

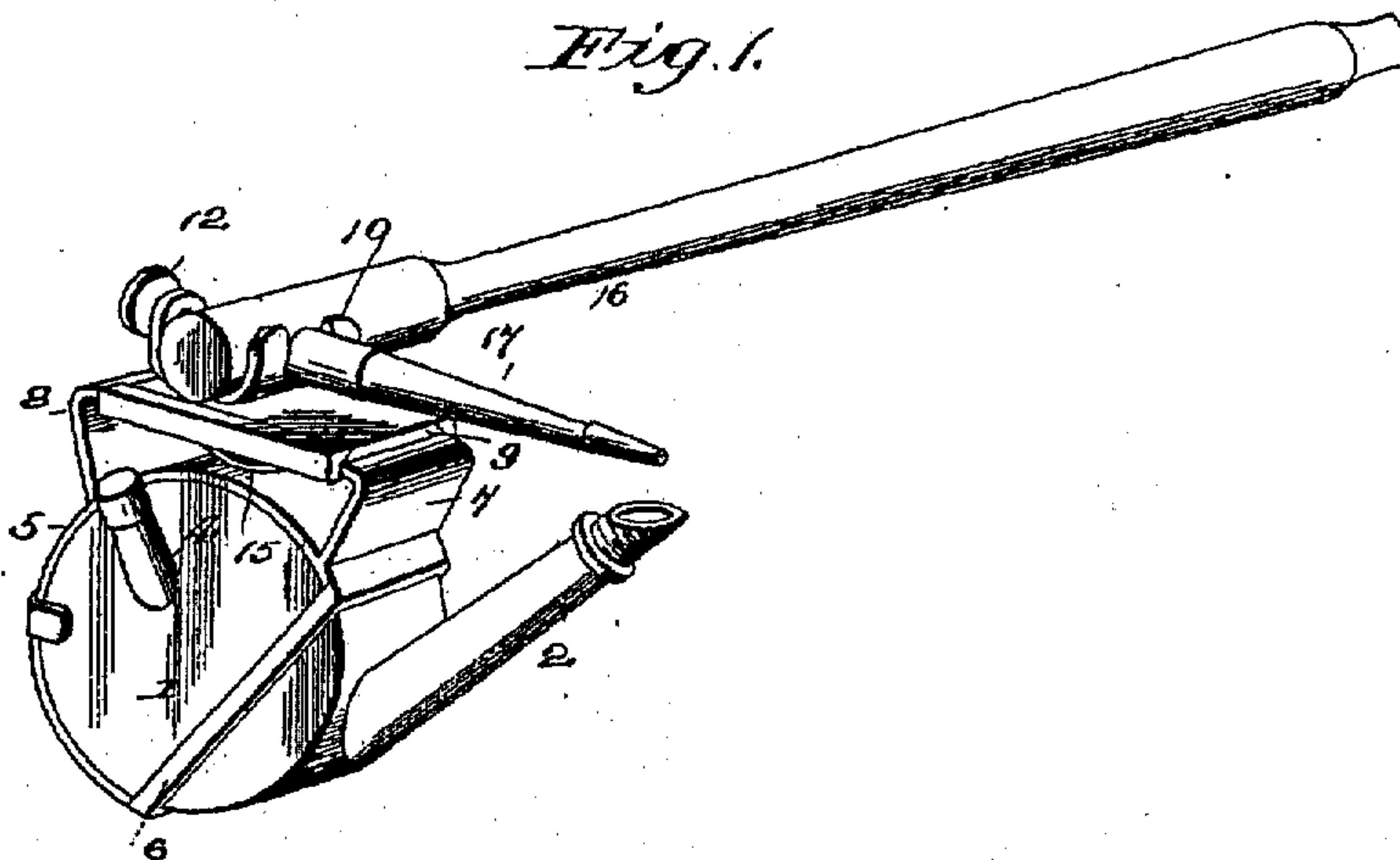
(No Model.)

