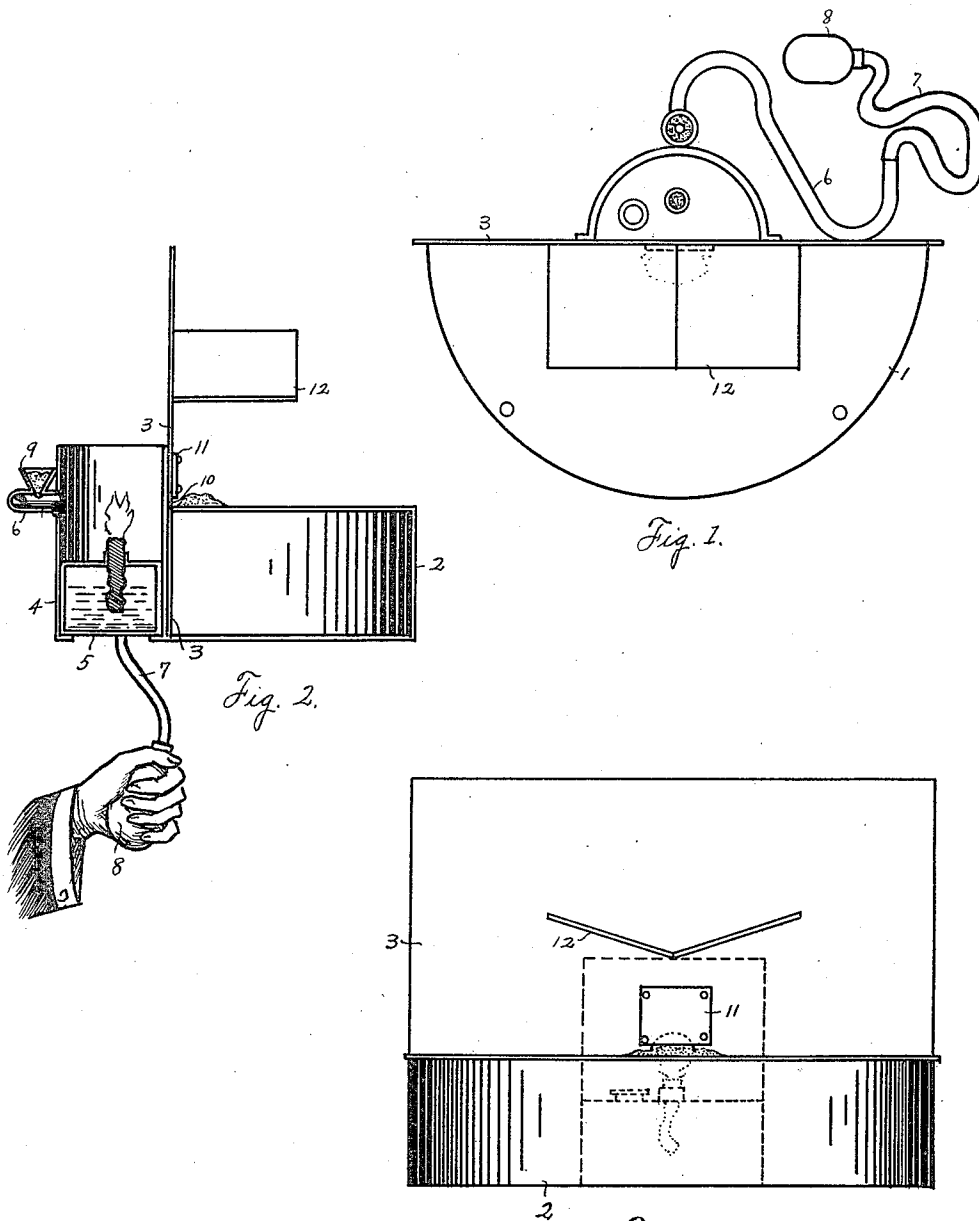


D. HARRINGTON.
FLASH LAMP.
APPLICATION FILED MAY 7, 1912.

1,042,341.

Patented Oct. 22, 1912.



WITNESSES:
Mary Montgomery.
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Fig. 3.

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UNITED STATES PATENT OFFICE.

DAVID HARRINGTON, OF EAGLE LAKE, TEXAS.

FLASH-LAMP.

1,042,341.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed May 7, 1912. Serial No. 695,621.

To all whom it may concern:

Be it known that I, DAVID HARRINGTON, a citizen of the United States, residing at Eagle Lake, in the county of Colorado and State of Texas, have invented certain new and useful Improvements in Flash-Lamps, of which the following is a specification.

My invention relates to new and useful improvements in flash lamps, and has more particular relation to such devices as are used by photographers in taking photographs.

