

H. J. Goff's Combined Lamp & Reflector

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PATENTED APR 11 1871

Fig 1

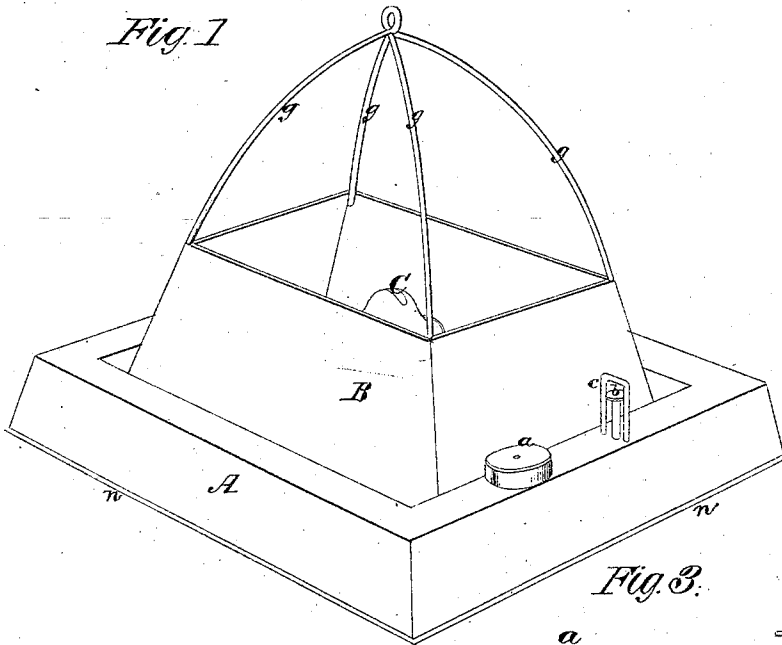


Fig 3.

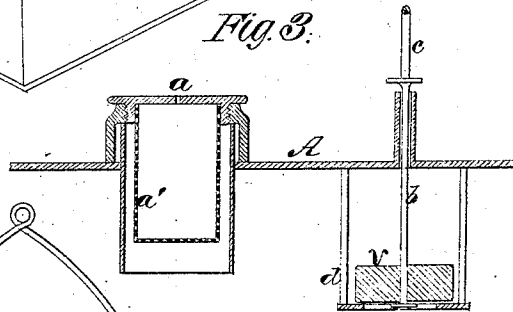
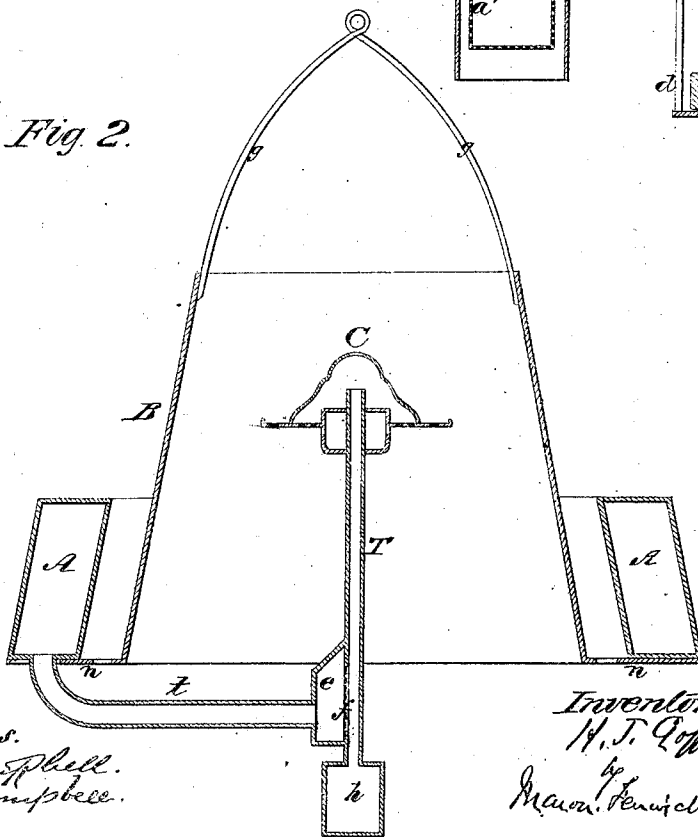


Fig 2.