W. A. CHAPMAN.  
BLOWPIPE LAMP.

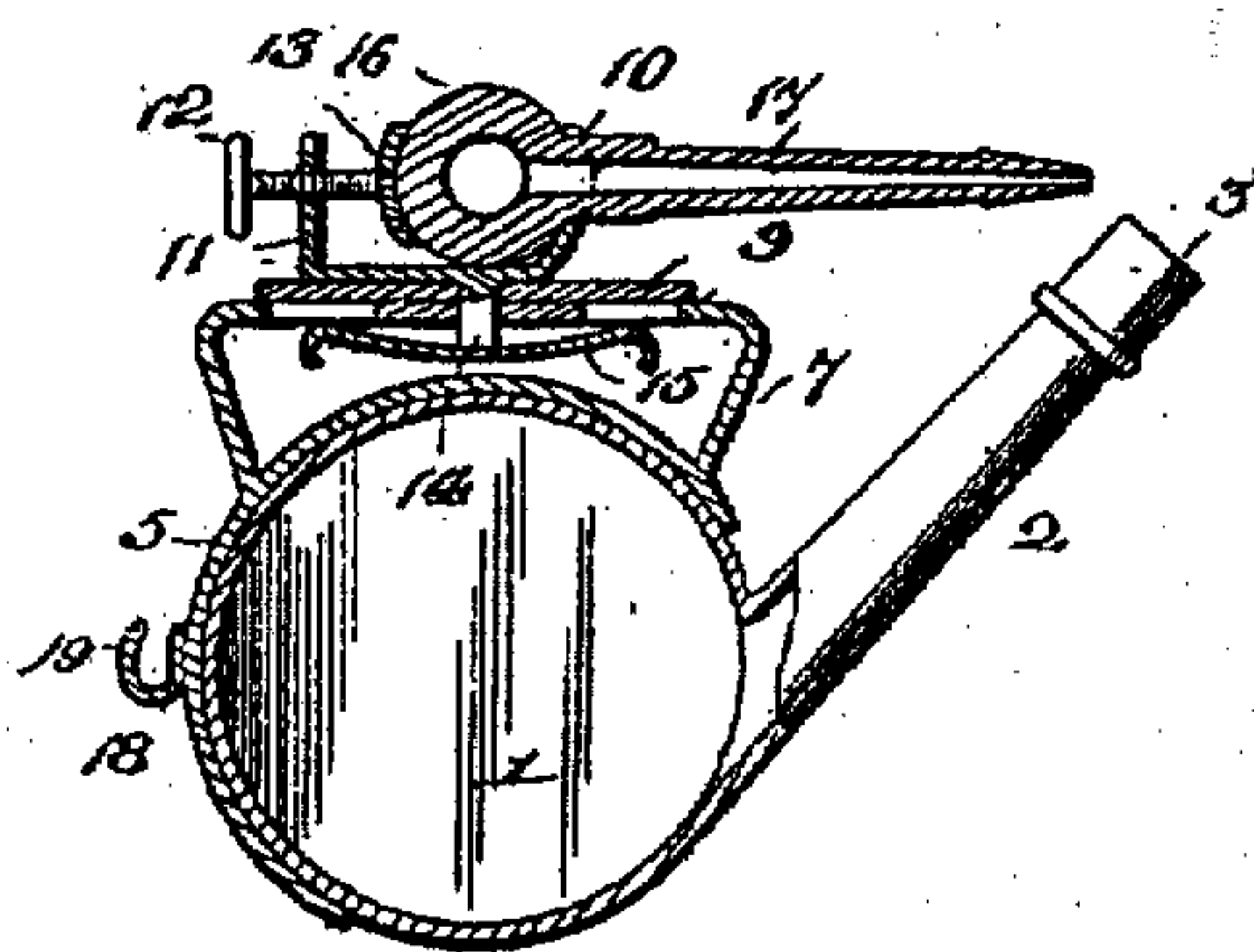
No. 589,815.

Patented Sept. 14, 1897.

