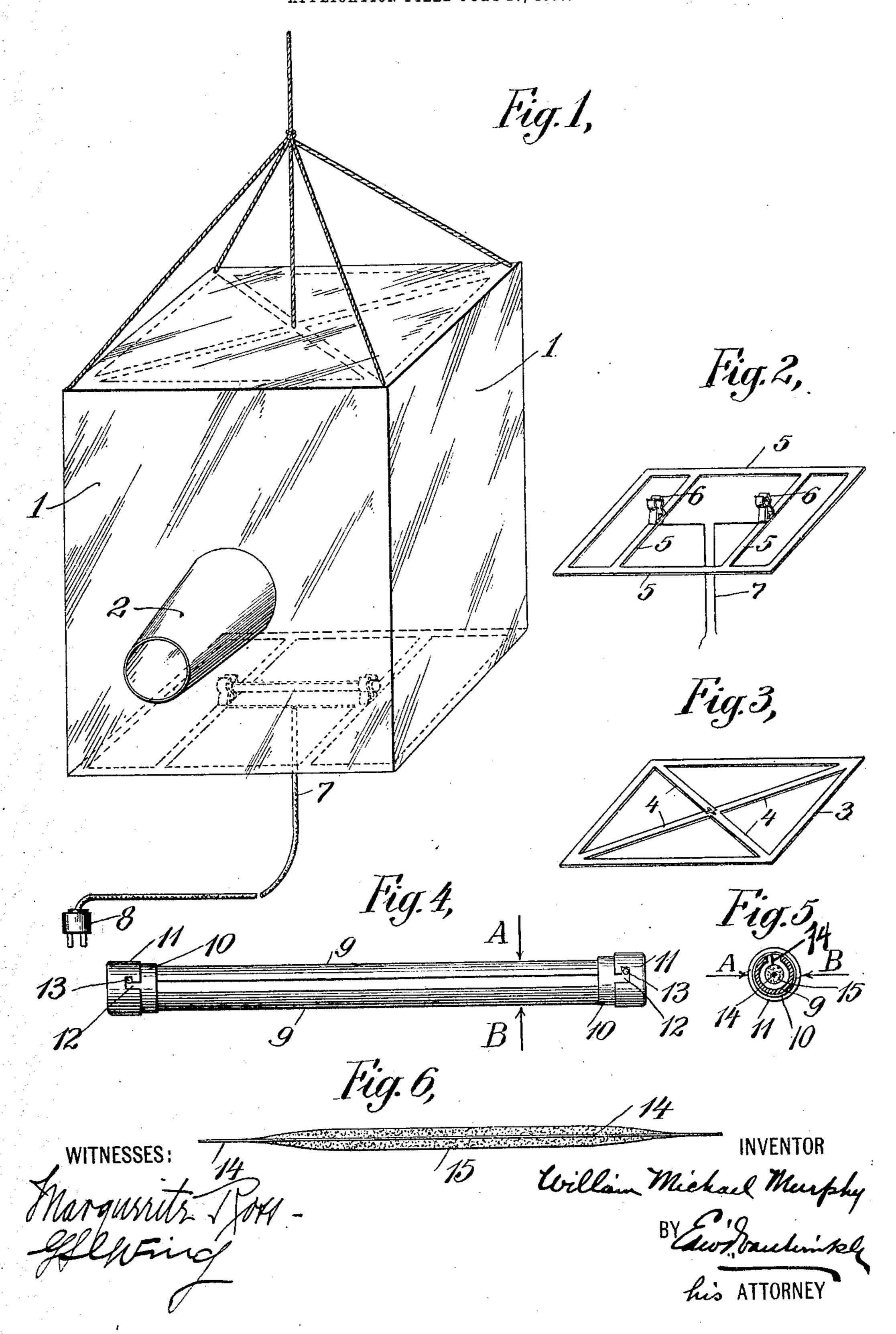
W. M. MURPHY.
FLASH LIGHT APPARATUS.
APPLICATION FILED JULY 27, 1907.



