

A. H. HUMPHREY.
MANTLE SUPPORT FOR GAS LAMPS.
APPLICATION FILED JAN. 18, 1909.

1,015,562.

Patented Jan. 23, 1912.

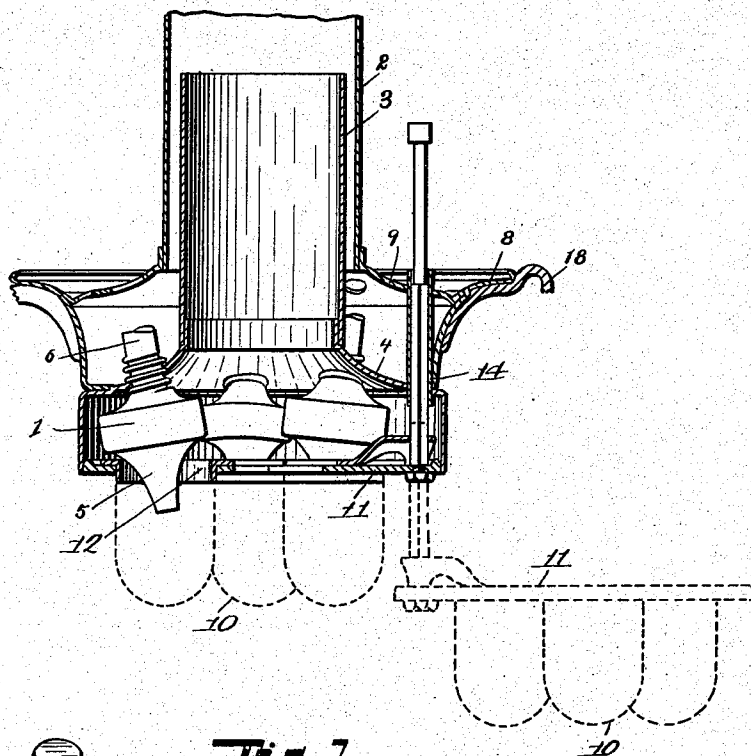


Fig. 1.

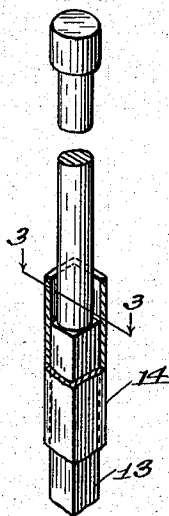


Fig. 2.

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Fig. 3.

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MANTLE-SUPPORT FOR GAS-LAMPS.

1,015,562.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed January 18, 1909. Serial No. 472,931.

To all whom it may concern:

Be it known that I, ALFRED H. HUMPHREY, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Mantle-Supports for Gas-Lamps, of which the following is a specification.

This invention relates to improvements in mantle supports for gas lamps.

The main object of this invention is to provide in a gas lamp an improved mantle support by which the mantles are effectively supported, and one which may be quickly and easily adjusted to permit the placing or renewing of mantles, and the cleaning or adjustment of the burners.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure 1 is a detail vertical section of a gas lamp embodying the features of my invention, portions being shown in full lines to better illustrate their form, the outer casing and globe being omitted. Fig. 2 is an enlarged detail perspective of the mantle supporting rod. Fig. 3 is a section taken on a line corresponding to line 3—3 of Fig. 2.

In the drawing, similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, the burners 1 are grouped about a draft chimney. The chimney illustrated is made up of sections 2 and 3, the lower section being arranged to project into the lower end of the upper section, and being spaced from the walls thereof, to provide an air passage into the chimney from above the flange 4, on the lower chimney section. The flange 4 projects outwardly and downwardly. The burners are arranged through the flange so that their tips 5 are below the same. The burner tubes 6 are arranged to receive gas from a suitable supply, the same not being here illustrated. The flange-like ring 8 is supported

by the chimney flange 4. The upper chimney section 2 is also provided with a flange, which is connected to the flange 8. These parts described are substantially those illustrated in Letters Patent No. 985,261, issued to me February 28, 1911.

The burners are provided with separate mantles 10, which are carried by a common support 11. This support is adapted to receive the rings 12, to which the mantles are suitably secured. The support 11 is adjustably supported by means of a vertically-adjustable supporting rod 13, which is mounted on the support 11 to project upwardly therefrom. This rod is arranged in a sleeve 14 supported by the chimney, the sleeve being arranged through the flanges 4 and 9 on the chimney members.