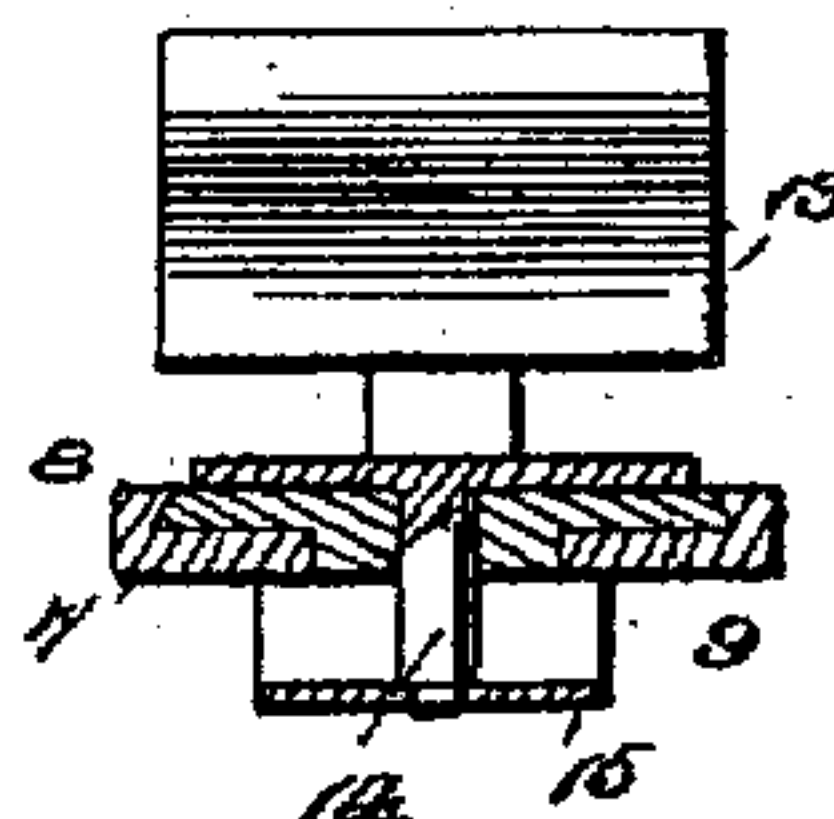
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES

*Joseph A. Stack*  
*Wm. C. Rogers*

INVENTOR

*William H. Chapman*  
*By John H. Hedges*  
Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM ALBERT CHAPMAN, OF YELLVILLE, ARKANSAS.

## BLOWPIPE-LAMP.

SPECIFICATION forming part of Letters Patent No. 589,815, dated September 14, 1897.

Application filed March 10, 1897. Serial No. 626,705. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ALBERT CHAPMAN, a citizen of the United States, residing at Yellville, in the county of Marion and State of Arkansas, have invented certain new and useful Improvements in Blowpipe-Lamps; 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.

This invention relates to improvements in blowpipe-lamps by means of which the blowpipe is connected to the lamp in such manner that it will provide a steady flame and also permit the lamp to be adjusted in order to properly direct the air from the blowpipe.

By the particular construction and arrangement of parts which make up my improved blowpipe-lamp the operator can braze articles of complicated form that could not heretofore be reached by the ordinary blowpipe, and at the same time there will be no change in the character of the flame.

With the above ends in view the invention consists in the particular construction of the lamp and device carried thereby holding the blowpipe, both lamp and blowpipe being adapted to be adjusted with respect to each other to direct the air upon the flame.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a blowpipe-lamp constructed in accordance with my invention. Fig. 2 is a vertical sectional view. Fig. 3 is a transverse sectional view through the support to which the blowpipe is connected.

In the drawings the numeral 1 designates the lamp proper, which consists of a circular reservoir having a wick-tube 2, projecting therefrom at a tangent, the outer end of said wick-tube being threaded to receive a cap 3, which is also threaded. From one side of the reservoir projects a filling-tube 4, also provided with a cap. Extending nearly around the periphery of this reservoir is a band 5, the ends of which are connected to each other by strips 6, extending across the sides of the reservoir. The band and connecting strips thereof are so placed in connection with the reservoir that the wick-tube 2 may have a movement between the ends of said band.

