J. M. HANCOCK.

Self-Acting Blow-Pipe.

No. 166,275. Patented Aug. 3, 1875.

Fig. 1

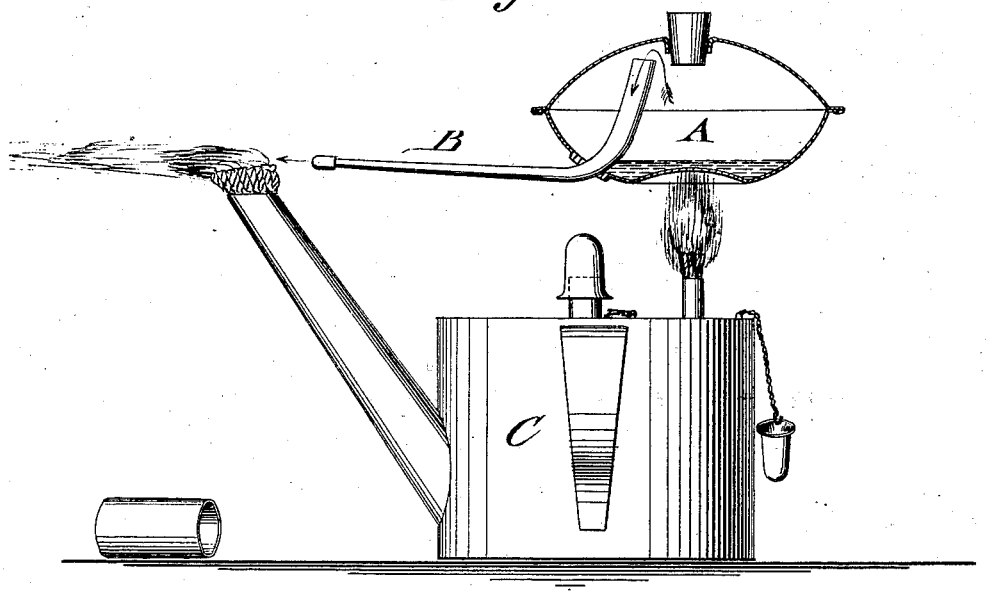


Fig. 2

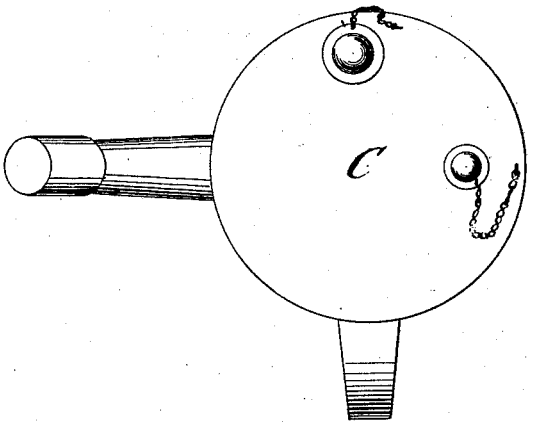
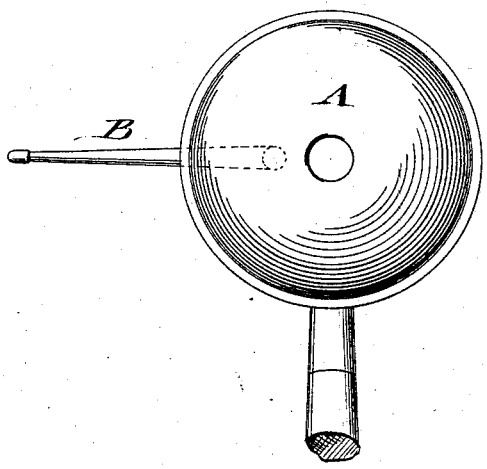


Fig. 3



WITNESSES:

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JOHN MARTIN HANCOCK, OF LANSING, IOWA.

IMPROVEMENT IN SELF-ACTING BLOW-PIPES.

Specification forming part of Letters Patent No. **166,275**, dated August 3, 1875; application filed June 5, 1875.

To all whom it may concern:

Be it known that I, JOHN M. HANCOCK, of Lansing, Allamakee county, Iowa, have invented a new and Improved Self-Acting Blow-Pipe, of which the following is a specification:

Figure 1 represents a side elevation of my self-acting blow-pipe, partly in section; and Figs. 2 and 3, respectively, top views of the alcohol-lamp and blow-pipe.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish for jewelers and others a self-acting blow-pipe for hard and soft soldering, by which the flame may be fully and instantly controlled, and the power of the same regulated without interrupting the working of the blow-pipe.

The invention consists of a pipe attached sidewise and projecting to some distance from the alcohol-vessel, which is exposed to the heat of a small flame, being about the same distance from the main flame of the lamp as the bottom of the alcohol-vessel is from the outermost end of the blow-pipe.

In the drawing, A represents a vessel or receptacle for the generation of the alcoholic vapors, which is filled in the customary manner with a quantity of alcohol and closed by a cork. The blow-pipe B is arranged sidewise of the bottom of the vessel, being bent up at the inside and extending up to a point near the top of the vessel to convey the steam or vapor of the alcohol to the issuing-orifice of the pipe. The blow-pipe is extended outside of vessel A to a distance corresponding to the size of the lamp C, which is used therewith. The alcohol-lamp C has two flames, the main or soldering flame at the end of the spout, and a small flame at the top for heating the generating-vessel A. The distance of the two flames corresponds to the distance of the bottom part of the vessel from the issuing-orifice of the blow-pipe, so that the vessel can be held steadily above the heating-flame and the orifice be in close proximity to the soldering-flame.

The action of the blow-pipe on the flame is instantly suspended by diverting the orifice from the soldering-flame, and the generating of alcoholic vapors and the intensity of the flame regulated by bringing the vessel A nearer to or from the small flame.

The soldering-flame is readily guided or removed from the work, and the effect and power of the flame on the work continually under observation, by having the orifice of the blow-pipe at some distance from and not below the alcohol-vessel.

The pipe is controlled by the right hand and the work held steadily by the left hand, the flame being directed and fully regulated by blow-pipe and lamp, furnishing a superior instrument to similar devices used for the same purpose.

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

The combination of vapor-chamber A, having blow-pipe B and the hand movable alcohol-vessel C, having one burner at the top and another at the side, as shown and described, to enable jewelers, in brazing or soldering gold or silver articles, to guide the flame to the work, regulate accurately the degree of heat, and then instantaneously remove the flame when it has performed its function.

JOHN MARTIN HANCOCK.

Witnesses:
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