Witnesses.
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HENRY J. GOFF, OF DUBUQUE, IOWA.

Letters Patent No. 113,650, dated April 11, 1871.

IMPROVEMENT IN COMBINED LAMPS AND REFLECTORS.

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, HENRY J. GOFF, of Dubuque, in the county of Dubuque and State of Iowa, have invented a new and improved Combined Lamp and Reflector; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of the combined lamp and reflector.

Figure 2 is a vertical section taken transversely through the lamp and reflector.

Figure 3 is a sectional view in detail of the filling-orifice and the air-escape valve.

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

This invention relates to improvements on reflector-lamps which are especially designed for use in show-windows, but which may be used wherever it is desired to reflect rays of light from a lamp downward.

The nature of my invention consists—

First, in the combination of an oil-reservoir and one or more burners with downwardly-reflecting surfaces, the oil-reservoir being arranged outside of said reflecting surfaces and the burner or burners being arranged inside thereof, the whole being sustained from above by a suitable bail, as will be hereinafter explained.

Second, in the combination of an upwardly-tapering reflector having a perforated supporting-flange, with an oil-reservoir and one or more burners which are supported by said flange, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will explain its construction and operation.

In the accompanying drawing—

A represents a rectangular oil-reservoir, which is provided with a filling-orifice and a gas-vent, and which is sustained upon a flange, *n*, that is formed on the base of a downwardly-flaring reflector, B. This reflector is sustained by a hook or other object, by means of the bails *g*, which terminates in an eye, as shown in the drawing.

The burner C is supplied to the upper end of a flat wick-tube, T, which terminates below in an enlargement, *h*, for receiving surplus wick. Just above this enlargement *h* is the feed-pipe *t*, attached to the tube by means of an enlargement, *e*, which forms a chamber that is only separated from the interior of the wick-tube by a safety-strip, *f*, of wire-gauze. The feed-pipe *t* is secure to the base of the oil-reservoir A, and passes through a slot made through the flange of the reflector B, as shown in fig. 2.

The oil-reservoir A is provided with a feed-orifice, which is covered by means of a perforated screw-cap, *a*, to the bottom of which a wire-gauze box, *a'*, is secured. This gauze-box *a'* prevents flame from communicating with the oil in the reservoir A.

Alongside of the fluid-orifice is a device which will indicate the height of oil in the reservoir A. This device consists of a float, *v*, made of any suitable material, and attached to the lower end of a vertical stem, *b*.

c is a loop over the upper end of the stem *b*, and *d* is a cage or guide for the float, arranged inside of the reservoir.

In filling the reservoirs the float *v* will rise, and the button on the upper end will indicate the level of the oil in this reservoir.

The combined oil-reservoir and reflector which I have represented in the annexed drawing are rectangular; but in practice they may be made circular, elliptical, prismatic, or of any other suitable shape, size, or length. The reflector may be made more flaring and of less depth than the one shown in the drawing, and its reflecting surface may be formed in any desired manner, either by using polished metal or by using glass mirrors.

The oil-reservoir may also be made of any desired shape, and it may extend entirely around the reflector or only partly around it. This reservoir may be permanently united to the lower edge of the reflector, or it may be made separate and sustained on a flange, *n*, as above described.

The flange *n* is perforated, as shown in fig. 2, for the purpose of allowing currents of cool air to rise between the reflector on the reservoir and assist in keeping this reservoir cool.

If desirable more than one burner may be employed, and made to communicate with the reservoir by means of a single feed-tube or by separate tubes.

Having described my invention,

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

1. The combination of an oil-reservoir, A, and one or more burners, with downwardly-reflecting surfaces B, arranged substantially as described.

2. The downwardly-flaring reflector B having a perforated flange, *n*, in combination with an oil-reservoir, A, and one or more burners, substantially as described.

HENRY J. GOFF.

Witnesses:

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