J. C. HOUSE.

Lamp Stove.

No. 69,670. Patented Oct. 8, 1867.

FIG. 3

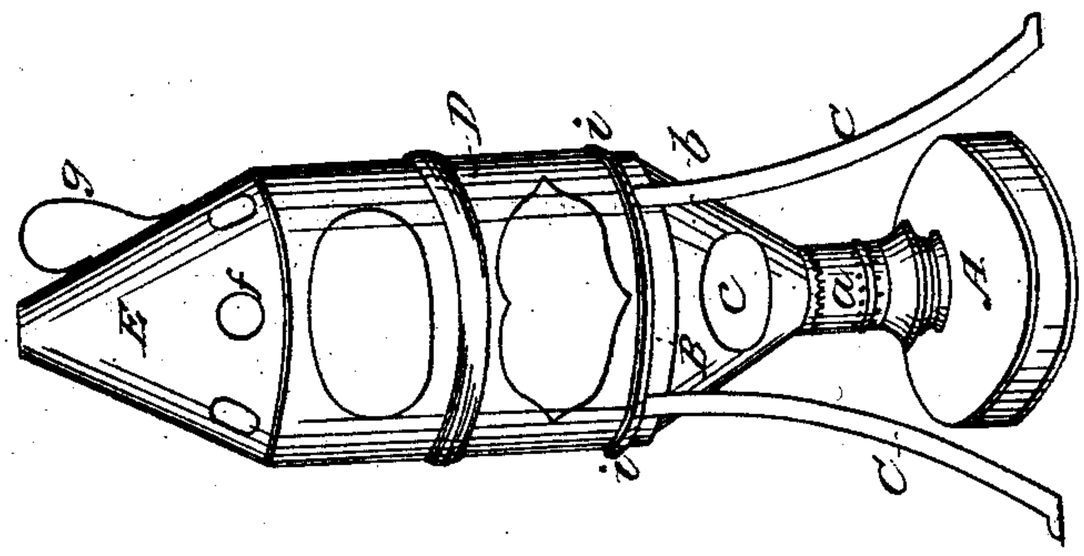

FIG. 2

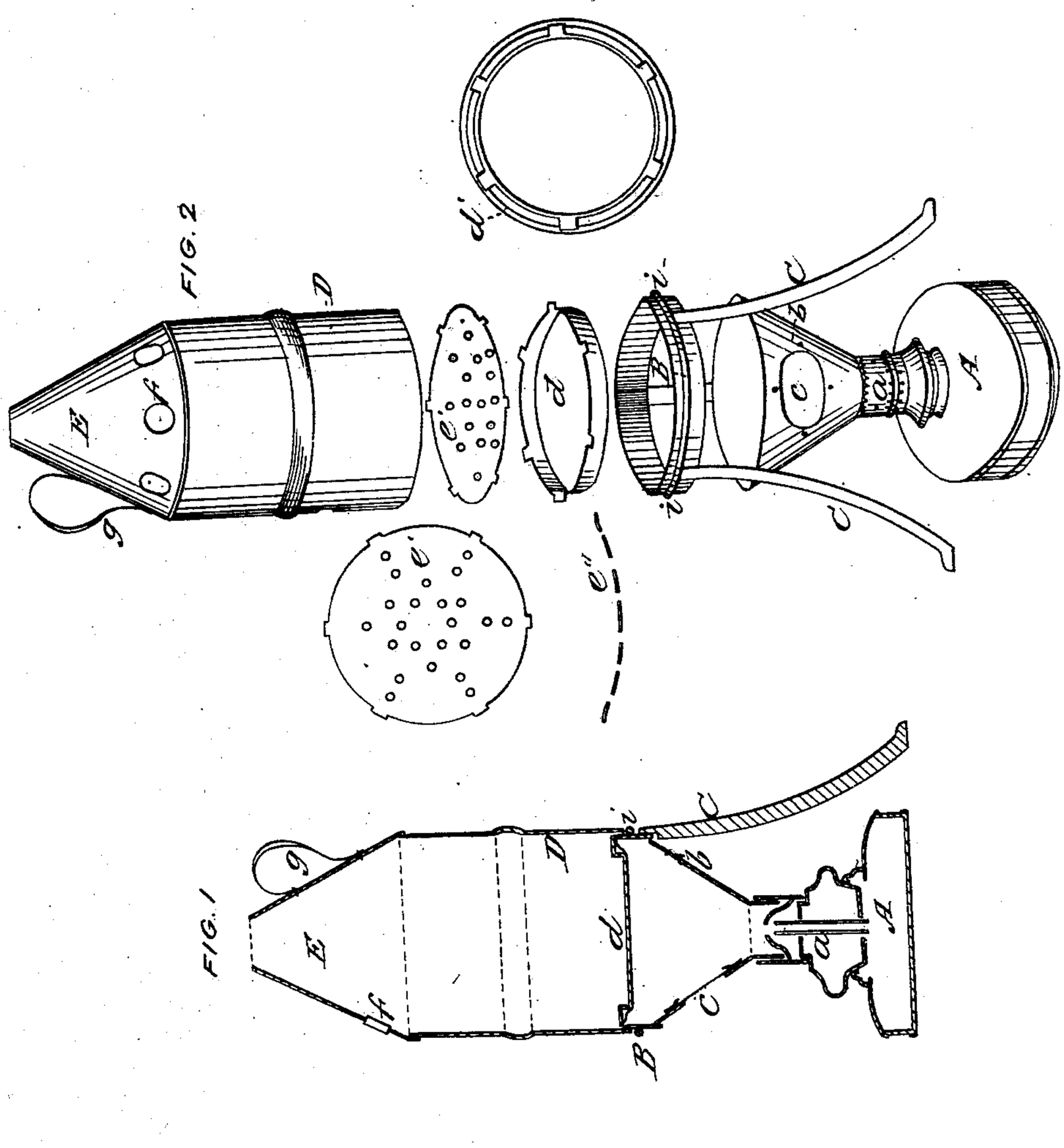

FIG. 1

WITNESSES:

Morris Chase

Jand Hould

INVENTOR:

J. Carroll House D.D.S

United States Patent Office.

J. CARROLL HOUSE, OF LOWVILLE, NEW YORK.

Letters Patent No. 69,670, *dated October* 8, 1867; *antedated September* 25, 1867.

LAMP-HEATER FOR DENTAL PURPOSES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. CARROLL HOUSE, of Lowville, of the county of Lewis, and State of New York, have invented a new and useful Heating Apparatus for the Use of Dentists and Artisans; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a vertical section.

Figure 2 a view of the several component parts as detached, represented in perspective, and

Figure 3 is a perspective view of the apparatus as combined in use.

A represents a kerosene or coal-oil lamp, with its burner *a* of any of the various forms in common use. Surmounting the burner is an inverted truncated cone of sheet metal, *b*, open at each end, the lower or smaller opening closely fitting the burner of the lamp. *c* is an oval opening in the sheet metal, over which is secured a film of mica, thus forming a window, through which to graduate the flame of the burner. The hoop B is formed of sheet metal or band iron, of sufficient thickness and width to form a stiff frame to which to attach the legs, (three or more, C C,) which are of round iron, and fastened to the rim B by soldering or riveting. The internal dimensions of the hoop or rim are such that the upper opening of the cone *b* upon its exterior circumference shall fit snugly within the rim B, when the frame (consisting of the rim B and legs C C) is in place. Surrounding the rim B, about midway of its vertical width, is a wire hoop, *i i*, which being secured to the rim B forms a ledge upon the outside of the same. *d* is a shallow metallic cup, having several wings or projections distributed equidistant about its circumference, by which the cup is supported in position upon the rim B. The exterior diameter of the sunken portion of the winged cup *d* being somewhat smaller than the interior of the rim B, leaves an annular opening or space between the two, (see *d'*.) The extreme diameter of the cup across the wings is the same as the outside diameter of B. *e* is a perforated plate, of either sheet or cast