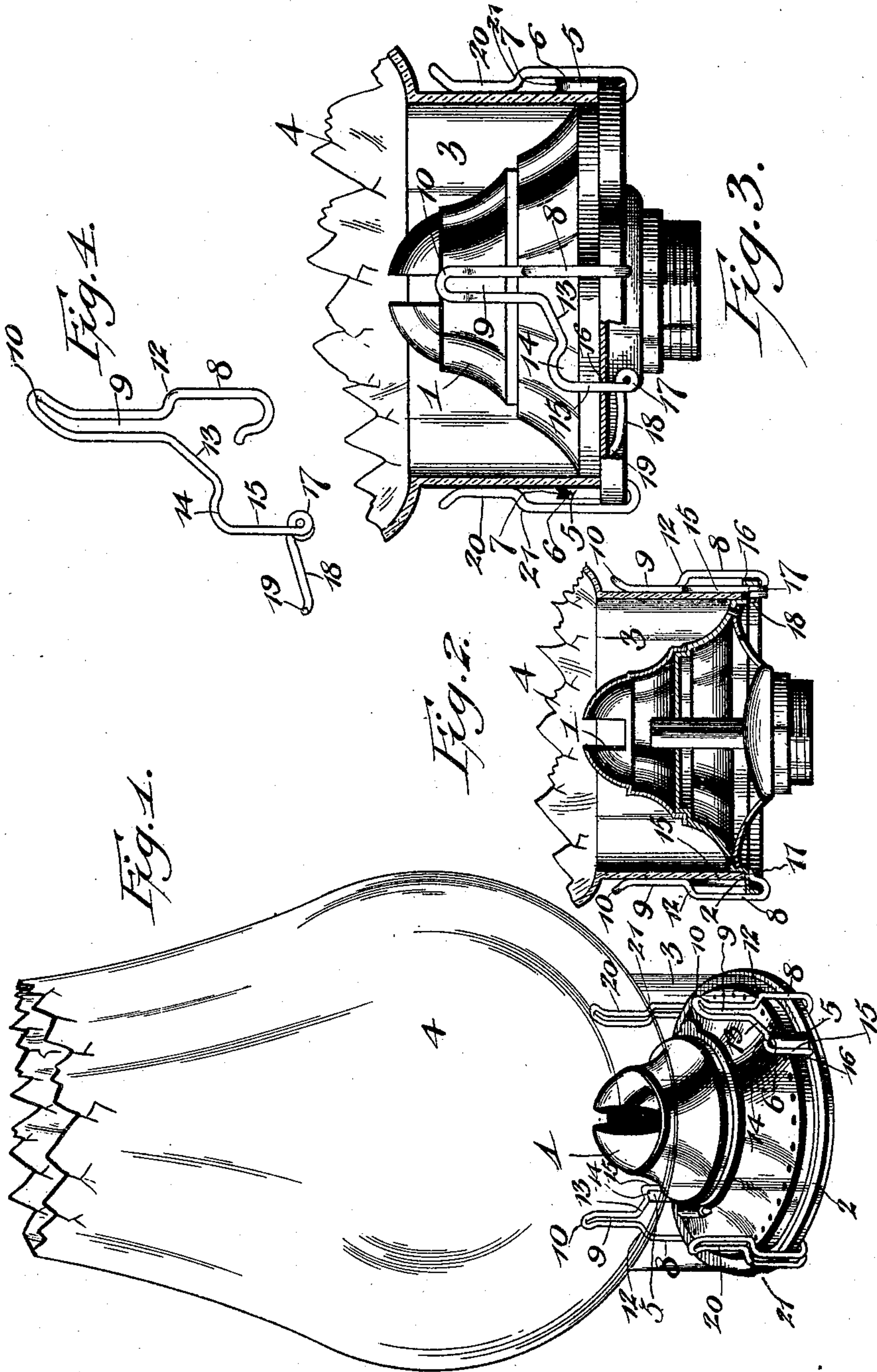


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Patented Sept. 19, 1899.

J. B. PARADIS.
LAMP CHIMNEY HOLDER.
(Application filed Nov. 21, 1898.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN B. PARADIS, OF BIDDEFORD, MAINE.

LAMP-CHIMNEY HOLDER.

SPECIFICATION forming part of Letters Patent No. 633,150, dated September 19, 1899.

Application filed November 21, 1898. Serial No. 697,065. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. PARADIS, a citizen of the United States, residing at Biddeford, in the county of York and State of Maine, have invented a new and useful Lamp-Chimney Holder, of which the following is a specification.

This invention relates to lamp-chimney holders; and it has for its object to provide an improved holding device or spring of this character for use on an ordinary lamp-burner and having simple and efficient means specially designed for securely fastening a "catch-lug" chimney in place on the burner, so as to prevent accidental displacement thereof.

