

D. G. SAUNDERS, JR.
 SHADE HOLDER FOR INCANDESCENT ELECTRIC AND OTHER LAMPS.
 APPLICATION FILED SEPT. 25, 1911.

1,053,538.

Patented Feb. 18, 1913.

Fig. 1

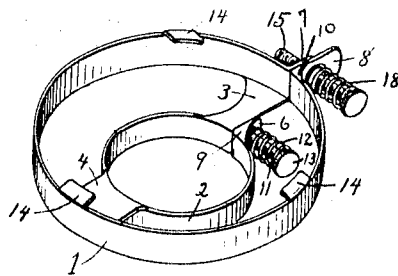


Fig. 5

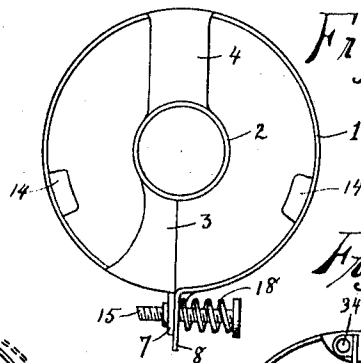


Fig. 2

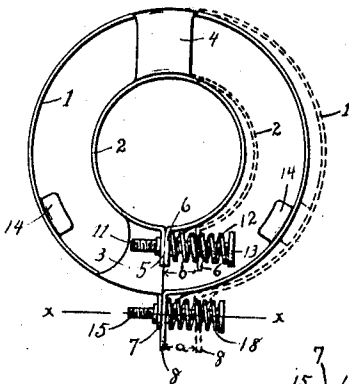


Fig. 3

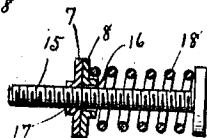
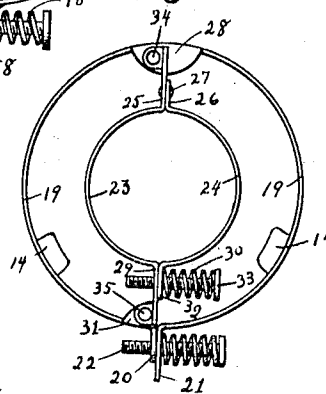


Fig. 4

Daniel Green Saunders, Jr.
 INVENTOR.

WITNESSES:

R. Hamilton

Wm. N. S. Sheets

UNITED STATES PATENT OFFICE.

DANIEL GREEN SAUNDERS, JR., OF KANSAS CITY, MISSOURI.

SHADE-HOLDER FOR INCANDESCENT ELECTRIC AND OTHER LAMPS.

1,053,538.

Specification of Letters Patent.

Patented Feb. 18, 1913.

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To all whom it may concern:

Be it known that I, DANIEL GREEN SAUNDERS, JR., a citizen of the United States, residing at Kansas City, county of Jackson, and State of Missouri, have invented certain new and useful Improvements in Shade-Holders for Incandescent Electric and other Lamps, of which the following is a specification.

This invention relates to shade-holders; and is particularly adapted to incandescent electric lamps and is adapted for use in lieu of the brackets with rigid shade holding rings and set screws used heretofore.

It is the object of my invention to provide an attachment for the purpose above stated which shall be simple, cheaply manufactured and easily attached to and detachable from the socket or shade.

Heretofore shade-holders for incandescent electric lamps have utilized a number of set screws for securing the shade to the holder but such set screws have to be manipulated individually and are also tedious and hard to manipulate, and furthermore they are often the cause of breaking or cracking the shade when set or screwed in too tightly.

It is the object of this invention to obviate the above mentioned objections and to produce an article which is convenient and easy to handle in connection with a socket and shade and also strong and rigid in construction and cheap to manufacture.

My invention involves all the uses of this device but I will describe it mainly in connection with incandescent electric lamp sockets.

Figure 1 is a perspective view of the shade-holder in an inverted position. Fig. 2 is a top plan view of the same holder showing also in dotted lines the position of the free arms of the rings when spread open. Fig. 3 is a plan view of a modification, and Fig. 4 is a transverse vertical section along line $x-x$ of Fig. 2. Fig. 5 is a plan view of a modification.

My improved device as herein shown comprises an open adjustable shade-holding ring 1, a smaller, open, and adjustable clamping ring 2 located within the ring 1, and flat connecting arms 3 and 4. This device in its preferred form is formed or struck out of a single piece of wrought metal thus making it economical to manufacture and with no loose or riveted parts to become deranged. In order to form the

rings 1 and 2 so as to be open and adjustable, these rings are cut open or apart on one side at the junction of each ring with the connecting arm 3, and the metal is drawn downward to form lugs or shoulders 5 and 6 on the ring 2 and the lugs or shoulders 7 and 8 of the ring 1 (see Fig. 2). When these rings are thus formed the drawn and cut out portions leave openings or spaces "a" and "b" in the rings 1 and 2 respectively, (Fig. 2), the dotted lines indicating the free ends of the rings in open position as when they are formed or struck out. These spaces "a" and "b" represent the adjustments allowed by spreading or closing the rings.

In forming the lug 6 a flat angular boss 9 is formed integral therewith and with the adjacent ring so as to make the lug 6 more rigid in its radial position. For a like purpose a boss 10 is formed integral with the lug 8 and its adjacent ring.

