

SIMPSON & CURRIER.
Lamp Chimney Holder.

No. 36,374.

Patented Sept. 2, 1862.

Fig. 1.

Fig. 4.

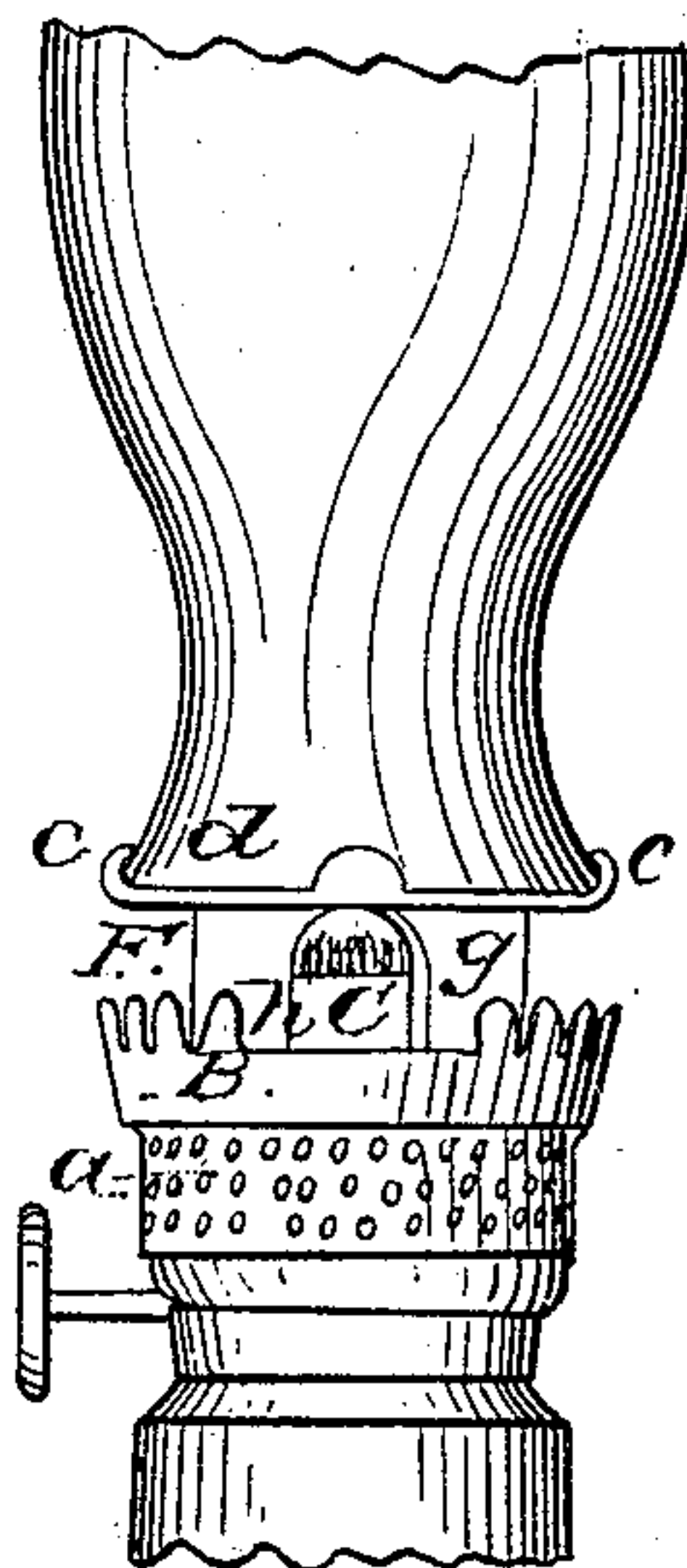
