(No Model.)

J. W. PRICE.

AUTOMATIC EXTINGUISHER FOR LAMPS.

No. 465,946. Patented Dec. 29, 1891.

Fig. 2.

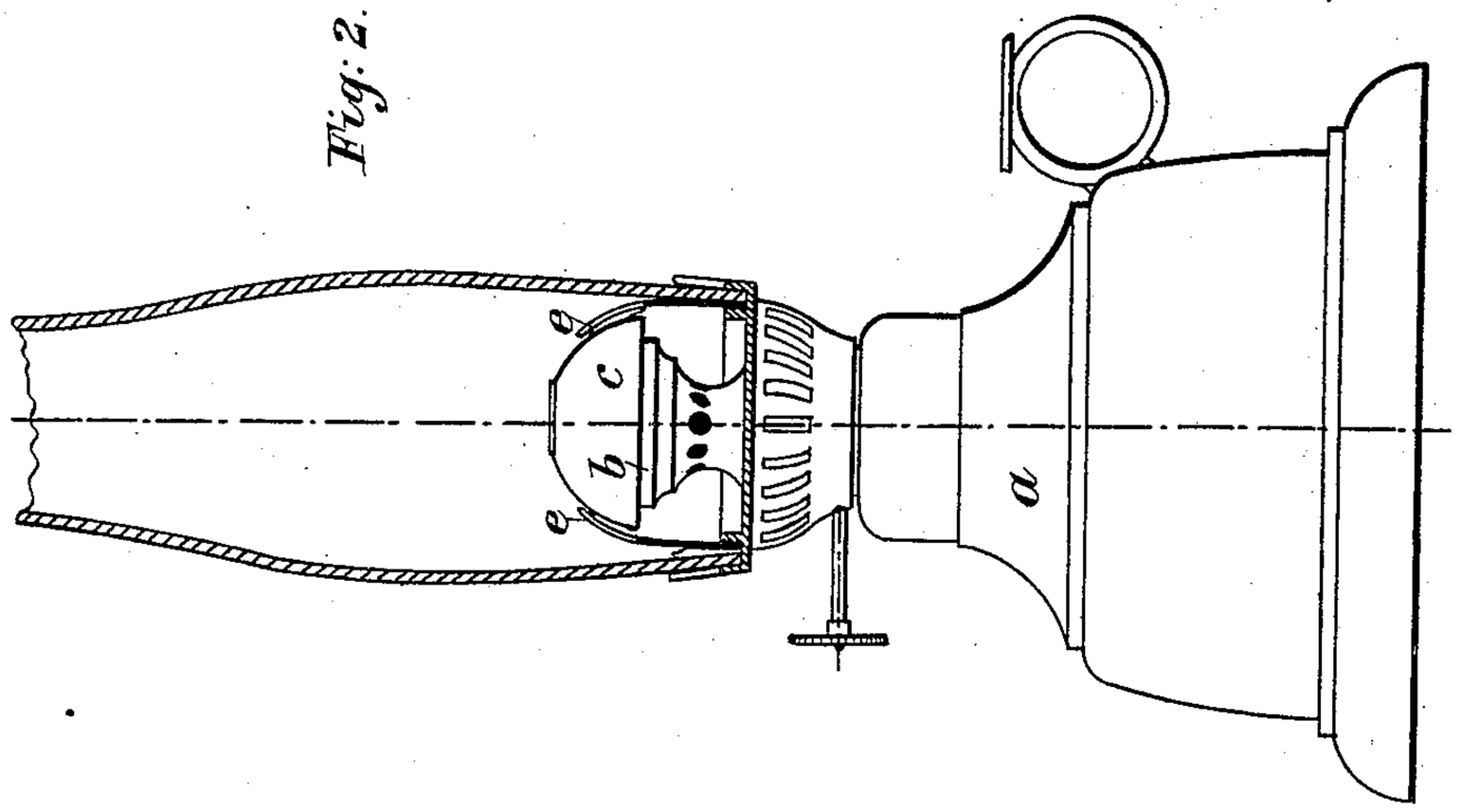


Fig. 6.