The object of the invention is to provide a device of the character described, whereby the blaze generated by the ordinary alcohol lamp will be positively driven against the powder on the flash pan and will ignite the same.

Another object of the invention resides in the provision of a priming device whereby a portion of the powder is driven through the flame of the lamp, thereby causing a small explosion which will increase the flame and render the explosion of the powder on the flash pan more certain.

A still further feature of the invention resides in the provision of a means for preventing the flame from being driven by air currents against the powder on the flash pan and thereby preventing an accidental explosion.

With the above and other objects in view, the invention has particular relation to certain novel features of construction and arrangement of parts, an example of which is given in this specification and illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of the complete device. Fig. 2 is a sectional side elevation thereof, and Fig. 3 is a front elevation thereof.

Referring now more particularly to the drawings, the numeral 1 refers to the flash pan which is preferably semi-circular in form and from the edge of which depends the rim 2. The straight edge of this pan is secured to a vertical metallic plate 3 by solder or some similar securing means.

To the rear portion of the plate 3 is secured the lamp receptacle 4 in the lower portion of which the ordinary alcohol lamp 5 is arranged. A metallic tube 6 communicates with said lamp receptacle at a point in horizontal alinement with the flame of the lamp 5 and to the free end of this tube a small rubber hose 7 is attached, which car-

ries the rubber bulb 8. When the rubber bulb 8 is collapsed by hand pressure, a jet of air is forced through the hose 7 and tube 6 into the lamp receptacle 4 and against the flame of the lamp 5. The tube carries a small hopper 9 near the lamp receptacle 4 which communicates with the tube 6 and is provided to receive a small quantity of flashing powder.

In the metallic plate 3, there is an orifice 10 alined with the tube 6 and the flame of the lamp 5 and to the front side of said plate 3 is secured a metallic apron 11 whose lower or free edge extends down over said orifice, but does not entirely close the same.

When a jet of air is driven through the tube 6, it carries a small quantity of the flashing powder from the hopper 9 and forces the same through the flame of the lamp 5 and the explosion of said powder so carried through said flame increases the size of the flame and the jet of air drives it through the orifice 10 and ignites the powder arranged in front of said orifice on the flash pan 1 and an explosion immediately occurs giving the desired bright light commonly required in the process of photography. The apron 11 serves to drive the blaze, passing through the orifice 10, downwardly and thus insures ignition of the powder on the flash pan and further operates to prevent the flame of the lamp 5 from being driven by an accidental gust of wind through the orifice 10 and thus prevents an accidental explosion.

Secured to the plate 3 and arranged above the flash pan is a deflector 12 composed of sheet material and provided for the purpose of distributing the blaze caused by the explosion and thereby materially increasing the light generated.

While I have shown the preferred form of my device, various modifications may be made therein in the mechanical construction and I hereby reserve the right to change the device so long as I do not depart from the principle thereof as set forth in the appended claims.

What I claim is:—

1. A device of the character described including a suitable flash pan and a vertically extending plate carried by one edge thereof and having an orifice therethrough, a lamp receptacle carried by said device and a lamp arranged therein, whose flame is alined with said orifice, a pneumatic tube

discharging into said lamp receptacle and against the flame of said lamp and arranged to drive said flame through said orifice, a suitable hopper discharging into said tube and a means for creating an air current through said tube.

2. A device of the character described including a suitable pan for receiving an explosive powder and a vertically extending plate carried by one edge thereof and having an orifice therethrough, a lamp receptacle carried by said device and a lamp so arranged therein that its flame will be alined with said orifice, a pneumatic tube discharging into said lamp receptacle and against the flame of said lamp and arranged to drive said flame through said orifice, a metallic apron secured to said plate and extending down over said orifice, a suitable hopper discharging into said tube, and means for creating an air current through said tube.

3. A device of the character described including a suitable flash pan and a vertically extending plate carried by one edge thereof and having an orifice therethrough, an apron secured to said plate and partially closing said orifice, a deflector secured to said plate

and arranged above said orifice, a lamp receptacle carried by said device and a lamp so arranged therein that its flame will be alined with said orifice, a pneumatic tube discharging into said lamp receptacle and against the flame of said lamp, a suitable hopper discharging into said tube and a means for creating an air current through said tube.

4. A device of the character described, including a suitable flash pan and a vertically extending plate carried by one edge thereof and having an orifice therethrough, a lamp receptacle carried by said device and a lamp arranged thereon whose flame is alined with said orifice, a tube discharging into said lamp receptacle and against the flame of said lamp and arranged to drive said flame through said orifice, a suitable hopper discharging into said tube and a means for generating a current of air through said tube.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID HARRINGTON.

Witnesses:

MAY MONTGOMERY,
J. W. YEAGLEY.