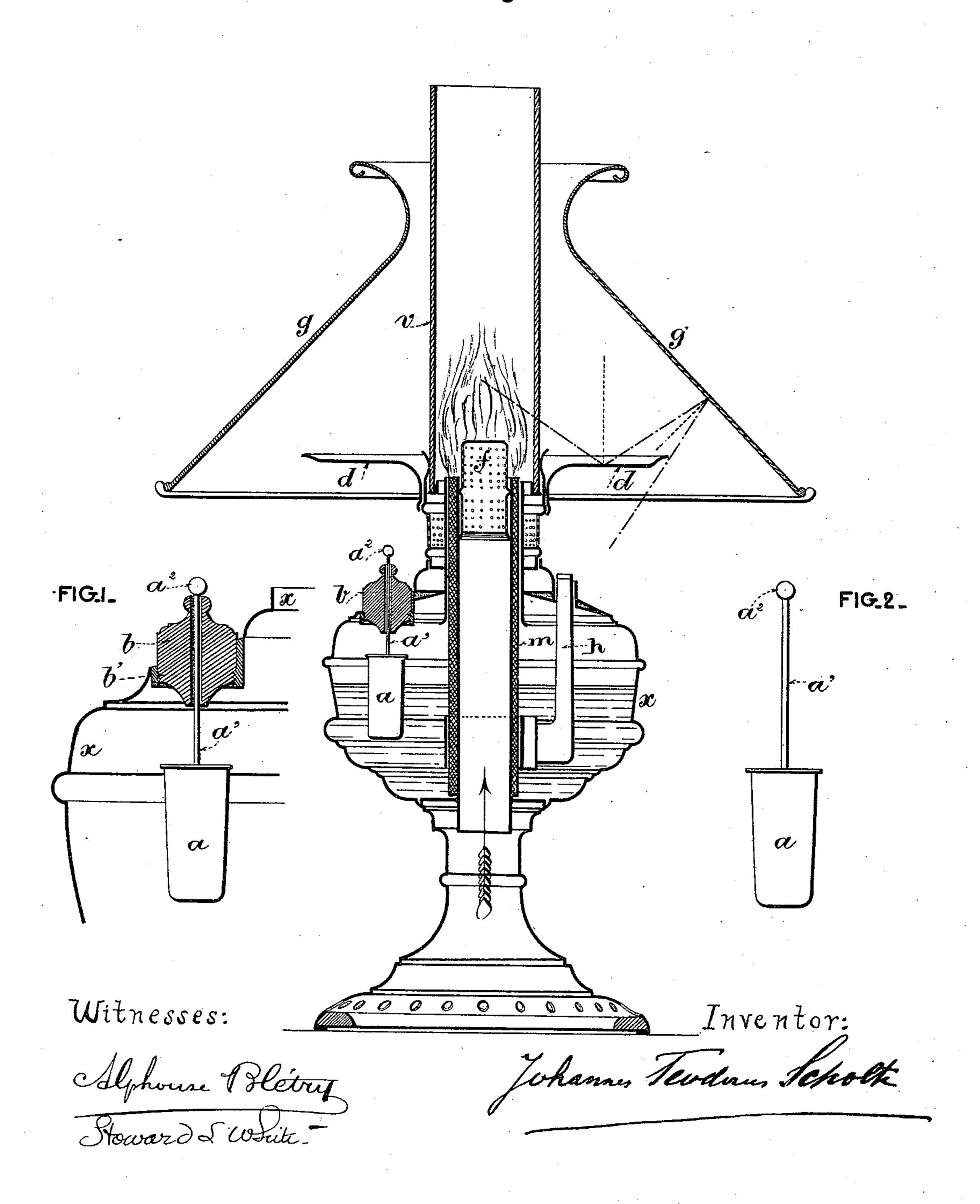
(No Model.)

## J. T. SCHOLTE. LIGHTING APPARATUS.

No. 450,429.

Patented Apr. 14, 1891.