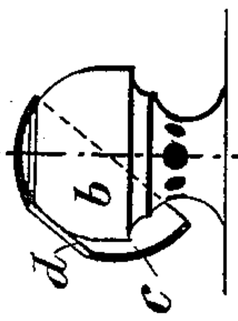


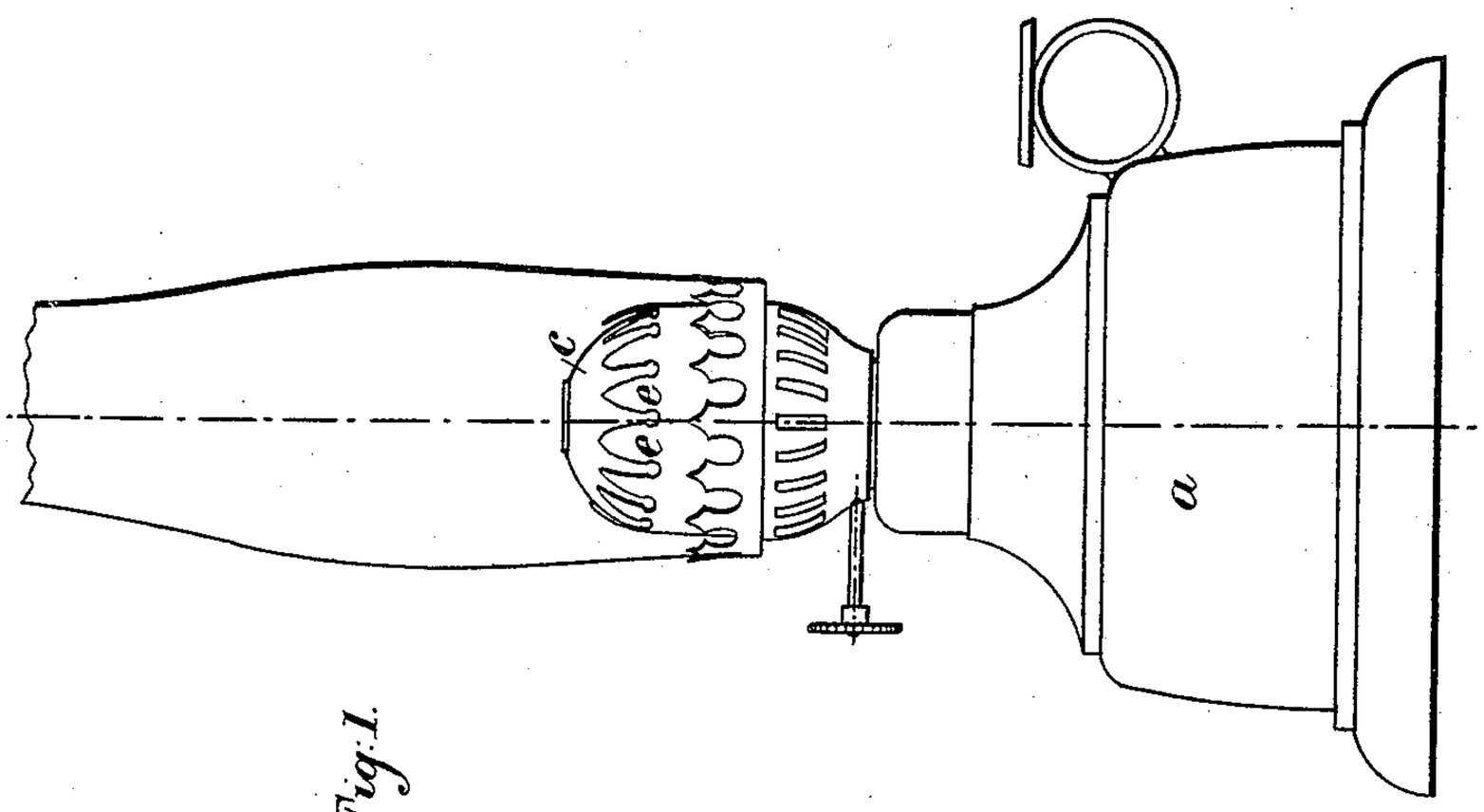
Fig. 5.

Fig. 7.

Fig. 4.

Fig. 3.

Fig. 1.



Witnesses:-
W. Harvey Muzzy
P. J. Ewing.

Inventor:-
John William Price
by
Wm. H. Babcock
Attorney.

UNITED STATES PATENT OFFICE.

JOHN WILLIAM PRICE, OF LONDON, ENGLAND.

AUTOMATIC EXTINGUISHER FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 465,946, dated December 29, 1891.

Application filed February 3, 1891. Serial No. 380,095. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILLIAM PRICE, a subject of the Queen of Great Britain, residing at Chiswick, in the county of Middlesex, England, have invented a new and useful Improved Automatic Extinguisher for Lamps, of which the following is a specification.

My invention relates more especially to mineral-oil lamps; and it has for its object a novel device by which, if the lamp is inclined sufficiently from its proper vertical position, the flame is automatically extinguished. For this purpose I arrange and fix round the opening above the wick, through which the flame of the lamp passes, a spherical surface of sufficient extent, having a central opening coinciding with the opening for the flame. Upon this spherical surface I fit a hemispherical cap, which can move freely in any direction upon the fixed spherical surface described. The lower edge of the cap may have a wire or beading round it, and the center of its spherical surface has an opening through it also corresponding with the opening for the flame.

The accompanying drawings are in illustration of my invention.

Figure 1 is a side view of a lamp having my invention applied to it; and Fig. 2 is a similar view, partly in section. Fig. 3 separately shows the spherical surface upon which the hemispherical cap fits, and Fig. 4 shows the cap separately. Figs. 5, 6, and 7 show the cap in different positions.

The same letters of reference indicate the same parts in the different figures.

a is the body of the lamp, and *b* is the fixed spherical surface through which the flame passes and upon which the loose hemispherical cap *c* fits.

d is the central opening in the cap, and *e* are guides or guards which allow it to move freely, but prevent it from falling off altogether.

When the lamp is in its proper position, as shown in Figs. 1 and 2, the cap *c* is arranged as shown in Fig. 5, with its central opening *d* coinciding with the opening for the flame through *b;* but if the lamp falls or is tilted to one side in any direction the cap *c* falls over, as shown in Figs. 6 and 7, covering the opening in *b* and instantly extinguishing the flame. I form on the upper edge of the hole through *b* a very slightly-raised flange, arranged so as to project a very little into the hole in the cap *c*. By this means the lamp may be carried about safely without risk of the cap *c* falling over and extinguishing it; but if it should be sufficiently inclined or should fall over in any direction the cap *c* at once falls and extinguishes the flame.

The improved device is very simple, cheap, and efficient for the purpose required and may be applied to any kind of lamp.

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

1. The loose hemispherical cap *c*, having an opening *d* through it, in combination with the fixed spherical surface *b*, arranged and operating substantially as described and shown.

2. In combination with the loose cap *c*, having an opening *d*, the flange surrounding the opening through the surface *b*, as described and shown.

3. In combination with the spherical surface *b* and the loose cap *c*, having the opening *d*, the guides or guards *e* for retaining the cap *c*, substantially as described and shown.

In testimony whereof I have hereunto set my name in the presence of two subscribing witnesses.

JOHN WILLIAM PRICE.

Witnesses:
ARTHUR E. EDWARDS,
HAROLD KENNEDY.