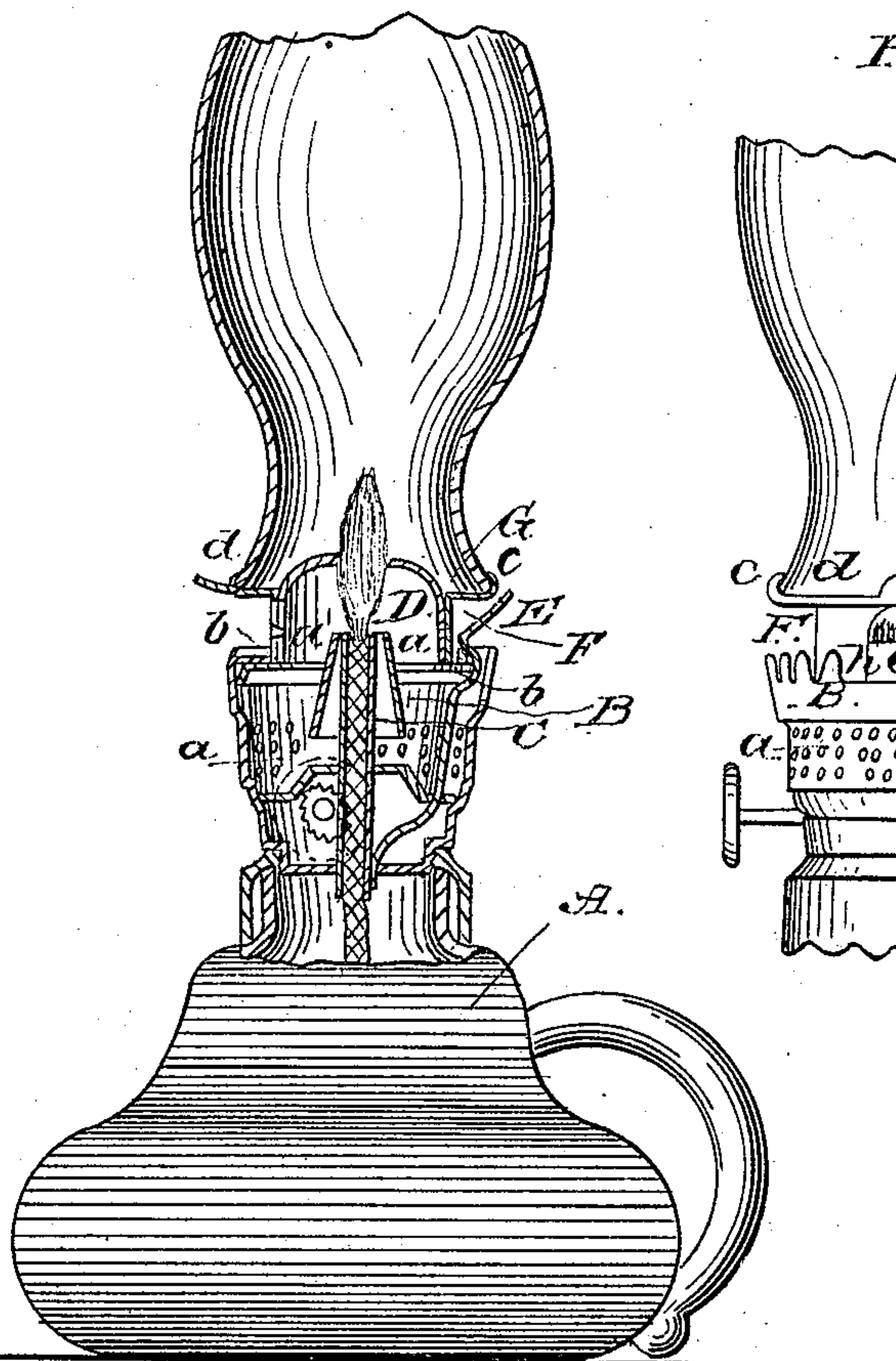
