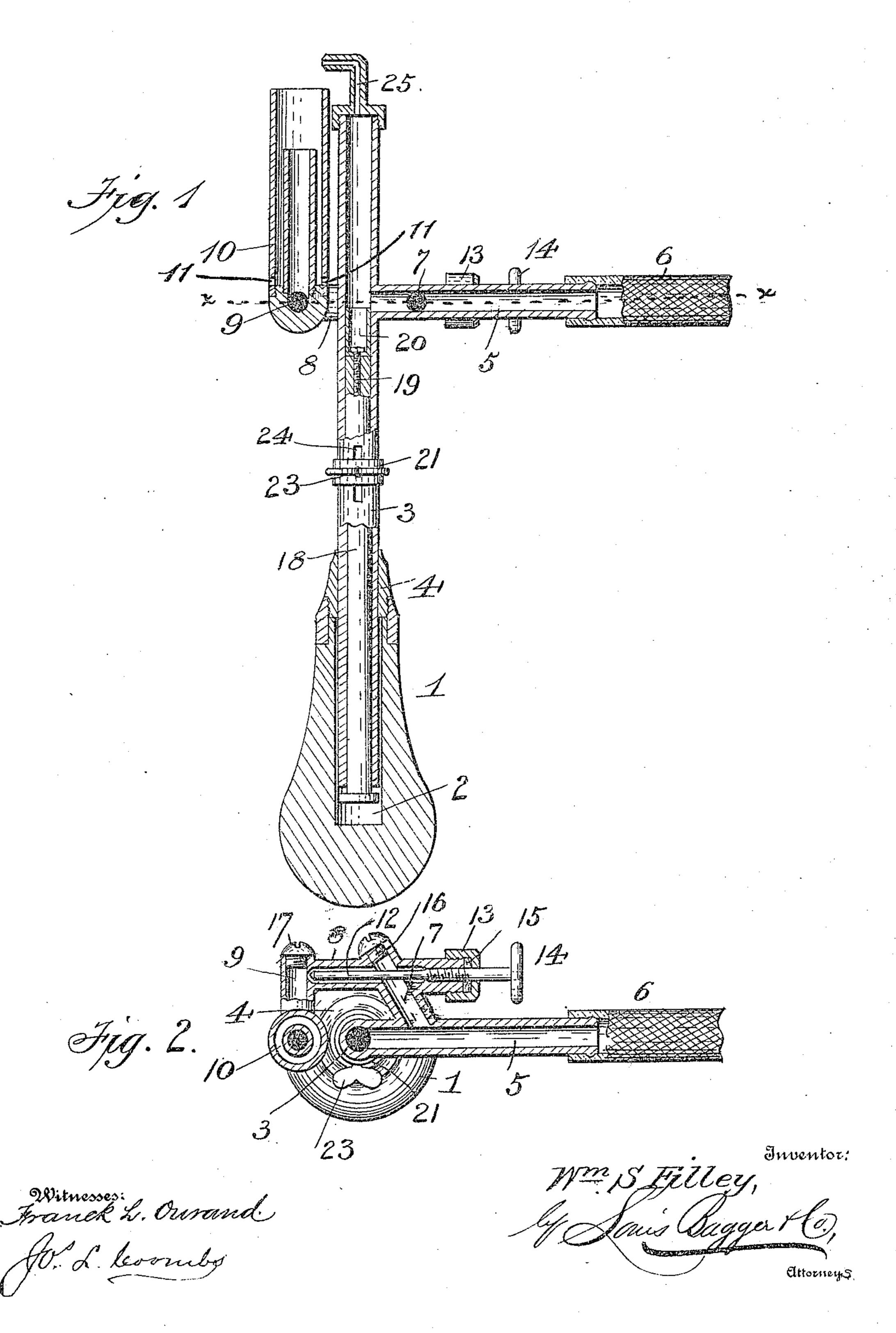
## W. S. FILLEY. BLOWPIPE.