Any desired number of connecting arms might be used for connecting the two rings together but it is deemed most practical to use but two as herein shown and to have them so arranged that the free end portion of each ring is longer than the remaining portion for the purpose of giving as much resilience as possible.

It will be readily seen that by spreading the free end portion of the ring 2 and thus enlarging said ring it may be slipped over a socket and then clamped around same as desired. In this improved device an ordinary screw passed through an enlarged hole (not threaded) in the lug 6 and thence screwed into a threaded hole in the lug 5 could be utilized to bind the clamping ring securely around the socket, much the same as is used in the ordinary shade-holder in common use. However, more convenient means might be used for this purpose as is herein shown, in which a compression coil spring 12 through which a binding screw 11 is passed, rests between the lug 6 and the head 13 of the screw 11. When the ring 2 is placed around a socket, the coil spring 12 expands back to its normal position and forces the lug 6 on the free end of the ring 2 into contact with or toward the lug 5 and thus compresses the ring 2 around the socket. Either the ordinary binding screw or the screw used in connection with the coil spring could be used to clamp the ring 2 around the socket.

The ring 1 is provided with inwardly extended ears 14 formed integral with the ring 1. These ears 14 are the means of securing the shade to the holder and they are adapted to be set into the groove on the shade for the purpose of support. In placing the shade in position in the holder the free end of the ring 1 is spread open thus enlarging the ring 1 as shown by dotted lines in Fig. 2 and the shade is then placed so that the ears 14 set within the groove on the shade and the ring 1 is then closed and so held by suitable means, as, by a binding screw 15 passed through an enlarged hole 16 (Fig. 4) (not threaded) in the lug 8 and thence screwed into a threaded hole 17 in the lug 7. As a convenience I have herein provided a compression coil spring 18 to be used with the binding screw 15 so as to keep the ring 1 normally in a closed position at all times, except, when pressure is applied to compress the spring 18 for the purpose of spreading the ring 1 and either releasing the shade held thereby, or inserting the shade in the holder.

The great convenience and advantage of a shade-holder as herein described is evident, as, a shade can be attached to or detached from the holder by simply compressing the spring and spreading the shade-holding ring and then placing or withdrawing the shade and then releasing the pressure all of which can be done instantly. Furthermore in this device with its open, adjustable shade-holding ring there is no danger of breaking or cracking the shade as is the case with the set screws used in rigid holders. Even if the coil spring 18 is eliminated and an ordinary binding screw be used to hold the ring 1 in a closed position there is no danger of cracking the shade because of the resilience in the ring 1.

Fig. 3 shows a modified form of constructing this device by using several parts and riveting the same together. The shade holding ring 19 is made of one piece of metal cut open at one side and there having radially extended lugs 20 and 21. The binding screw 22 with or without a coil spring is used for holding the ring 19 in a closed position in a like manner as described in connection with Figs. 1 and 2. The clamping ring comprises two semicircular portions 23 and 24 with radial extensions 25 and 26 riveted together at 27. The extension 25 is secured or riveted by the rivet 34 to the ear 28 carried by the ring 19. The opposite radial extension 29 of the portion 23 is riveted by the rivet 35 to the ear 31 carried by the ring 19. The portion 24

carries a radial extension 32. A binding screw 33 either with or without the coil spring 30 is used to bind the lugs or extensions 29 and 32 in a manner similar to that described in connection with Figs. 1 and 2.

Fig. 5 shows a modified form of this device adaptable for use on gas brackets. In this modified form the ring 2 is not open or adjustable but is adapted to be fitted or secured around the gas tube in any suitable manner. The open adjustable shade holding ring 1 with the integrally formed ears 14 may be constructed similar to that described in Figs. 1 and 2. The connecting arms 3 and 4 connect the two rings. In this structure, the device can be formed or struck out of a single piece of sheet or wrought metal.

I wish it understood that I am not limited to the precise detail constructions herein set forth, inasmuch as many changes in form, proportion and arrangement of parts may be resorted to within the spirit and scope of my invention.

What I claim as my invention and desire to secure by Letters Patent of the United States, is:—

1. In a shade holder, an open adjustable shade holding ring, lugs carried by said ring at its open side, spring pressed means of binding or retaining these lugs together so as to retain this ring in a closed position independent of adjustments in the clamping ring; in combination with an adjustable clamping ring.

2. In a shade holder, an open adjustable shade holding ring, lugs carried by said ring at its open side, spring pressed means of binding or retaining these lugs together so as to retain this ring in a closed position independent of adjustments in the clamping ring, an open adjustable clamping ring, lugs carried by said clamping ring, means of binding or retaining these lugs together so as to retain the clamping ring in a closed position independent of adjustments in the shade holding ring, and connecting arms connecting the two rings.

3. In a shade holder, an open adjustable ring, lugs carried by said ring at its open side, a headed member secured to one of said lugs and passing loosely through the other lug, a coil spring mounted on the headed member and adapted for pressing the lugs together.

DANIEL GREEN SAUNDERS, Jr.

Witnesses:

W. B. McMECHAN,
N. S. SHEETZ.