No. 842,537. PATENTED JAN. 29, 1907.

A. H. ELLIOTT.

ATTACHMENT FOR OIL LAMPS.

APPLICATION FILED MAR. 2, 1906.

Fig. 1.

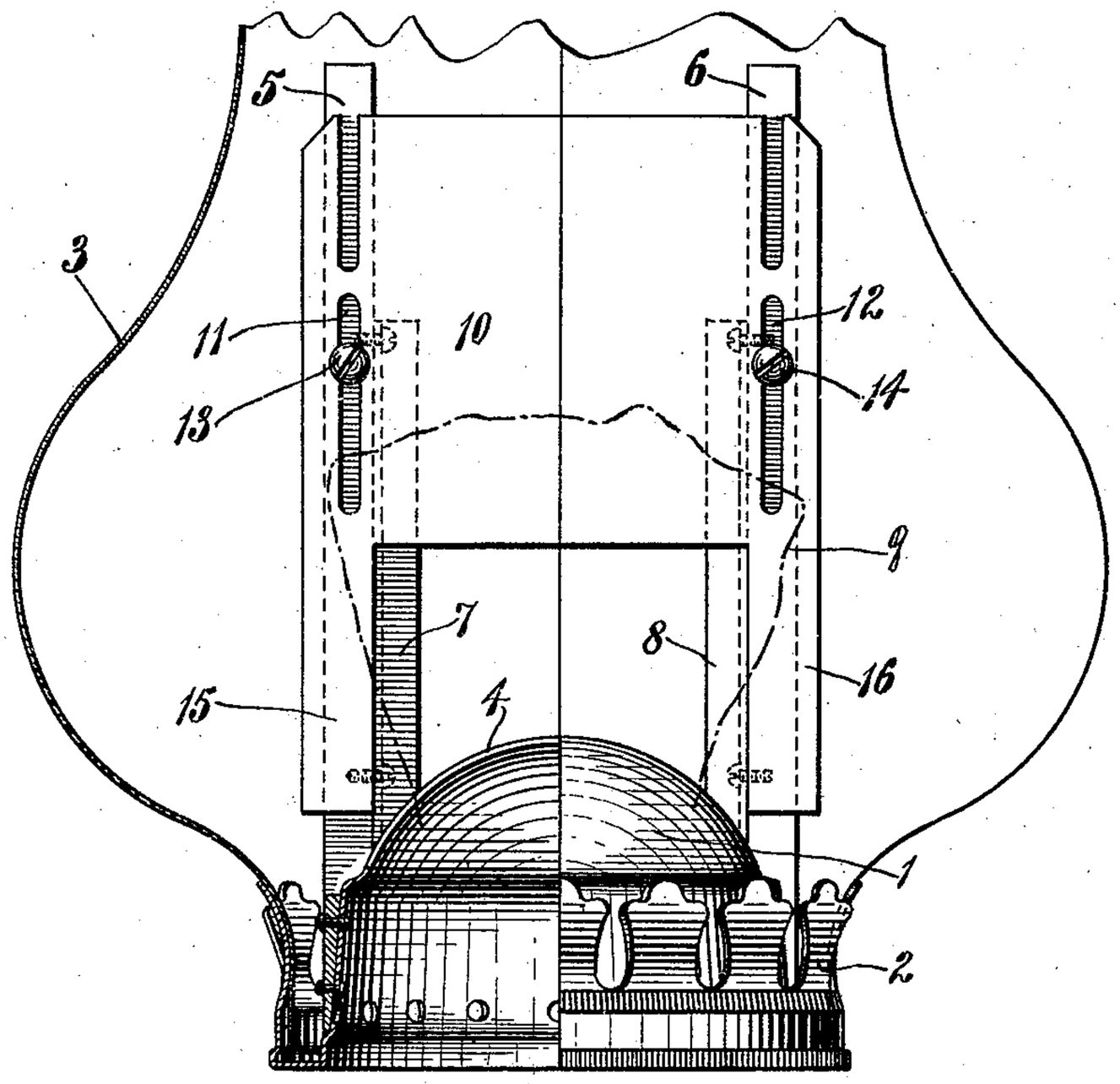
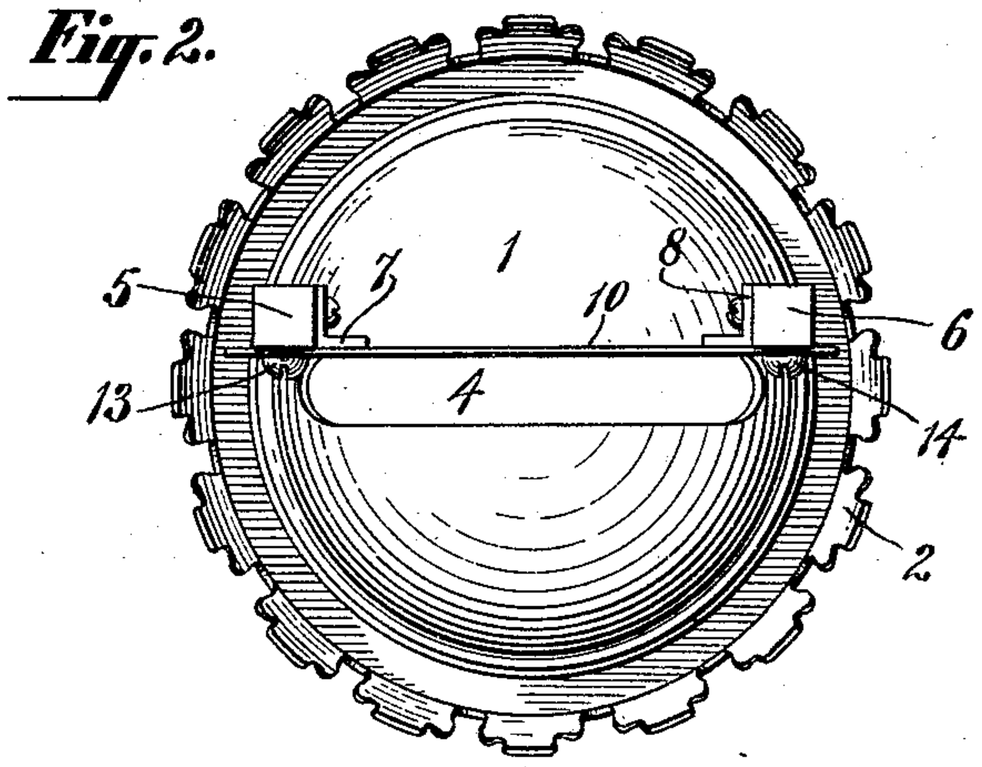