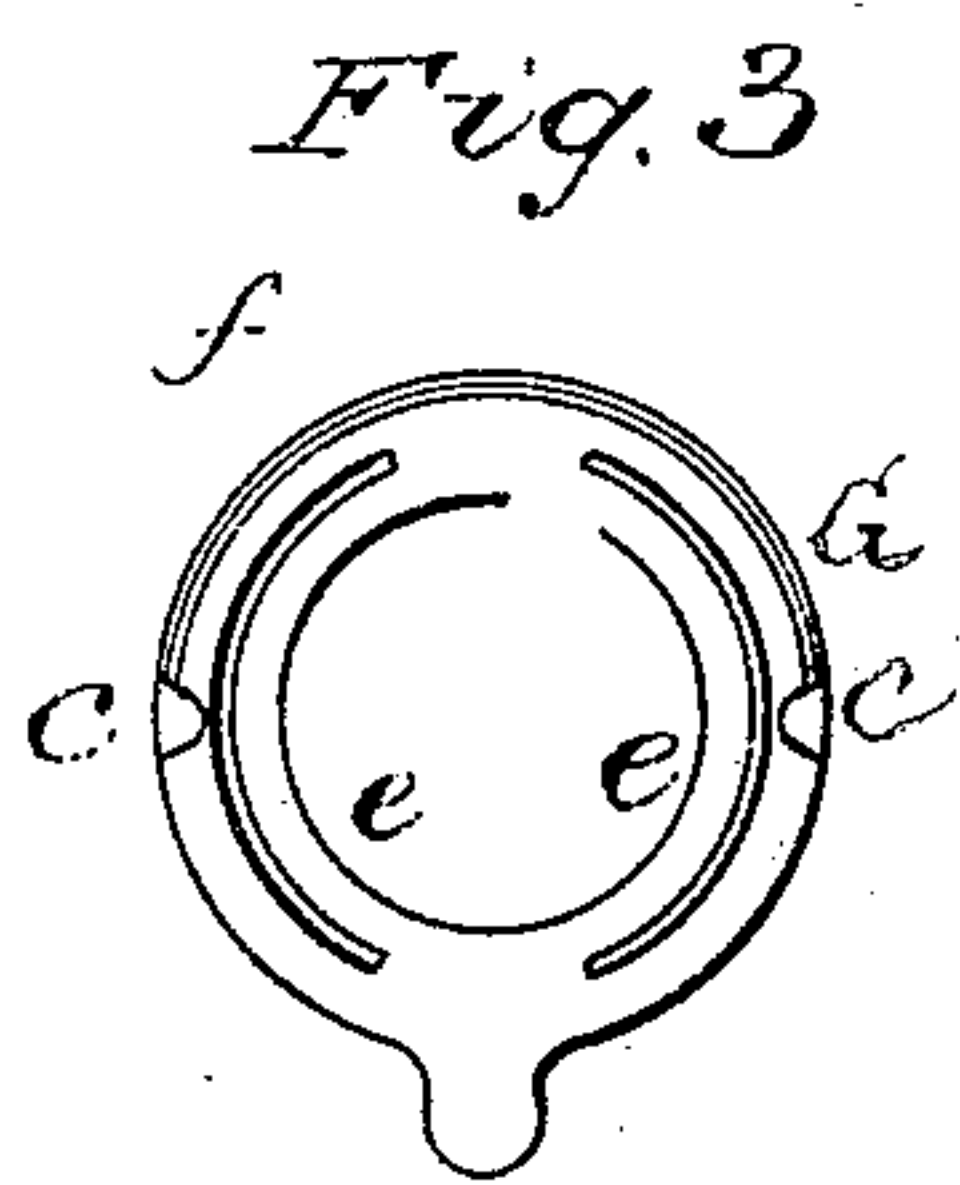
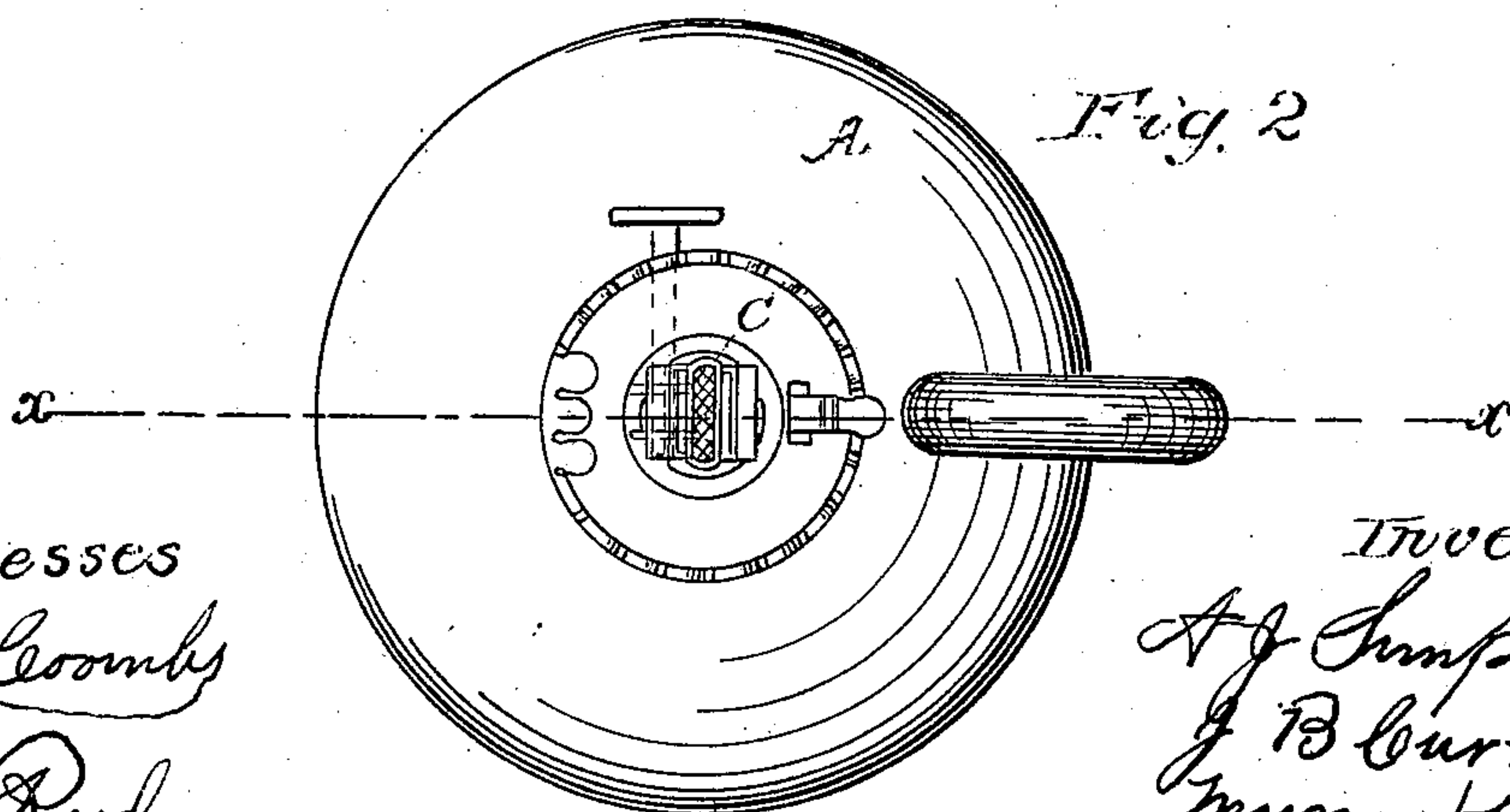