The ordinary type of lamp-chimney holders in common use simply consist of spring-wire arms fastened to and arising from the peripheral edge of the burner at regularly-spaced points and normally sprung inward, so as to have a frictional engagement with the lower end of the chimney, which is seated on the burner; but the objection to this type of lamp-chimney holders is that the same do nothing more than steady the lamp-chimney and do not provide for positively holding the same in place, as a careless handling of the lamp or accidental tilting thereof will dislodge the chimney from the burner, with the usual result. Furthermore, the old type of lamp-chimney holders, even with careful handling of the lamp, frequently permit a slight displacement of the chimney, which causes a flickering of the light and a smoking of the chimney.

It is the purpose of the present invention to overcome these objections or disadvantages to the ordinary forms of lamp-chimney holders used in connection with lamp-burners and to provide an improved holder having means for positively interlocking with the lamp-chimney, so that the same cannot be removed from the lamp-burner except by a manual operation.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a perspective

view of a lamp-burner equipped with chimney-holders constructed in accordance with the present invention. Fig. 2 is a cross-sectional view of the construction shown in Fig. 1. Fig. 3 is a side view of the burner, showing in elevation one of the improved chimney-holders. Fig. 4 is a detail in perspective of one of the holders.

Referring to the accompanying drawings, the numeral 1 designates a lamp-burner of any improved type, provided at the base thereof with the usual peripheral flange 2, forming a seat for the lower end or neck 3 of the lamp-chimney 4, and while the present invention does not interfere with the use of an ordinary lamp-chimney in connection with the burner still the improvements are especially designed to cooperate with a lamp-chimney which is provided at diametrically opposite sides of its lower end or neck 3 with the exterior offset catch-lugs 5. The exterior offset catch-lugs 5, which are formed on the outside of the chimney at directly opposite points on its neck, are vertically disposed and of an oblong or any other suitable shape, said lugs being also provided with rounded upper ends 6, which are recessed or grooved, as indicated at 7, to provide for a proper interlocking engagement with the holders, as will be hereinafter more fully described.

In using the invention with a lamp-burner I preferably employ a pair of the improved chimney-holders arranged, respectively, at diametrically opposite sides of the lamp-burner, as plainly illustrated in the drawings. Each of these holders is formed of a single piece or length of spring-wire bent into a body having an upright standard 8, which is looped at its upper end into separate parallel members forming a vertical spring holding-arm 9, the upper looped terminal 10 of which is deflected outwardly to form a guiding-lip for the lower end or neck of the chimney as the same is inserted within the circular group of holders and forced down onto the peripheral seat-flange 2 of the burner. The vertical looped spring holding-arm 9 of the holder springs radially with relation to the burner, so that it will move outwardly or inwardly to accommodate itself to the chimney, and the lower end of the upright standard 8 of the holder, which standard sustains the arm 9

in an operative position, is extended around the peripheral edge of the burner and rigidly fastened to the under side thereof, as at 11, by a rivet or any other suitable fastening means, providing for a rigid connection between the standard 8 and the lamp-burner. Directly adjacent to its point of connection with the body of the lamp-burner the vertical standard 8 of the holder is provided, in the vertical plane thereof, with an angular outwardly-projecting offset-bend 12, which projects a sufficient distance beyond the peripheral seat-flange 2 of the burner to provide a clearance-space for the vertical oblong or other-shaped lugs 5 of the lamp-chimney as the latter is turned on its seat into interlocking engagement with the holders.

From one terminal of the vertical holding-arm 9, or, in other words, from the portion thereof lying parallel to the upright standard 8, the spring-wire body is extended laterally to form a vertically-movable or yielding spring-jaw portion. This spring-jaw portion of the wire body lies approximately within the circular plane of the lamp-burner and is disposed substantially at right angles to the offset-bend 12, and to form said spring-jaw portion the wire is bent from one terminal of the holding-arm 9 in a plane substantially at the upper end of the offset-bend 12, at an inclination to form the shoulder-incline 13, which declines toward and leads into a rounded locking-bend 14, which locking-bend is disposed at the upper end of the vertically-disposed guide-stem 15, which loosely projects through a radially-disposed slot 16, formed in the peripheral flange 2 of the burner. Below said flange 2 the stem 16 is provided with a spring-coil 17, from which is extended a substantially horizontal stop-arm 18, provided with an upwardly-disposed rest-foot or terminal 19, which loosely rests or bears against the under side of the burner near the peripheral edge thereof.

