(No Model.)

L. CHARRON.

PLUMBER'S LAMP.

No. 506,871. Patented Oct. 17, 1893.

Fig. 1.

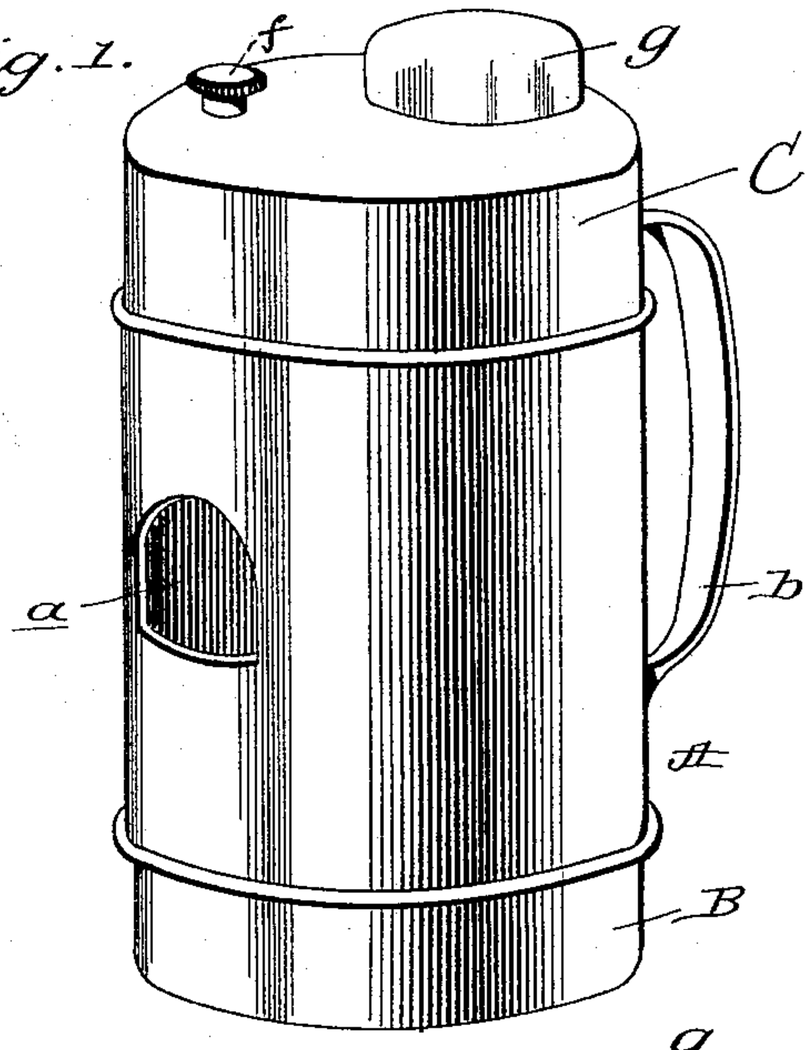
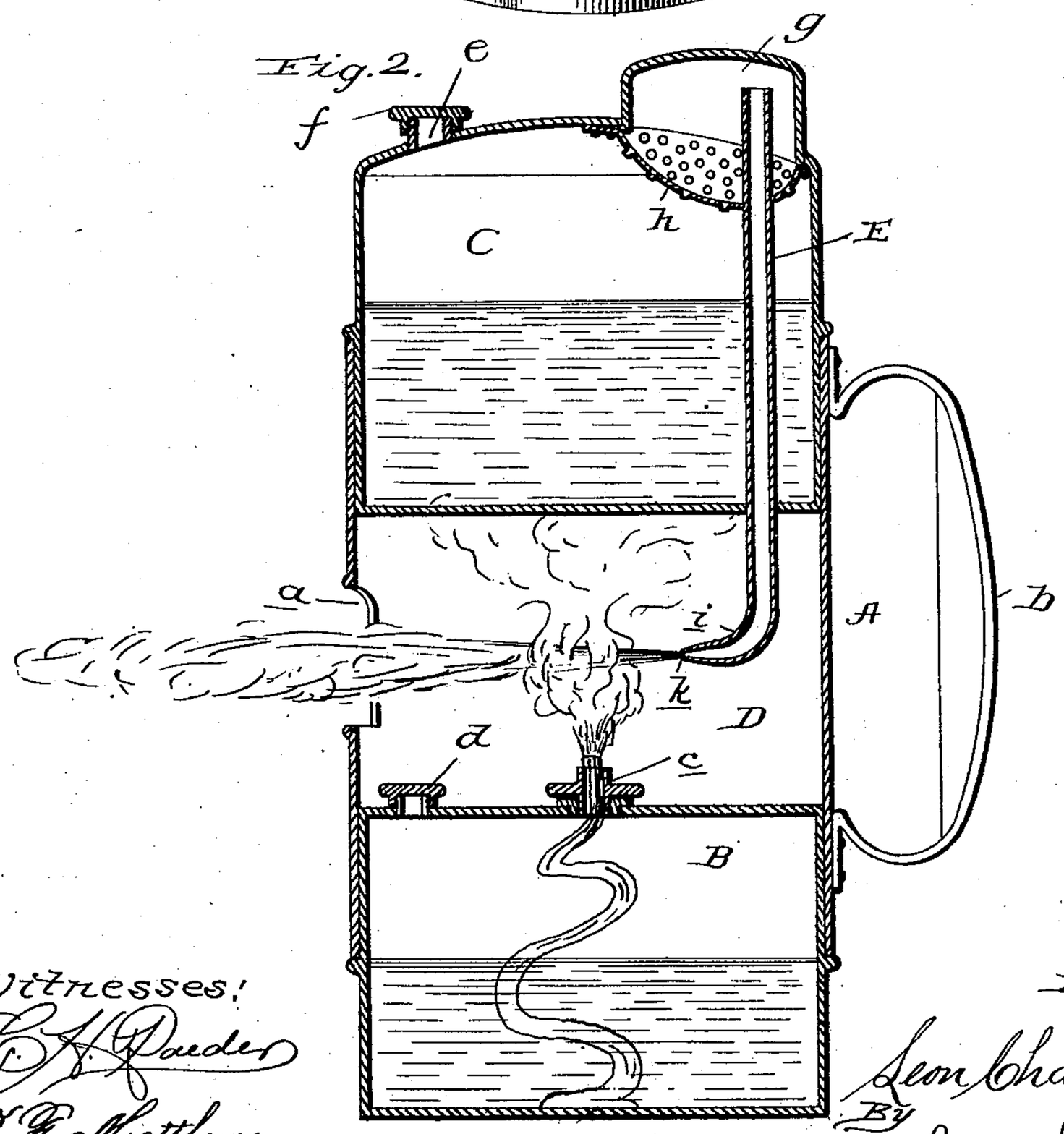


