G. E. SOMERS. SHADE HOLDER.

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SHADE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 401,910, dated April 23, 1889.

Application filed September 15, 1888. Serial No. 285,478. (No model.)

To all whom it may concern:

Be it known that I, George E. Somers, a citizen of the United States, residing at Bridge-port, in the county of Fairfield and State of 5 Connecticut, have invented certain new and useful Improvements in Shade-Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is applicable to all classes of lamp-burners with which a shade is used, and has for its object to provide an elastic shade-15 ring which will itself yield outwardly as it is pressed downward and placed over the chimney-springs, or in the act of removal from the burner, and which will, furthermore, adapt itself to slight inequalities in the size of the 2c burners, its elasticity being sufficient to hold it firmly in place at all times, but at the same time to allow it to be readily applied or removed without injury to the chimney-springs. In practice the outer ends of the chimney-25 springs are made to flare outward for convenience in inserting and removing the chimney, the diameter of the circle of the tips of the chimney-springs being greater than the diameter of the interior of the ring, so that in 30 applying or removing the ring it is necessary to spring the chimney-arms out of place, which is inconvenient in itself, and, moreover, necessitates that the chimney-springs be bent back to place after applying or removing the 35 shade-ring. In order to overcome these objections, I have devised the novel yielding shade-ring, of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to 40 denote the several parts.

Figure 1 is an elevation of a lamp-burner with one form of my improved shade-holder applied; Fig. 2, a plan view of another form of shade-holder detached; Fig. 3, an inverted plan view of the form of shade-holder in Fig. 1; and Fig. 4 is a detail plan view, and Fig. 5 an inverted plan view, illustrating another form of guide for the ends of the ring.

1 denotes a lamp-burner of any ordinary or 50 suitable construction, and 2 the chimney-

springs, which are curved inward and then outward in the usual manner.

3 denotes a ring, which in practice slips on over the chimney-springs and rests upon a flange, 4, on the burner.

5 denotes the shade-arms, which may be attached to the ring in any suitable manner, but preferably by passing the curved lower ends thereof downward through an opening in the ring and then upward through another 60 opening and heading down the ends, as described in my pending application, Serial No. 285,477, of even date herewith.

In the form illustrated in Fig. 2 the shade rests directly upon the arms, the outer ends 65 being curved upward and inward slightly to retain it.

In the forms shown in Figs. 1 and 3 the shade is carried by an independent ring, 6, which is attached to the outer ends of the 70 arms.

The ring 3 is ordinarily made of sheet metal and divided, the ends resting against each other, or nearly so. In practice I provide a guide, which is attached to one of the ends of 75 the ring and engages the other end thereof, so that neither end can be sprung upward or downward away from the other. This guide may be made in the form of a sheath or clasp, 8, one end of which is secured to one end of 80 the ring by a rivet, 9, the other end of the ring sliding within the outer end of the clasp, as in Figs. 1, 2, and 3; or a wire or guide rod, 10, may be secured to the under side of one end of the ring, preferably by passing through 85 and heading down, as shown in the drawings, the other end of the guide-rod passing through a loop or eye, 11, upon the under side of the other end of the ring, as in Figs. 4 and 5. In practice the loop or eye used in this form con- 90 sists simply of the curve at the lower end of one of the shade-arms. This manner of attaching the shade-arms will be clearly understood from the drawings and from my pending application referred to above. It is deemed 95 sufficient to say here that the ring is provided with two openings in line with each other radially, and the lower end of each shade-arm is curved, so that the end may be passed downward through one of the openings and then 100

upward through the other, a shoulder being provided to rest against the under side of the ring and the end of the arm projecting above it, so that it may be headed down, thereby 5 holding each arm firmly in position, the bent portion of the arm under the ring forming the loop 11, as is clearly shown. It will be seen that the elasticity of the ring will cause it to clasp the burner firmly, while at the same to time it may be expanded outward in placing it in position, so that it will pass freely over the tips of the chimney-springs, and will, when released, contract upon the burner. Slight variations in the size of burners, which are unt5 avoidable in manufacturing, and—where solid shade-rings are used—are a serious inconvenience, are of no consequence whatever when my novel yielding shade-rings are used.

Having thus described my invention, I

20 claim—

1. A divided spring shade-ring adapted to yield outward and to contract in a horizontal

plane, whereby it is retained in position on burners of varying size, one end of said ring having a guide and the other end constructed 25 to slide freely therein, so that both of said ends are held against springing in any direc-

tion except away from each other.

2. A divided spring shade-ring adapted to yield outward and to contract and having 30 shade-arms, the ends of which pass twice through the ring, forming loops 11 on the under side, one end of said ring having a guiderod, 10, constructed to engage one of said loops on the other end, whereby both ends 35 are held against movement except toward or from each other in the horizontal plane.

In testimony whereof I affix my signature in

presence of two witnesses.

GEORGE E. SOMERS.

Witnesses:

NELSON M. BEACH, A. M. WOOSTER.