The rod 3 is provided with a guide portion at its lower end, and a pivot portion at its upper end, the guide portion being rectangular in the structure shown, while the pivot portion is cylindrical. The sleeve 14 is squared to coact with the guide portion of the supporting rod to prevent rotative movement of the mantle support as it is adjusted in its operative position. The upper end of the rod being round, when the mantle support is lowered, it can be swung to one side, as shown by dotted lines in Fig. 1. The guide portion of the rod, however, prevents its being swung on the pivot portion until the support is lowered sufficiently to clear the burners, and, further, it prevents the raising of the support 11 until it is adjusted to bring the mantles into proper position relative to the burner tips, and thus not only supports the mantles in proper operative position, but prevents injury thereto during the adjustment. By this simple means, I secure an effective guide, and at the same time, the mantle support may be adjusted so that it is readily accessible.

I am aware that my invention is capable of considerable modification in structural details, but I do not attempt to illustrate or describe the modifications herein as they will no doubt be obvious to those skilled in the art to which this invention relates. One modification was shown in this case as originally filed. This modification was withdrawn to form the subject matter of a divisional application.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a gas lamp, the combination with a

chimney having an outwardly and downwardly projecting flange at its lower end; a plurality of burners grouped about said chimney and arranged through said flange
 5 with their tips below the same; separate mantles for said burners; a common support for said mantles; a supporting rod for said mantle support; a sleeve in which said rod is arranged to be vertically adjusted, said
 10 rod being provided with a pivot portion at its upper end and a guide portion at its lower end whereby pivotal movement of the mantle support is prevented until it has cleared the burner tips; and a guide to coact with
 15 said guide portion of said supporting rod whereby said support is guided to bring the mantles carried thereby into proper operative relation to the burner tips.

2. In a gas lamp, the combination with a
 20 chimney having an outwardly and downwardly projecting flange at its lower end; a plurality of burners grouped about said chimney and arranged through said flange with their tips below the same; separate
 25 mantles for said burners; a common support for said mantles; a supporting rod for said mantle support; and a sleeve in which said rod is arranged to be vertically adjusted, said rod being provided with a pivot portion
 30 at its upper end and a guide portion at its lower end whereby pivotal movement of the mantle support is prevented until it has cleared the burner tips.

3. In a gas lamp, the combination with a
 35 plurality of burners; separate mantles for said burners; a common support for said mantles; a supporting rod for said mantle support, and a sleeve in which said rod is arranged to be vertically and pivotally ad-
 40 justed, said rod being provided with a guide portion at its lower end whereby pivotal movement of the mantle support is prevented until it has cleared the burner tips, and with a part coacting with the sleeve to
 45 pivotally support the rod in its lowered position.

4. In a gas lamp, the combination with a burner; a mantle for said burner; a support for said mantle; a supporting rod for said
 50 mantle support; and a sleeve in which said rod is arranged to be vertically adjusted, said rod being provided with a pivot portion at its upper end and with a guide portion at its lower end, said sleeve being
 55 adapted to coact with said guide portion whereby pivotal movement of the mantle support is prevented until it has cleared the burner tips.

5. In a gas lamp, the combination with a
 60 plurality of burners; separate mantles for said burners; a common support for said mantles; a vertically and pivotally adjust-

able supporting rod for said mantle support; a means for preventing pivotal movement of said mantle supporting rod until the mantle
 65 support has been lowered to clear the burner tips, said means being adapted to be automatically disengaged by the lowering of the mantle support; and means whereby said support is guided when adjusted to its
 70 operative position, adapted to prevent the complete raising of the mantle support until the mantles are brought into alinement with the burners.

6. In a gas lamp, the combination with a
 75 plurality of burners; separate mantles for said burners; a common support for said mantles; a vertically and pivotally adjustable supporting rod for said mantle support projecting upwardly therefrom; and a
 80 means for preventing pivotal movement of said mantle supporting rod until the mantle plate has been lowered to clear the burner tips, said means being adapted to be automatically disengaged by the lowering of the
 85 mantle support.

7. In a gas lamp, the combination with a plurality of burners; separate mantles for said burners; a common support for said mantles; a vertically adjustable sup-
 90 porting member for said mantle support having a guide portion and a pivot portion, said supporting member being arranged above said mantle support, and a member coacting with said supporting member to
 95 prevent the pivotal movement on its said pivot portion until the support has been lowered to clear the burner tips and prevent the raising of the support to operative position until the mantles are brought into
 100 alinement with the burners, all coacting for the purpose specified.

8. In a gas lamp, the combination with a burner; a mantle for said burner; a support for said mantle; a vertically-adjustable sup-
 105 porting member for said mantle support having a guide portion and a pivot portion, said supporting member being arranged above said mantle support and a member coacting with said supporting member to
 110 prevent the pivotal movement on its said pivot portion until the support has been lowered to clear the burner tip and prevent the raising of the support to operative position until the mantle is brought into aline-
 115 ment with the burner, all coacting for the purpose specified.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

ALFRED H. HUMPHREY. [L. S.]

Witnesses:

C. G. WEST, Jr.,

ALBER E. COHN.