metal, (represented in plan at *e'*, and section at *e''*;) corresponding in diameter to the interior of the rim B, and having short lugs upon its periphery, in length corresponding to the thickness of the rim B, upon which when in use they rest as supports for the plate. D is a cylindrical dome of sheet metal, with a conical top, E, which fits snugly down upon the exterior of the rim B, and rests upon the ledge formed by the wire *i i*. The cone E which surmounts the cylinder is open at the apex, and has also several perforations near its base, as shown at *f f*. At *g* a handle is attached for convenience in use.

Having thus described the construction of my invention, I will now briefly describe its operation.

Having filled the reservoir A with kerosene or other coal-oil burning-fluid, and the burner *a* with suitable wick being in place and lighted, the cone *b* is put in its place upon the burner, and the frame B C set down around the top of the cone *b*. I then put either the winged cup *d*, or its equivalent, the diaphragm plate *e*, (depending upon the character of the work I have to heat,) upon the frame, and upon this set the article or articles I have to heat and cover it or them with the cylindro-conical dome D E, the flame from the wick being regulated to the proper height. The draught created by the lower cone and the dome, in combination, carries the intense heat generated by the combustion of the oil up beneath and around the cup *d* (or through the apertures in the diaphragm *e*,) which heat is in turn imparted to the articles contained in the dome D E, the products of the combustion finally finding their escape through the openings in the cone at *f f*.

Having thus described the construction and operation of my invention, not claiming the use of any particular style or form of lamp or burner, nor the novelty of a window of mica in the cone *b*, (as such may be considered as conflicting with a patent issued to W. S. Fish, of Newark, New Jersey, dated June 17, 1862, and reissued December 23, of the same year,) what I do claim as my invention, and desire to be protected in the rightful use of by Letters Patent, is—

The construction and use of the cylindro-conical dome D E, in combination with the winged cup *d*, the perforated diaphragm plate *e*, or their equivalents, as set forth in the above specification.

J. CARROLL HOUSE.

Witnesses:

MORRIS CHASE,

JARED HOUSE.