As already explained, a pair of the holders herein described are respectively arranged at opposite points on the lamp-burner, and to provide for securing the chimney in place within the holders it will be understood that the lower end or neck of the chimney is first forced inside of the holding-arms 9 down onto the rest-flange 2 of the burner. By now turning the chimney in the proper direction the catch-lugs 5 thereof will be carried through the clearance-spaces provided by the offset-bends 12, and the upper rounded ends 6 thereof will engage and ride under the shoulder-inclines 13 of the holders, thus causing the spring-jaw portions to be sprung upward in a vertical direction, the stop-arm 18 and spring-coil 17 permitting this movement of the spring-jaw portion. A continued turning of the lamp-chimney brings the recessed upper ends 6 of the catch-lugs into interlocking engagement with the locking-bends 14 of the holders, the pressure of the stop-arms 18 against the under side of the lamp-burner

and the action of the spring-coils 17 serving to draw the spring-jaw portions into secure engagement with the catch-lugs 5 of the lamp-chimney. To release the chimney, it is simply necessary to forcibly rotate the same out of engagement with the spring-jaw portions of the holders.

The slot 16 in the flange of the burner, which receives the guide-stem 15 of the holder, permits of the proper adjustment of the holder on the burner according to the size of the chimney used in connection therewith.

To assist in centering the chimney on the burner, I preferably employ a pair of extra-looped spring holding-arms 20, which are secured to the burner at diametrically opposite points and alternate with the improved holders. Said spring holding-arms 20 are of the ordinary type, with the exception of being provided with vertically-disposed outwardly-projecting offset-bends 21, corresponding to the bends 12 of the improved holder, so as to provide clearance-spaces for the catch-lugs of the chimney. By the use of the extra or supplemental spring holding-arms 20 it will be understood that ordinary lamp-chimneys without the catch-lugs can be placed on the burner when the specially-constructed chimney is not available.

While the improved chimney-holder has been described as preferably cooperating with the catch-lugs on the exterior of the lamp-chimney, it will be obvious that an inversion of these parts would permit the holders to project from the lamp-burner in a plane so as to engage inside of the lower end or neck 3 of the lamp-chimney and to cooperate with catch-lugs provided on the interior of said lower end or neck of the chimney. As stated, this would simply involve the inversion of the parts without any change in the construction whatever and would therefore be clearly within the scope of the present invention, and I would have it understood that other changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A chimney-holder for lamp-chimneys, comprising a spring-body having an upright holding-arm movable inwardly and outwardly with relation to the burner and adapted to exert a lateral spring-pressure against the lamp-chimney, and a separate vertically-movable spring-jaw formed integral therewith and adapted for interlocking engagement with the chimney at a different point, that portion of the holder intermediate the arm and the jaw being separated from the chimney by an interspace when the holder is in operative relation thereto.

2. A chimney-holder for lamp-burners, comprising a spring-body having an upright holding-arm, movable inwardly and outwardly

with relation to the burner, and adapted to exert a lateral spring-pressure against the lamp-chimney, said body also having a separate vertical movable spring-jaw portion adapted to have an interlocking engagement with the chimney at a different point, substantially as set forth.

3. A lamp-chimney holder for lamp-burners, comprising a spring-body having an upright holding-arm movable inwardly and outwardly with relation to the burner, and a vertically-movable spring-jaw portion projected laterally from the holding-arm, substantially within the plane of the perimeter of the burner, and adapted to have an interlocking engagement with the lamp-chimney, substantially as set forth.

4. In combination with a lamp-chimney having a catch-lug, of a chimney-holder adapted to be fitted to the lamp-burner and comprising a spring-body having a vertically-disposed member provided with a clearance-space for the lug, and a separate lateral vertically-movable spring-jaw portion disposed substantially at right angles to the clearance-space, and adapted to interlock with the said lug, substantially as set forth.

5. In combination with a lamp-chimney having a catch-lug provided with a recessed end, a chimney-holder adapted to be fitted to the lamp-burner and comprising a spring-body

having a clearance-space for said lug and at one side of said clearance-space provided with a vertically-movable spring-jaw portion having a locking-bend adapted to interlock with the recessed end of said catch-lug, substantially as set forth.

6. In combination with a lamp-burner and a chimney having a catch-lug, of a chimney-holder comprising a spring-wire body having an upright standard looped into a vertical holding-arm and rigidly secured at its lower end to the burner, the standard being provided within the vertical plane thereof with an outwardly-projecting offset-bend, said spring-wire body being bent laterally from its holding-arm to form a shoulder-incline, a locking-bend leading off from said incline, and a vertically-disposed stem depending from the locking-bend and provided beneath the burner with a spring-coil and a substantially horizontal stop-arm resting against the under side of the burner, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN B. PARADIS.

Witnesses:

P. H. BEAUREGARD,
GEO. A. LANDEE.