UNITED STATES PATENT OFFICE.

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FLASH-LIGHT APPARATUS.

No. 870,897.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, William Michael Murphy, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented a new and useful Improvement in Flash-Light Apparatus, of which the following is a specification.

My invention relates to improvements in portable flash light apparatus used for photographing interiors such as banquet halls, theaters, etc., where it is necessary to inclose the smoke and fumes generated through the ignition of the flash-powder, and has for its object the production of a portable protected fuse that can be easily adjusted in any electric circuit.

A further object is to provide a smoke bag that is convenient for handling and one that has no openings for the escape of the fumes and smoke after the flash.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts, which will be exemplified in the structure hereafter described and the scope of the application of which will be indicated in the claims.

Referring to the accompanying one sheet of drawings, in which similar characters of reference indicate like parts throughout the several views, Figure 1 is an elevation of my smoke bag. Fig. 2 is a detail of the bottom frame. Fig. 3 is a detail of the top frame. Figs. 4 and 5 illustrate the fuse covering and guard. Fig. 6 is a detail of my fuse.

In my invention I provide a rectangular smoke bag I made of any suitable fabric or flexible material, preferably a finely-woven cambric, soaked in a fire-proofing solution, provided with a valve or opening 2 in one of its sides, the function of which is to provide an 35 accessible means to renew the fuse. This opening is tied shut just before the fuse is ignited. The smoke bag is kept extended by a top frame 3 provided with cross bracing 4 by means of which the bag may be suspended. A bottom frame 5 is provided with two spring 40 yokes 6 which are the terminals of a circuit cord 7 provided with a regulation connection-plug 8, all of which being so well known need not be explained further here. This bottom frame rests inside the bag and keeps it extended and rectangular in shape. A rectangular piece of fiber, or any other non-conducting and non-combustible material, is formed into a tube 9, having a slot extending laterally its entire length, section of which is illustrated in Fig. 5, and held in that

position by metallic ferrules 10. These ferrules 10 are provided with conducting caps 11 which tightly fit the 50 aforesaid ferrules and can be locked by the slots 12 and pins 13, as will be readily understood by referring to Fig. 4. For my fuse I provide a wire 14 of any fusible metal, around which is placed a tissue paper tube 15 containing the fuse powder. This fuse is placed in 55 the tube 9 and the ends of the fuse wire 14 are passed through the ferrules 10 and returned over the outside and clamped to the ferrules by the conducting caps, making a tight electrical connection. The tube 9 is of such a length that the conducting caps 11 fit into the 60 spring yokes 6 on the bottom frame 5.

The fuses may be prepared and inserted in their portable tube and are ready for transportation. When an instantaneous exposure of an interior is to be made the smoke bag is hung up in a convenient place by 65 means of cords extending from the top frame 3 or cross bracing 4, the valve 2 is opened and a tube 9 is placed in the spring yokes 6. The valve 2 is closed tight and the connection plug is placed into socket and fuse is ignited, the smoke and fumes remaining in bag. The 70 bag being held extended both on top and bottom, there is no means for the powder coming in contact with the material from which it is made, and burning a hole through it and letting the smoke out. The tube 9 is long enough so that the flash will not arc across the ter-75 minals and thereby blow the fuse in the main circuit.

I am well aware that a bag has been employed for the retention of smoke and fumes, also that electrical forms of ignition have been used. I therefore make no broad claim for those details.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is,—

A flash light apparatus, in combination a closed rectangular smoke bag of suitable material provided with a valve on one of its sides; a metal frame, to keep the aforesaid bag extended at the top, provided with means to support the bag; a metal frame to keep the aforesaid bag extended at the bottom provided with two spring yokes which may be connected to any electrical circuit, a portable fuse adapted to engage both the aforesaid yokes.

This specification signed and witnessed this 23 day of July, A. D. 1907.

WILLIAM MICHAEL MURPHY:

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In the presence of— EDWD. VAN WINKLE, MARGUERITE ROBB.