The filling-tube is also positioned so as not to interfere with this movement. On the upper part of the band 5 is rigidly secured a bracket 7, presenting a flat horizontal portion the side edges of which are turned over to present guides or channels 8. This bracket is intended to support the blowpipe, which is connected to a plate 9 in sliding engagement with the guides or channels 8. The plate 9 carries a clamp, which is swiveled thereon and consists of rigid members 10 and 11, provided with a screw-threaded aperture receiving a thumb-screw 12, carrying a curved plate 13, adapted to be moved to and from the members 10 by the said thumb-screw. The pivot 14, which connects the clamp to the sliding plate 9, extends through the horizontal member of the bracket 7 and is secured to a flat spring 15, the ends of which bear against the under side of said horizontal member of the bracket. By this arrangement spring-pressure is exerted not only against the sliding movement of the plate, but also against the pivotal movement of the clamp.

16 designates the blowpipe, the outer end of which is held firmly in the clamp to locate the nozzle 17 between the members 10 of said clamp. The opposite end of the blowpipe is provided with the usual mouthpiece.

At the rear end of the lamp the band 5 is provided with a cross-piece 18, the ends of which are bent to embrace the sides of the lamp, an intermediate portion of said cross-bar being turned up to provide a projection 19, which, with the adjoining ends of the bracket, will form feet for supporting the lamp so that the wick-tube will be in a vertical position.

By the particular construction and arrangement of parts as hereinbefore described the said parts are susceptible of numerous adjustments to change the direction of the flame, the forward movement of the blowpipe in introducing the nozzle into the flame to govern its character. The turning of said blowpipe provides for directing the flame upward or downward and at an intermediate angle. After the parts have been adjusted the character of the flame remains steady, and consequently better work had than with the ordinary blowpipe.



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

1. In a blowpipe, the combination of a reservoir having a wick-tube and a support attached to said reservoir, a clamp pivoted to the support, and the spring bearing against the lower end of the clamp, substantially as shown and for the purposes set forth.

2. In a blowpipe-lamp, the combination with a reservoir having a wick-tube, of a support carried by said reservoir, a plate in engagement with the support to slide in a direction to and from the wick-tube, and a clamp pivoted to said plate, substantially as shown and for the purposes set forth.

3. In a blowpipe-lamp, the combination with the reservoir, having a wick-tube extending therefrom, a support carried by the reservoir and presenting a horizontal plate having a longitudinal slot, and turned upward at its edges to present guides or channels, a plate in sliding engagement with said guides or channels, a clamp pivoted to the plate, the pivot-pin of the clamp extending through the slot in the support, and a flat spring secured to the end of the pivot and bearing at its ends on the under side of the plate, substantially as shown and for the purposes set forth.

4. In a blowpipe-lamp, the combination with the reservoir, having a wick-tube extending therefrom, of a support carried by the reservoir, a plate in sliding engagement with the support, and a clamp for the blowpipe presenting a bifurcated member 10, between which the nozzle is placed, the member having a threaded aperture receiving a screw with a plate on its inner end, substantially as shown and for the purposes set forth.

5. In a blowpipe, the combination with the circular reservoir having a tube extending at a tangent therefrom, of a band extending nearly

around the circumference of the reservoir and a clamp carried by said band, substantially as shown and for the purposes set forth.

6. In a blowpipe-lamp, the combination with the circular reservoir, having a wick-tube extending at a tangent therefrom, of a band nearly encircling the periphery of the reservoir, a sliding plate supported by the band and the clamp for the blowpipe pivoted to the sliding plate, substantially as shown and for the purposes set forth.

7. In a blowpipe, the combination with the circular reservoir, having a wick-tube extending at an angle therefrom, of a band nearly encircling the wick-tube and held in engagement therewith by strips connecting the ends of said bands extending across the sides of the reservoir, a bracket attached to the band, a plate in sliding engagement with the bracket, a clamp pivoted to the sliding plate and having its pin projecting through the bracket, and the flat spring in engagement with the lower end of the pin and bearing at its ends against the bracket, substantially as shown and for the purposes set forth.

8. In a blowpipe-lamp, the combination with a circular reservoir, having a wick-tube extending therefrom, of a band nearly encircling the wick-tube, a bracket attached to the band, a plate in sliding engagement with the bracket, a clamp for the blowpipe pivoted to said plate, and a projection extending from the band adjoining one end of the bracket, substantially as shown and for the purposes set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM ALBERT CHAPMAN.

Witnesses:

NEAL DODD,

IRVIN JACKSON BAKER.