Fig. 2.



Witnesses:

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ATTACHMENT FOR OIL-LAMPS.

No. 842,537. Specification of Letters Patent. Patented Jan. 29, 1907.

Application filed March 2, 1906. Serial No. 303,783.

To all whom it may concern:

Be it known that I, ARTHUR H. ELLIOTT, a citizen of the United States, and a resident of the borough of Manhattan, in the city and State of New York, have invented a new and useful Attachment for Oil-Lamps, of which the following is a specification.

My invention relates to a standard oil-lamp, the object being to provide an attachment for an oil-lamp by means of which the margin of a flat oil-flame may be shut out and a steady flat even illuminating-surface may be obtained which shall be suitable for use as a standard unit of light for photometric purposes.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a view of the attachment and the part of the lamp-burner to which it is secured, showing the same in elevation; and Fig. 2 is a top plan view.

The burner-cone is denoted by 1 and is provided, as is usual, with a surrounding rim 2 for holding the bottom of the ordinary glass chimney 3 in position. Within the chimney 3 and attached to the cone 1 at points in proximity to the opposite ends of the slot 4 in the cone are standards 5 and 6 of some suitable non-combustible material—for example, brass—and on the inner faces of these standards 5 and 6, either formed integral therewith or attached thereto, are strips of metal 7 and 8, which are intended to overlap the opposite edges of the flame, (indicated by dotted lines at 9.)

In practice I prefer to make the standards 5 and 6 of brass and the side screening-strips 7 and 8 of oxidized or black iron, so that they may become readily heated by the flame and prevent the undue cooling of its opposite edges by conduction from the standards 5 and 6.

On the side of the standards 5 and 6 and strips 7 and 8 toward the wick and flame slot 4 I locate a vertically-movable opaque slide 10, having elongated slots 11 and 12 formed in its opposite edges for the reception of clamp-screws 13 14 for holding the screen at any desired height above the top of the cone 1. I also prefer to extend the opposite edges of this screen 10 downwardly in the form of legs 15 16 to cover the brass standards 5 and 6 at the opposite edges of the flame to assist in maintaining the flame at its opposite edges up to the full standard of brilliancy.

When adjusted in position for use, as shown in Fig. 1, a certain portion of the flame (represented by dotted lines) is allowed to shine through below the screen 10 and between the side strips 7 and 8 and above the cone 1, while the wavering portion of the flame along its sides and top is completely shut out from view on the side of the screen opposite that which the flame occupies. This part of the flame which is thus permitted to show through the screen may be increased or diminished in size at pleasure by raising or owering the screen 10 on the standards 5 and 6. This screen may be placed within the ordinary transparent glass chimney 3.

It is well known in the art that an oil-flame from a lamp-wick which feeds the oil to the flame and housed within a chimney is the steadiest and most uniform of all flames for measuring purposes, and this simple device, as has been hereinabove explained, serves the purpose of screening the margin of the flame from view, so as to leave an exceedingly reliable section of the flame for photometric purposes.

What I claim is—

1. The combination with means for producing a flat oil-flame, of means for shutting out from view the margin of the flame whereby a steady, flat and even illuminating-surface is obtained for use as a standard of light.

2. The combination with means for producing a flat oil-flame including a transparent chimney surrounding the flame, of means located within the transparent chimney for shutting out from view the margin of the flame leaving a section of the flat flame in view for photometric purposes.

3. The combination with the cone of an oil-burner provided with an elongated wick and flame slot, of standards attached to the cone in proximity to the opposite ends of the slot and at one side thereof and a vertically-sliding screen attached to the standards for shutting a portion of the flame from view.

4. The combination with the cone of an oil-burner provided with an elongated slot, of standards uprising from the cone in proximity to the opposite ends of the slot and at

one side thereof, strips for screening the side edges of the flame from view and a vertically-adjustable screen for shutting the top portion of the flame from view whereby a central well-defined portion of the flat flame is left in view for photometric purposes.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 1st day of March, 1906.

ARTHUR H. ELLIOTT.

Witnesses:

FREDK. HAYNES,

HENRY THIEME.