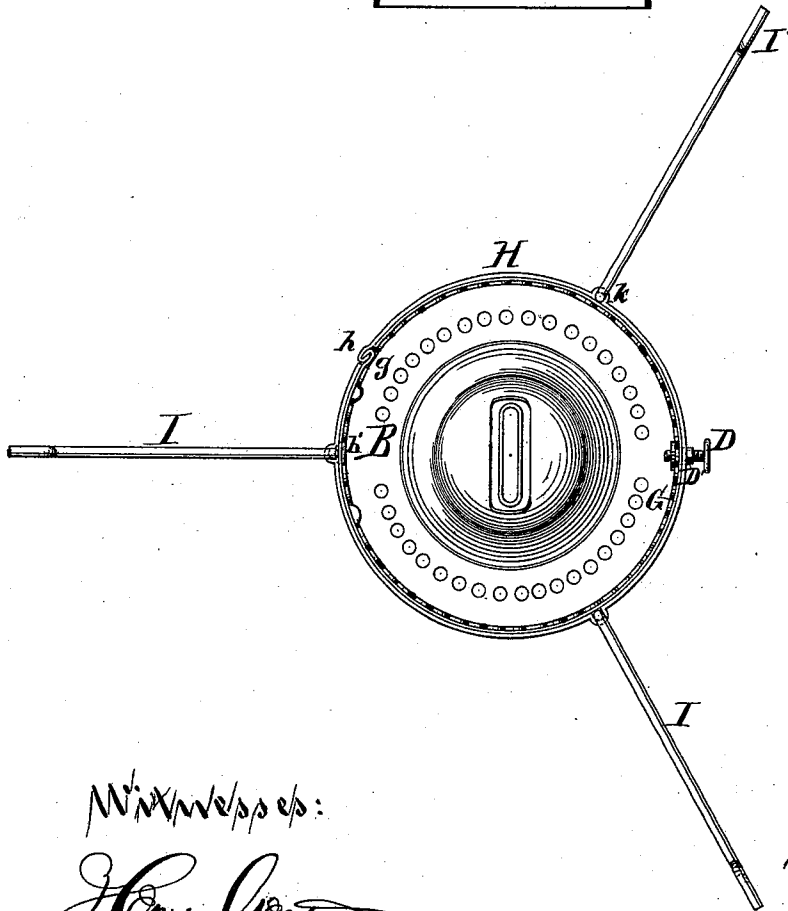
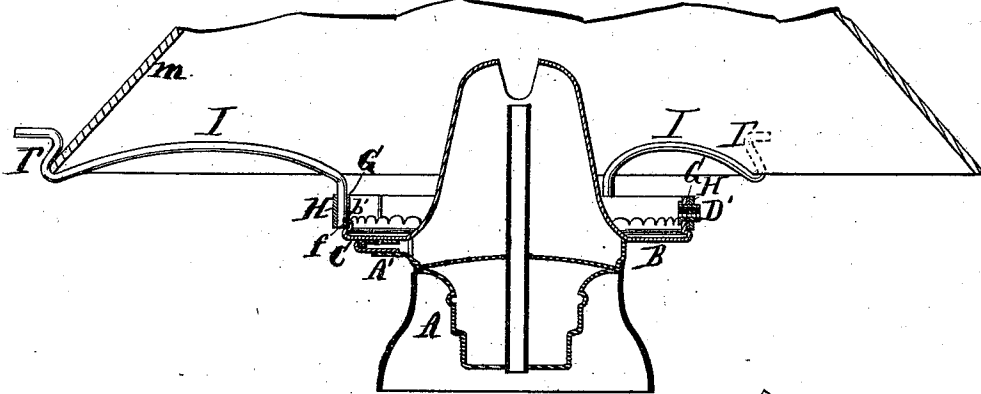
W. SCARLETT.

SHADE-HOLDERS FOR LAMPS.

No. 173,186.

Patented Feb. 8, 1876.

Fig. 1.



Witnesses:

Henry Gent

Chas. C. Stetson

Inventor:

William Scarlett
by his attorney
J. B. Stetson

UNITED STATES PATENT OFFICE.

WILLIAM SCARLETT, OF AURORA, ILLINOIS.

IMPROVEMENT IN SHADE-HOLDERS FOR LAMPS.

Specification forming part of Letters Patent No. **173,186**, dated February 8, 1876; application filed July 20, 1875.

To all whom it may concern:

Be it known that I, WILLIAM SCARLETT, of Aurora, Kane county, Illinois, have invented certain new and useful Improvements relating to Shade-Holders for Lamps, of which the following is a specification:

The improvement is intended more particularly for lamps for burning kerosene, equipped with what is called the "sun" hinged burner; but it is not necessarily confined thereto.

The accompanying drawings form a part of this specification, and represent my improvement as applied to a kerosene-burner with a flat wick-tube. The shade may be of any ordinary or suitable construction.