Fig. 2.



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LEON CHARRON, OF WOONSOCKET, RHODE ISLAND.

PLUMBER'S LAMP.

SPECIFICATION forming part of Letters Patent No. 506,871, dated October 17, 1893.

Application filed June 2, 1893. Serial No. 476,314. (No model.)

To all whom it may concern:

Be it known that I, LEON CHARRON, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Plumbers' Lamps; and I do 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 has relation to an improvement in plumbers' lamps, as used for soldering purposes, and may be advantageously used by jewelers, and mechanics generally, to take the place of blow pipes, and by being provided with a handle, it can be conveniently used to direct a flame to any point such as in repairing electric wires, water pipes, and the like, and the novelty will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1, is a perspective view of my improved lamp, and Fig. 2, is a vertical, central, sectional view of the same.

Referring by letter to said drawings: A, indicates a casing, which is here shown as of a cylindrical form, although it may be made in any other suitable shape. This cylindrical casing is open at opposite ends as shown, and is provided in one side at or about midway of its length, with a flame aperture *a*, and on its outer-opposite side with a handle *b*.

B, indicates a lamp, which is of a shape in cross section corresponding to the casing A, and is placed in the same, from below, upwardly, as shown, where it may be held by frictional contact or suitable securing devices. This lamp which may be made of sheet metal, is provided with a tube *c*, to receive a suitable wick, such as commonly employed, and the top of the lamp is furthermore provided with an aperture surrounded by a threaded collar, closed by a screw cap *d*, the aperture being designed to fill the fountain or lamp B, with naphtha, alcohol, or the like.

C, indicates a boiler, which is also designed to contain alcohol or naphtha. This boiler is provided with a filling aperture *e*, in its top covered by a threaded cap *f*, and is furthermore provided in its top with a gas dome *g*, which is separated from the generating chamber or interior of the boiler by means of a foraminous plate *h*, the holes in which are so punched as to leave the burr of the displaced metal on the outer side so that as the gas rises from the naphtha or alcohol, or such liquid as may be employed, it will be prevented from passing into the gas chamber, but will drip back into the boiler, and in order to aid this action, the foraminous plate may be of a concavo-convex form as shown. The boiler is placed within the casing A, so as to form a combustion or flame chamber D, between the top of the lamp and the bottom of the boiler.

E, indicates a tube. This tube passes through the boiler, vertically as shown, and its upper end opens into the gas chamber above the foraminous plate through which it also passes, and the opposite end of the tube, which passes into the combustion chamber, is curved as shown at *i*, and has a reduced aperture *k*, which is directed horizontally and at a point just in rear of the plane of the flame which rises from the lamp.

In operation, after a suitable quantity of alcohol or naphtha has been placed in the boiler and lamp respectively, the wick is ignited, and as the flame and particles of combustion rising against the bottom of the boiler, will quickly boil the contents, causing a gas to generate and rise in the chamber *g*, such gas passing down the pipe E, will be forcibly ejected from the reduced aperture *k*, against the flame of the lamp, when it will throw a blaze out through the aperture *a*, as better shown in Fig. 2, of the drawings.

Having described my invention, what I claim is—

As an improved article of manufacture, a lamp for the purpose described, comprising the casing, having the handle and also the flame aperture, the lamp arranged in the lower end of the casing, and having a wick tube, the boiler arranged in the upper end of the casing, so as to form a combustion chamber between the same and the lamp, the gas

chamber, separated from the interior of the boiler by a foraminous plate, and a pipe leading from the gas chamber down to the combustion chamber and arranged to discharge the gas conducted thereby through the path of the lamp flame and through the flame aperture, substantially as specified.

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

LEON CHARRON.

Witnesses:
GEO. W. SPAULDING,
CAROLINE R. MASON.