FIG.3



## United States Patent Office.

JOHANNES TEODORUS SCHOLTE, OF AMSTERDAM, NETHERLANDS.

## LIGHTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 450,429, dated April 14, 1891.

Application filed September 25, 1889. Serial No. 325,038. (No model.) Patented in France January 7, 1888, No. 188,015; in Belgium January 7, 1888, No. 80,198, and in England February 11, 1888, No. 2,077.

To all whom it may concern:

Be it known that I, Johannes Teodorus Scholte, a citizen of the Kingdom of Holland, residing at Amsterdam, Netherlands, have invented certain new and useful Improvements in Lighting Apparatus, and more especially in lamps for burning hydrocarbon oil, (for which I have received Letters Patent in France, No. 188,015, dated January 7, 1888; in Belgium, No. 80,198, dated January 7, 1888, and in England, No. 2,077, dated February 11, 1888;) and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its principal object the application of a float in the body of the lamp in order to constantly show the level of the combustible liquid, and the application of a reflector fixed on a level with or a little above the burner and having several a lyantages that I shall mention hereinafter.

The accompanying drawings show in a clear and explicit manner the two parts of my in-

vention.

Figure 1 is an elevation of the float applied to the lamp. Fig. 2 shows the float separately. Fig. 3 is a hydrocarbon-lamp of my own mak30 ing and provided with the float and with my new reflector.

Many persons use mineral-oil lamps having the containing part in glass or china, so as to be able to see how the filling is going on.

In order that lamps with the reservoir formed of metal may be used without any inconvenience, I have devised the float shown in Figs. 1, 2, and 3, which can suffer no harm from packing or removal and which gives a faithful indication of the level when the lamp is being filled. This float is substantially composed of a long hollow cylinder a, hermetically closed, to which is fixed a stem a', passing upward through a screw-plug or removable stopper b, having screw-threads b'. This plug or stopper is screwed air-tight within the top side of the reservoir x in a way which allows of its being put in or taken

out, as desired. This float is only put in place when the lamp is about to be used. 50 When the lamp is packed, the float is put into a separate box, so as to receive no injury during the journey. The stem has at its upper end a stop  $a^2$  in the form of a ball or other enlargement, which plainly shows the rise of 55

the liquid when filling.

I apply to any lighting apparatus whatever, and more especially to my lamps, a reflector d, Fig. 3, of metal or other opaque substance, and fixedly placed on a level with or slightly 60 above the burner by any means suitable to the kind of lamp used. The advantages of this new application are very important. In the first place the reflector constitutes a preserver of sight in preventing the rays of light 65 from passing through the substance of which it is composed. In the second place it prevents the heat from descending, and, lastly, it reflects the light onto the lamp-shade g, made of opal or other glass, in such a way 7c that the light is practically and equally thrown on the surface to be lighted, as shown in the dotted lines in Fig. 3. The reflector then gives twice the light, prevents the heat from descending, and preserves the sight against 75 injury by the glare of the light.

I reserve for myself the right of making the reflector d of any suitable opaque substance whatever, provided on the inside with a polished reflector or with a mirror. On the 80 outside it may be garnished or beautified, according to the style or kind of lamp or sconce to which it is applied. The reflector can be cheaply applied to all the known lighting apparatus, as well as to those which may be in-85

vented.

m represents the wick, h the key for raising or lowering the wick, and v the glass or chimney.

Having now particularly described my in- 90

vention, what I claim is—

1. In a lamp, the combination, with the burner, of the reflector d, having a central aperture adapted to fit around the burner, and a horizontal plane reflecting top surface, 95 substantially as set forth.

2. In a lamp, the combination, with the burner and a conical shade g, having an inner and under reflecting-surface, of the reflector d, situated within said shade and having a central aperture adapted to fit around the burner, and a horizontal plane reflecting top surface, substantially as set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOHANNES TEODORUS SCHOLTE.

Witnesses:

Alphonse Blétus, R. J. Preston.