

A. C. FRIESEKE.

SOLDERING LAMP & BLOW PIPE

118229

PATENTED AUG 22 1871

Fig. 1

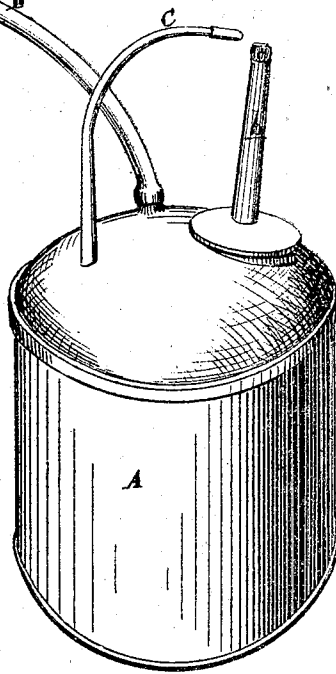
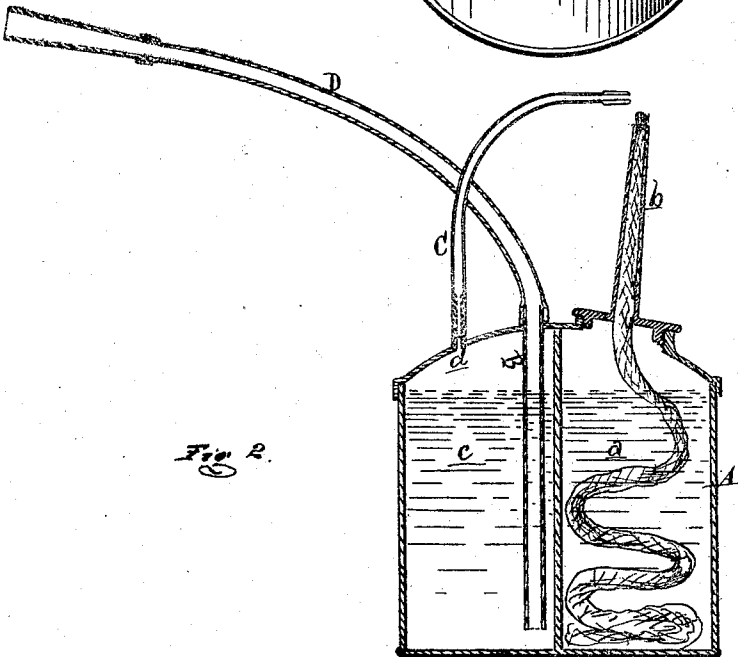


Fig. 2.



ATTEST

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ALBERT C. FRIESEKE, OF OWASSO, MICHIGAN.

'IMPROVEMENT IN COMBINED SOLDERING-LAMPS AND BLOW-PIPES.

Specification forming part of Letters Patent No. 118,229, dated August 22, 1871.

To all whom it may concern:

Be it known that I, ALBERT C. FRIESEKE, of Owasso, in the county of Shiawassee and State of Michigan, have invented a new and useful Improvement in Soldering-Lamp and Blow-Pipe; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 shows my invention in perspective. Fig. 2 is a vertical section.

Like letters refer to like parts in each figure.

The nature of this invention relates to an improved construction of lamps and blow-pipes for the use of jewelers and other manufacturers. The invention consists in so arranging a lamp with a flame derived from alcohol that the flame will be fed by the volatile gas thrown off from naphtha by means of the blow-pipe, while at the same time the latter is employed in giving direction and intensity to the flame.

In the accompanying drawing, A represents the lamp, divided into two compartments, the one *a* being designed to be filled with alcohol and provided with a wick-tube, *b*, of ordinary construction. The other compartment *c* is designed to be partially filled with naphtha or its equivalent. This compartment is provided with a tube, B, which passes downward through the top of the lamp and terminates near the bottom of the compartment. A smaller tube, *d*, leads from this compartment through the top. To the top of this tube the nozzle of the pipe C is secured in such a manner that it may be removed

at will or turned in any direction. A flexible pipe, D, is secured to the top of the tube B, and its opposite end may terminate in a mouth-piece.

The compartment *a* being filled with alcohol, supplies the wick in the tube *b*. The compartment *c* being filled about two-thirds full with naphtha, and the nozzle of the pipe C being directed to the alcoholic flame, a blast through the pipe D forces the air through the pipe B to the bottom of the compartment *c*, whence the air rises, becoming impregnated with the gas of the naphtha, and is forced through the tube *d* and pipe C into the flame, mingling said gas with the alcoholic flame, and greatly intensifying the heat. By mingling such gas with the alcoholic flame a great saving in the quantity of alcohol is had, and a more intense heat, at a small cost, than can usually be obtained from alcohol; and by the use of my device the operator is not compelled to use one of his hands to guide his blow-pipe and flame, but has both hands left free to handle his work.

What I claim as my invention, and desire to secure by Letters Patent, is—

The soldering-lamp and blow-pipe described, wherein the lamp is divided into two compartments, *a* and *c*, the former being provided with wick-tube *b* and the latter with tubes B and *d*, in connection with the pipes C and D, the several parts being constructed, arranged, and operated substantially as described and shown, for the purposes set forth.

Witnesses:

A. C. FRIESEKE.

MYRON H. CHURCH,

H. F. EBERTS.