(Application filed Mar. 11, 1898.)

(No Model.)



## United States Patent Office.

WILLIAM'S. FILLEY, OF MONTPELIER, OHIO.

## BLOWPIPE.

SPECIFICATION forming part of Letters Patent No. 617,729, dated January 17, 1899.

Application filed March 11, 1898. Seriai No. 673,505. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. FILLEY, a citizen of the United States, residing at Montpelier, in the county of Williams and State of Ohio, have invented new and useful Improvements in Blowpipes, of which the following is a specification.

My invention relates to blowpipes in which carbureted air is employed both as the medium to for producing the flame and as the jet for directing the flame and concentrating the heat upon any particular point; and the invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a blowpipe constructed in accordance with my invention. Fig. 2 is a horizontal section on the line x x,

20 Fig. 1. In the said drawings the reference-numeral 1 designates a handle, of any suitable material, having a central recess 2, in which is located a vertical tube 3, secured in place by a screw-25 threaded socket 4, fitting on the upper end of said handle. 'Intermediate its ends said tube is formed with a lateral pipe 5, the outer end of which is provided with a hose 6, connected with any suitable carbureting-machine. Said 30 pipe near its inner end is connected by an inclined passage 7 with a valve-casing 8, parallel with the pipe 5, but extending beyond the opposite side of tube 3. This valve-casing is connected by a passage 9 with a Bunsen or 35 other burner 10 and at its lower end is formed

with holes 11 for the admission of air. This burner may be of any ordinary construction, and a detailed description thereof is not necessary. Located in said casing is a needle-valve 12 for opening and closing communication between the same and the passage 9. At the outer end the casing is provided with a screw-threaded cap 13, through which passes the outer end of the needle-valve, provided with a hand-wheel 14. Said needle-valve intermediate its ends is screw-threaded to en-

The numeral 15 designates a packing-ring interposed between the end of the casing and the cap 13.

The numerals 16 and 17 designate removable screw-plugs engaging with threaded holes in the casing 8 and passage 9.

Located in the tube 3 is a vertically-movable rod 18, provided at the upper end with a stem 19, to which is secured a cylindrical valve 20 for opening and closing communication between said tube and the pipe 5. Located on said tube is a vertically-movable 60 collar 21, provided with a thumb-screw 23, the shank or stem of which passes through a hole in said collar and engages with the rod 18. The tube 3 is formed with a vertical slot 24 to allow the said thumb-screw to move up 65 and down.

The numeral 25 designates the jet-pipe at the upper end of tube 3.

The operation will be readily understood. Carbureted air is forced from any suitable 70 carbureting-machine to the pipe 5, and valve 20 being opened said air will escape to the burner, where it is ignited. At the same time the needle-valve 12 is opened to admit air also from said pipe to the tube 3 to furnish 75 the jet or blast.

Having thus fully described my invention, what I claim is—

1. In a blowpipe, the combination with the handle, the tube secured thereto, the lateral 8c pipe connected with said tube, the valve-casing connected and communicating with said pipe, the needle-valve located in said casing and the burner connected with the casing, of the vertically-movable rod located in said 8s tube, the circular valve at the upper end of said rod, and means for operating the same, substantially as described.

2. In a blowpipe, the combination with the handle, the tube connected therewith, the lateral pipe connected with said tube, the valvecasing connected with said pipe, the needlectality, and the burner connected with said casing, of the vertically-movable valve located in said tube, the rod connected therestimate, the collar on said tube, the thumb-screw passing therethrough and through a vertical slot in said tube and secured to said rod, substantially as described.

termediate its ends is screw-threaded to enengage with corresponding screw-threads in the end of said casing.

In testimony whereof I have hereunto set roc my hand in presence of two subscribing witnesses.

WILLIAM S. FILLEY.

Witnesses:
E. E. RECHTOL,
Mrs. J. F. Donnelly.