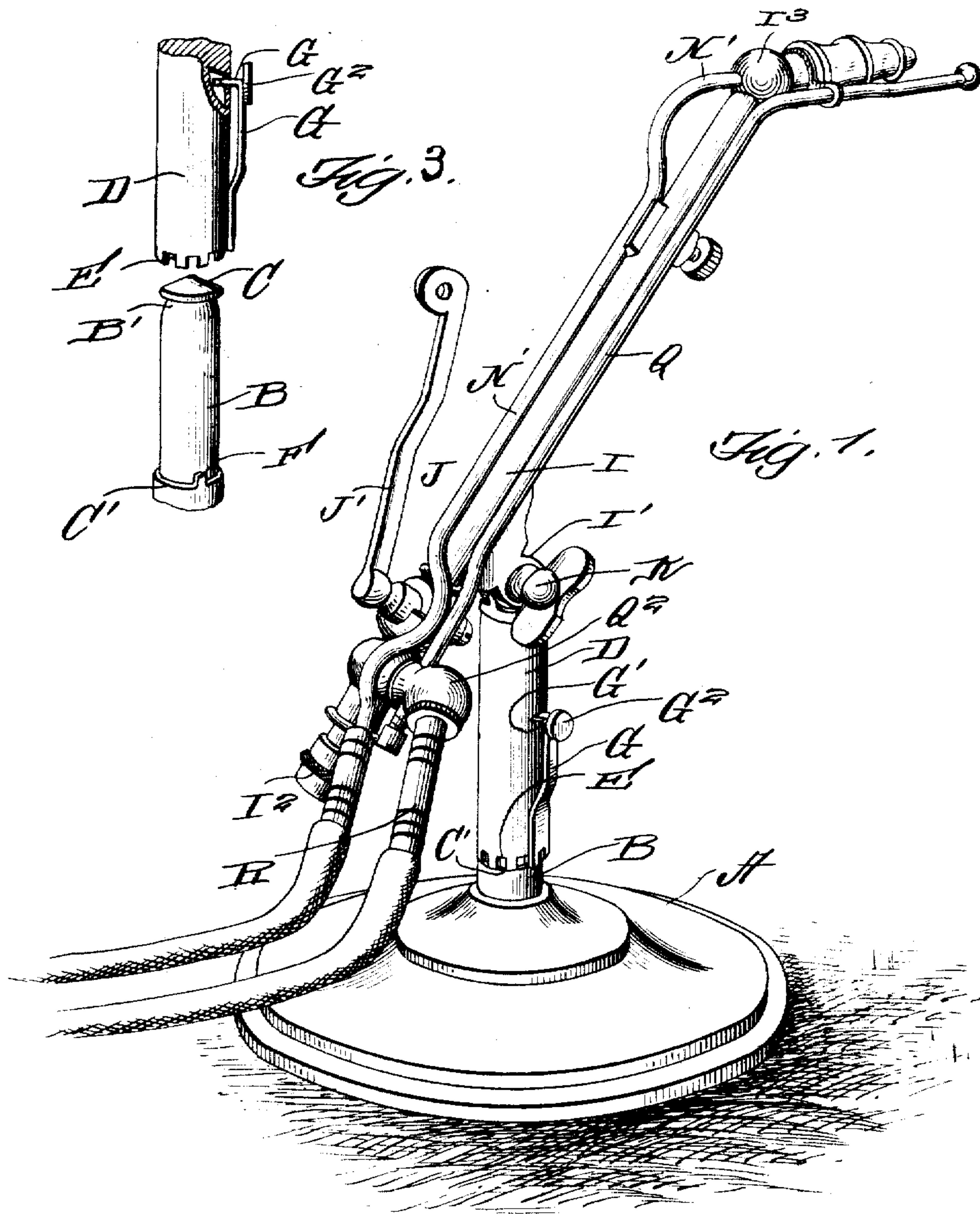


J. H. FLOWER.
BLOWPIPE.
APPLICATION FILED MAR. 16, 1909.

936,769.

Patented Oct. 12, 1909.
2 SHEETS—SHEET 1.