Fig. 2



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UNITED STATES PATENT OFFICE.

A. J. SIMPSON AND J. B. CURRIER, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 36,374, dated September 2, 1862.

To all whom it may concern:

Be it known that we, A. J. SIMPSON and J. B. CURRIER, both of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Lamp-Burner of that class which are provided with glass draft-chimneys and designed for burning coal-oil and similar hydrocarbons; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical central section of our invention, taken in the line *xx*, Fig. 2. Fig. 2 is a plan or top view of the same with the cone and parts connected to it detached. Fig. 3 is a plan or top view of the same with the chimney removed. Fig. 4 is an external view or elevation of the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved lamp-burner of that class in which provision is made for lighting the wick without removing the chimney from the burner.

The invention consists in having the flange to which the chimney is attached provided with a pendent cylinder which encompasses the cone or deflector of the burner, and which is fitted thereon in such a manner as to be allowed to rotate, the pendent cylinder being provided with an opening corresponding in size to a similar opening in the cone or deflector, the two openings being made to coincide with each other by turning the flange in one direction, so that the top of the wick-tube may be exposed, or the opening in the cone or deflector closed by turning the flange in the opposite direction, so as to shut off the wick-tube from a direct communication with the external air.

The invention also consists in using in connection with the parts arranged as aforesaid a novel way for securing the chimney to the flange, whereby the latter may be turned on the cone or deflector without the liability of the chimney being casually detached.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents the body or fountain of the lamp, and B is the burner, which is screwed into the upper part of the lamp in the usual

way. The burner is perforated all around, as shown at *a*, and is provided with a wick-tube, C, arranged as usual, and also provided with a cone or deflector, D, which is fitted on the upper part of the burner B and secured in proper position by a spring-catch, E. The cone or deflector is of the same form as those of ordinary burners, and it is encompassed by a cylinder, F, which extends down to the base of the cone and is secured thereon by sinking a groove, *a*, all around the cone at the junction of its base and having the lower end of the cylinder bent inward, so as to form a lip, *b*, to fit in groove *a*. (See Fig. 1.) By this means the cylinder F is allowed to turn freely on the cone, and still cannot be raised or detached therefrom. The upper convex surface of the cone projects a trifle above the upper edge of the cylinder F, and the latter is provided with a flange, G, which projects horizontally all around its upper edge and is provided at opposite points with two lips, *c c*, which are curved inward in hook form to project over the edges of the flange *d* at the base of the chimney, as shown in Figs. 1 and 4. The flange G has two curved slots, *e e*, made in it at opposite sides, as shown in Fig. 3. These curved slots give a certain degree of elasticity to the outer part of the flange and admit of the lips *c c* rising or springing, so as to adjust themselves snugly on the flange *d* of the chimney as the former is shoved laterally between them. The flange G is provided at one side between the two lips *c c* with a raised ledge, *f*, which serves as a stop and prevents the chimney being shoved too far between the lips *c c*, so as to project over the edge of the flange.

The cone or deflector D has an opening, *g*, made in its side, and a similar opening, *h*, is made in the cylinder F, (see Fig. 4,) and when the flange G and cylinder F are turned so that the two openings *g h* register with each other the top of the wick-tube is exposed and the wick may be lighted with the greatest facility, and by turning the flange G and cylinder F so that the openings *g h* will be out of register the opening *g* in the cone will of course be closed and the interior of the cone shut off from a direct communication with the external air. When the wick requires to be trimmed, the cone D and cylinder F, by throwing back the spring-catch E, may be detached and the interior of the burner fully exposed.

The advantages of this burner over others of the same class are, first, the invention may be applied to any ordinary coal-oil burner in use, the cone, with cylinder F attached, being applicable to the ordinary burner. Burners have been devised with openings or slides to admit of the insertion of a match to light the wick; but they all hitherto, so far as we are aware, involve some specialty in the construction of the burner, which augments the cost of manufacture and does not admit of the improvement being applied to the ordinary ones. By our invention it will be seen that in the manufacture of the burners no outlay in the way of expensive tools is required, as the body of the burner is of the ordinary form, and also the cone or deflector, the new parts being composed of the flange G and cylinder F, which may be cheaply made and applied at a trifling expense. The chimney also, by being secured to the flange G, as shown and described, obviates the use of screws, catches, &c., which have been hitherto used for the purpose, and all play of the chimney on the flange is avoided, while at the same time the slots *e e* admit of

the lips *c c* yielding or giving to compensate for the expansion of the chimney under the heat of the flame.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The flange G, having the cylinder F attached, the latter being fitted on the cone or deflector D, as shown, so that it may turn freely thereon, and at the same time prevented from being casually detached, in combination with the two openings *g h*, made, respectively, in the cone and cylinder, all arranged as and for the purpose specified.

2. Providing the flange G with two curved slots, *e e* and lips *c c*, substantially as shown, for securing the chimney to the flange, and at the same time admit of the expansion of the chimney under the heat of the flame, as set forth.

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Witnesses:

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