

C. F. MARTINE.

Lamp.

No. 35,349.

Patented May 20, 1862.

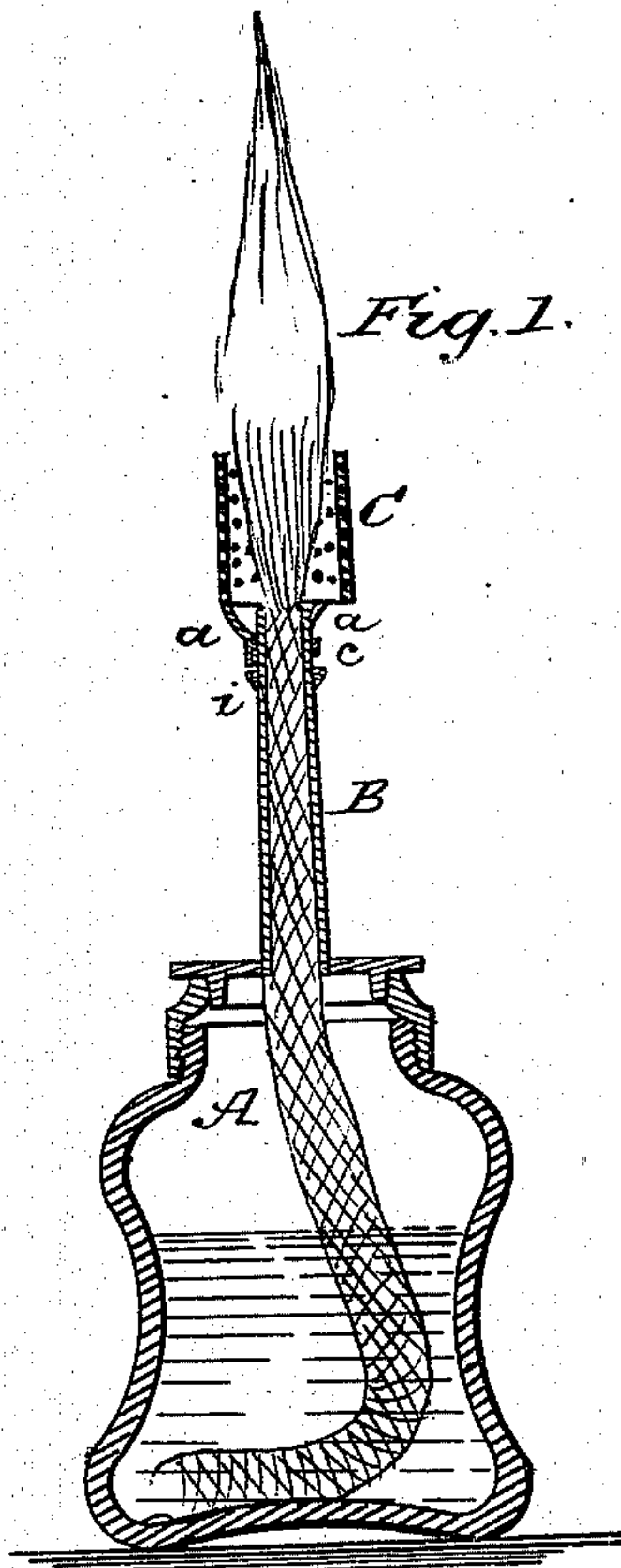
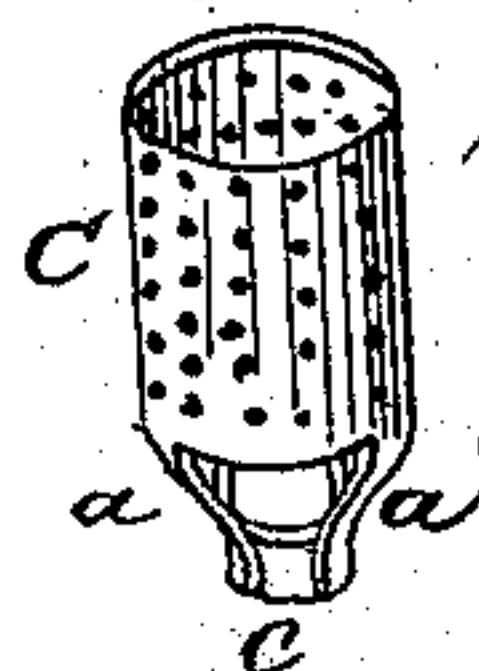


Fig. 2.

WITNESSES
Edw. Schenck
Emm. Nason



INVENTOR

Chas. Martine
by his Attorney
Samuel Cooper

UNITED STATES PATENT OFFICE.

CHARLES F. MARTINE, OF DORCHESTER, ASSIGNOR TO HIMSELF, AND RUFUS H. EMERSON, OF LYNNFIELD CENTRE, MASSACHUSETTS.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 35,349, dated May 20, 1862.

To all whom it may concern:

Be it known that I, CHARLES F. MARTINE, of Dorchester, in the county of Norfolk and State of Massachusetts, have invented an Improvement in Lamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical section through a lamp having my improvement attached thereto. Fig. 2 is a view of the attachment which constitutes my improvement.

The object of my invention is to improve that class of lamps which are used without a chimney, and which from the imperfect combustion of the kerosene or other fluid used are liable to smoke; and my invention consists in attaching to the lamp a tube of sheet metal or other suitable material of somewhat greater diameter than the wick tube or orifice and extending above it, so as to encircle the lower part of the flame, and by the heat which it retains assist in consuming the smoke and gases, which would otherwise escape by imperfect combustion.

That others skilled in the art may understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A is the lamp; B, the wick-tube, to the upper end of which is attached a perforated tube of sheet metal, C. (Shown detached in Fig. 2.) It has three short legs, *a*, projecting from it, to which are attached a ring, *c*, which embraces the wick-tube. This may be made sufficiently tight to hold the tube C in place, or a ring, *i*, may be secured to the wick-tube, on which the ring *c* will rest. This tube C extends above the top of the wick-tube and surrounds the lower

part of the flame, as shown in Fig. 1. When adjusted at the proper height, the flame burns above the tube C in a clear steady cone of light of much greater size and emitting a much greater amount of light without smoking than the same lamp would do without the attachment of the tube.

The form and dimensions of the tube C may be varied, as well as the material of which it is made, without departing from the spirit of my invention; but the construction here shown is that which I prefer. For example, the tube may be made tapering, or its sides concave or convex, or when applied to a flat wick may be shaped to correspond with it. I have also tried the plain metal without the perforations, but consider that the perforated tube gives the best result, as it admits a larger amount of air to the flame. I deem it essential, however, to produce the best effect, that the tube should be open at both top and bottom. I am aware that a metal cap has been applied to a lamp with a chimney, as in the "kerosene-lamp," so called; but in this case the cap was set upon the top of the lamp and was surrounded by a chimney and could not be applied to such a lamp as is here represented.

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

The tube C, open at both its top and bottom, its lower end being at or near the top of the wick-tube and its upper end projecting above the wick, the whole constructed, arranged, and operating substantially in the manner and for the purpose specified.

CHAS. F. MARTINE.

Witnesses:

THOS. R. ROACH,
EDMUND MASSON.