Witnesses

R. H. Boswell,
A. L. Hough

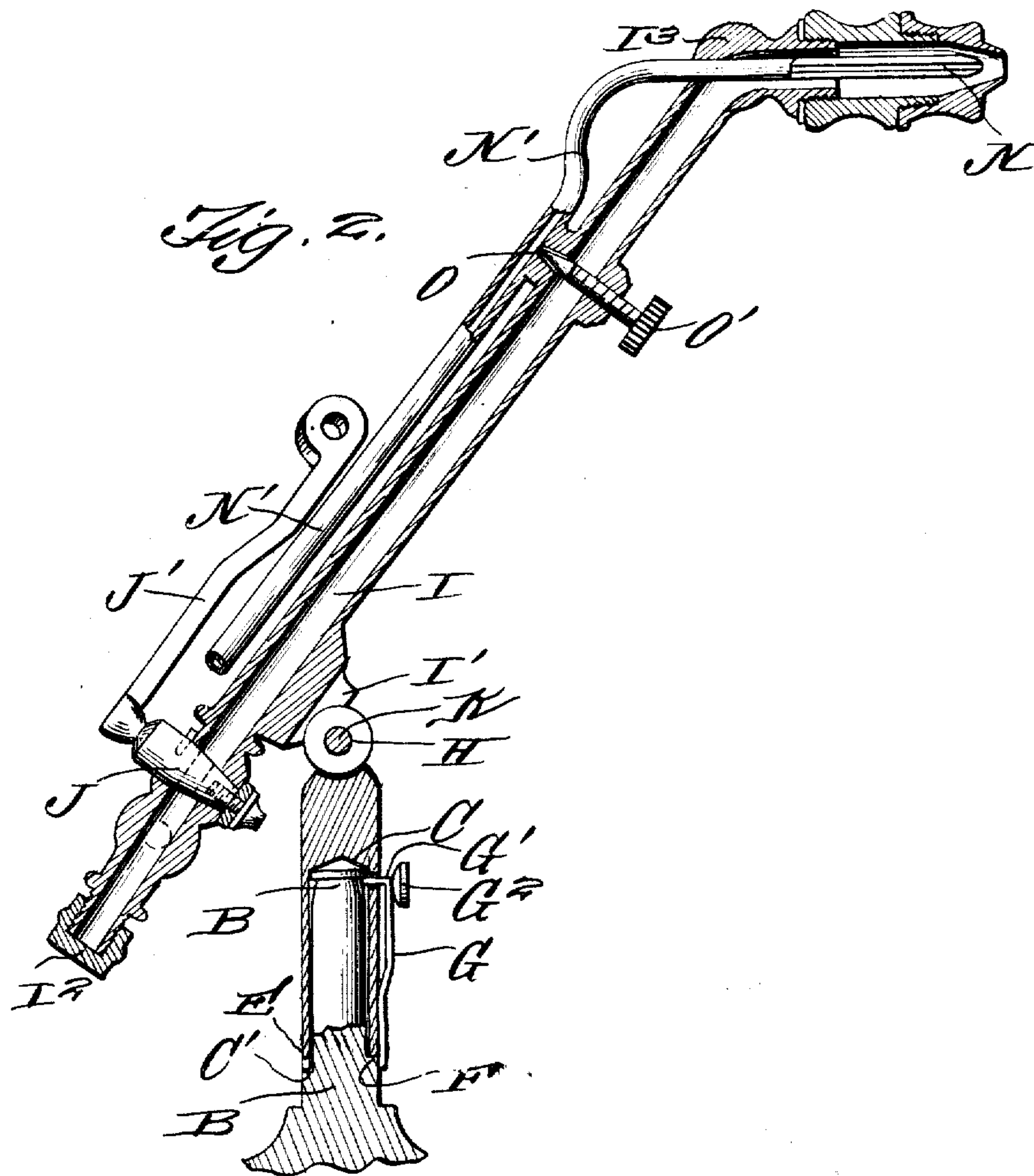
Inventor

James H. Flower,
By *Franklin H. Hough*
Attorney

J. H. FLOWER.
BLOWPIPE.
APPLICATION FILED MAR. 16, 1909.

936,769.

Patented Oct. 12, 1909.
2 SHEETS—SHEET 2.



Witnesses

R. H. Brewster,
A. L. Hough

Inventor

James H. Flower,
Franklin D. Hough

Attorney

UNITED STATES PATENT OFFICE.

JAMES H. FLOWER, OF ASHTABULA, OHIO.

BLOWPIPE.

936,769.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed March 16, 1909. Serial No. 483,743.