Figure 1 is a vertical section, and Fig. 2 a plan view.

Similar letters of reference indicate like parts in both the figures.

A is the ordinary spun-brass collar, by which the burner is supported upon the lamp. On the extremity of an arm, A', therefrom is connected, by a hinged joint, C, a perforated lid, B, having the ordinary dome formed in one therewith, or soldered or otherwise fixed thereon. The outer edge of the lid B is turned upward and finished as usual, two of the scallops, nearly opposite to the chimney-fastening screw D, being bent inward to engage with the rim of the chimney. All these parts, as also the ordinary spring-catch (not represented) for fastening down the lid, may be of the ordinary and long-approved construction. Another scallop, b', on the turned-up edge of the lid B, is deflected outward, for a purpose which will appear hereafter.

My shade-holder may be connected and disconnected at will. It is composed of a ring formed of two thicknesses of sheet metal, with their ends peculiarly joined, and of three wires, forming branches to support the shade, soldered in sockets formed by the rings. I have in my experiments made the inner part of the ring of tinned iron, and the outer part of brass, and will so describe them, though both parts may be formed of the same material, and of equal thickness, if preferred. The iron ring G is formed with one end plain, and the other end folded upon itself to form a hook, g, such hook being presented outward. The brass outer ring H is applied thereto,

with also one end plain, and the other end formed hook-wise, and the hook h turned inward to engage with the iron hook. At three equidistant points in the circuit are formed sockets K by bending one or both of the rings. I prefer that the inner ring shall be continuous and smooth, or but very little deflected inward at the sockets. In other words, the whole or nearly all the socket shall be formed by the bending of the outer ring H. The sockets thus formed are of a size adapted to receive the turned-down inner ends of the branch wires or shade-supporting arms I, which are soldered firmly therein at their inner ends, and are formed, at or near their outer ends, with return bends I', to receive and firmly confine the lower edge of the shade m.

The rings G and H may be soldered together continuously along their entire length, or they may be left unsoldered, except at the junctions with the arms I, or they may be slightly soldered or sweated along their entire length. I believe it practicable to unite them additionally by forming the lower edge of the outer one inward, and causing it to embrace the lower edge of the inner ring, or by various other means; but I prefer the form represented, in which the rings are continuously soldered. A hole, e, is made through both thicknesses G and H to receive the boss D' for the screw D. Opposite to this is the turned-out scallop b', before referred to. It engages in a hole, f, produced to receive it in the inner ring H. This hole f is directly adjacent to one of the arms I, and the turned-out portion of the scallop b' is of sufficient length to pass not only through the inner ring H, but also a little distance into the thickness of the vertical portion of the arm I, which is notched to receive it. To remove my shade-holder after taking off the shade, it is only necessary to apply the thumb and finger of each hand, taking hold with the right on one side of the hooked connection g h, and with the left hand on the other side of the said hooked connection, press one of the ends upward, while the other is held firmly in place. After displacing them to an extent equal to the width of the ring the hooks will be necessarily disengaged from each other. The compound ring may then be slightly uncoiled or straightened—a form

which it will usually assume naturally by its elasticity—and it then readily disconnects itself, or is disconnected, first, from the turned-out scallop, and afterward from the boss D' , which latter disengagement completes its removal from the burner. A reverse movement applies the shade in place.

The arms $I I'$ may usually be made sufficiently elastic to allow the engagement and disengagement of the shade. In case they shall be too stiff, either by accident or design, the holder may be partially opened by disengaging the hooks $g h$, to allow the introduction or removal of the shade.

My shade-holder is held firmly and reliably in its place, and does not interfere with opening and shutting the hinge, or putting on or off the chimney. It is connected or detached with little labor or skill. It requires no alteration of the sun hinged burner, except the simple one of bending outward the scallop b' .

It may be applied to all lamps. The bottom of the collar A may be serrated to form a supply, or to increase the supply of air to the burner.

I propose usually to form two of the holes

f , one each side of the root of the arm I which comes opposite to the hole e , and to turn out two scallops, b' , to engage therein.

I claim as my invention—

1. A duplex ring formed of two thicknesses of sheet metal, $G H$, with pockets K between, and provided with engaging-hooks $g h$, in combination with arms $I I'$, the whole being adapted to support a shade, and be supported upon a lamp-burner, as herein specified.

2. The combination of the shade-supporting arms, adapted to engage with the lower edge of the shade, a sheet-metal ring with hooks $g h$, for engaging and disengaging, a hole adapted to receive the boss or nut of the chimney-screw, and one or more holes on the opposite side, adapted to receive a turned-out scallop, b , on a lamp-burner, as herein specified.

In testimony whereof I have hereunto set my hand this 15th day of July, 1875, in the presence of two subscribing witnesses.

WILLIAM SCARLETT.

Witnesses:

C. H. ADAMS,

E. G. WHEATON.