To all whom it may concern:

Be it known that I, JAMES H. FLOWER, a citizen of the United States, residing at Ashtabula, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Blowpipes; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in standards for blow pipes especially adapted for use of dentists, jewelers, etc., and comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view of the standard showing a blow pipe attached thereto. Fig. 2 is a vertical sectional view through the standard and blow pipe, and Fig. 3 is an enlarged detail showing the parts of the standard disassembled.

Reference now being had to the details of the drawings by letter, A designates the base of the device having a standard B with a circumferential groove B' adjacent to its upper end. The extreme upper end of said post is tapered as at C, and D designates a shell adapted to telescope over said post and the inner end of said shell is conical shaped and adapted to rest upon the upper tapering end of the post while the lower end of the post rests upon a shoulder C'. It will be noted that the lower end of said shell is provided with a series of notches E, and F designates a lug projecting from the shoulder upon said post and adapted to engage one or another of said notches to hold the shell from rotation. Fastened to the circumference of said shell is a spring G, the lower end of which is notched to receive said lug and the upper end of said spring is bent at an angle as at G' and passes through the shell, the inner end of said spring being concaved and adapted to engage the groove in the post when pressure is applied to the button G², thereby causing the shell and the standard to be raised together. The spring, however, is

normally out of engagement with said groove and, if the spring is not pushed within the shell, the latter may be taken off of the post and standard.

The upper end of the standard has an aperture H, and I designates a gas pipe having lugs I' projecting therefrom which are apertured, one of which apertures is threaded and K is a thumb screw passing through the apertures in the upper end of the shell and said lug and is adapted to hold the pipe at any desired angle. Fastened to one end of said pipe is a plug or cap I² which may be removed and a gas nipple may be applied thereto should it be desired to allow gas to enter directly to the pipe. J designates a valve in said pipe provided with a handle J'. At one end of said pipe is a hollow nozzle screwed to the pipe and N is a needle air jet which passes through the bulb I³ at the end of said pipe, which air jet is a continuation of a tube N' running parallel and fastened to said pipe I. Said pipe I is adapted to be connected to any suitable source of supply of gas, either natural or artificial. A valve O is mounted within said pipe I and has a stem with a head O', said valve O being provided to regulate if desired the flow of the air from the pipe N' to the pipe I to commingle with the gas within the shell about said nozzle. A pilot tube Q extends parallel with the pipe I and communicates with a slight orifice in the bulb Q² which orifice leads from the chamber Q³ which has a valve Q⁴ therein to regulate the flow of gas through said pilot tube and R is a gas supply pipe leading to said chamber.

In operation, the pilot tube with a minute jet may be continuously burning to avoid the necessity of lighting the main jet any time it is desired to use the apparatus, the flow of gas to the pilot tube being regulated through the valve shown and described and the supply of gas passing through the pipe I from the pipe R regulated through the valve J. Air is admitted through the tube N' where it makes exit at the jet N and commingles with the gas in the chamber about the jet. If desired, of course, air from the tube N' may be allowed to pass through the duct regulated by the valve O into the gas supply tube, in the event of the gas being too rich.

When it is desired to raise the standard with the pipe and jet, the operator by press-

ing in upon the spring may cause the inner end thereof to engage the groove at the upper end of said post. Should it be desired to utilize the pipe independent of the base, 5 the shell will readily rise from the post the spring being normally out of engagement with the groove therein. By the provision of the notches at the lower end of the shell, which engage the lug upon the 10 post, the shell may be held from rotation.

What I claim to be new is:—

1. In combination with the standard of a blow pipe, a base and a post rising therefrom, a shell telescoping over said post, said 15 post having a groove therein, a spring carried by said shell and adapted to engage said groove.

2. In combination with the standard of a blow pipe, a base and a post rising therefrom, a shell telescoping over said post, said 20 post having a groove therein, a spring carried by said shell and adapted to engage said groove, means for preventing the shell from rotating upon the post.

25 3. In combination with the standard of a

blow pipe, a base and a post rising therefrom, a shell telescoping over said post, said post having a groove therein, a spring carried by said shell and adapted to engage said groove, a lug upon said post, the lower end of said shell having notches adapted to engage said lug.

4. In combination with the standard of a blow pipe, a base having a post with a circumferential groove therein, said post having a shoulder, a lug projecting therefrom, a shell telescoping over said post and provided with notches in the lower end adapted to receive said lug, a spring fastened to said shell and having an angled portion extending through a slot in the shell and adapted to engage said groove as the spring is pushed within the shell.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 40

JAMES H. FLOWER.

Witnesses:

E. N. TILTON,

B. C. BLAKESLEE.