

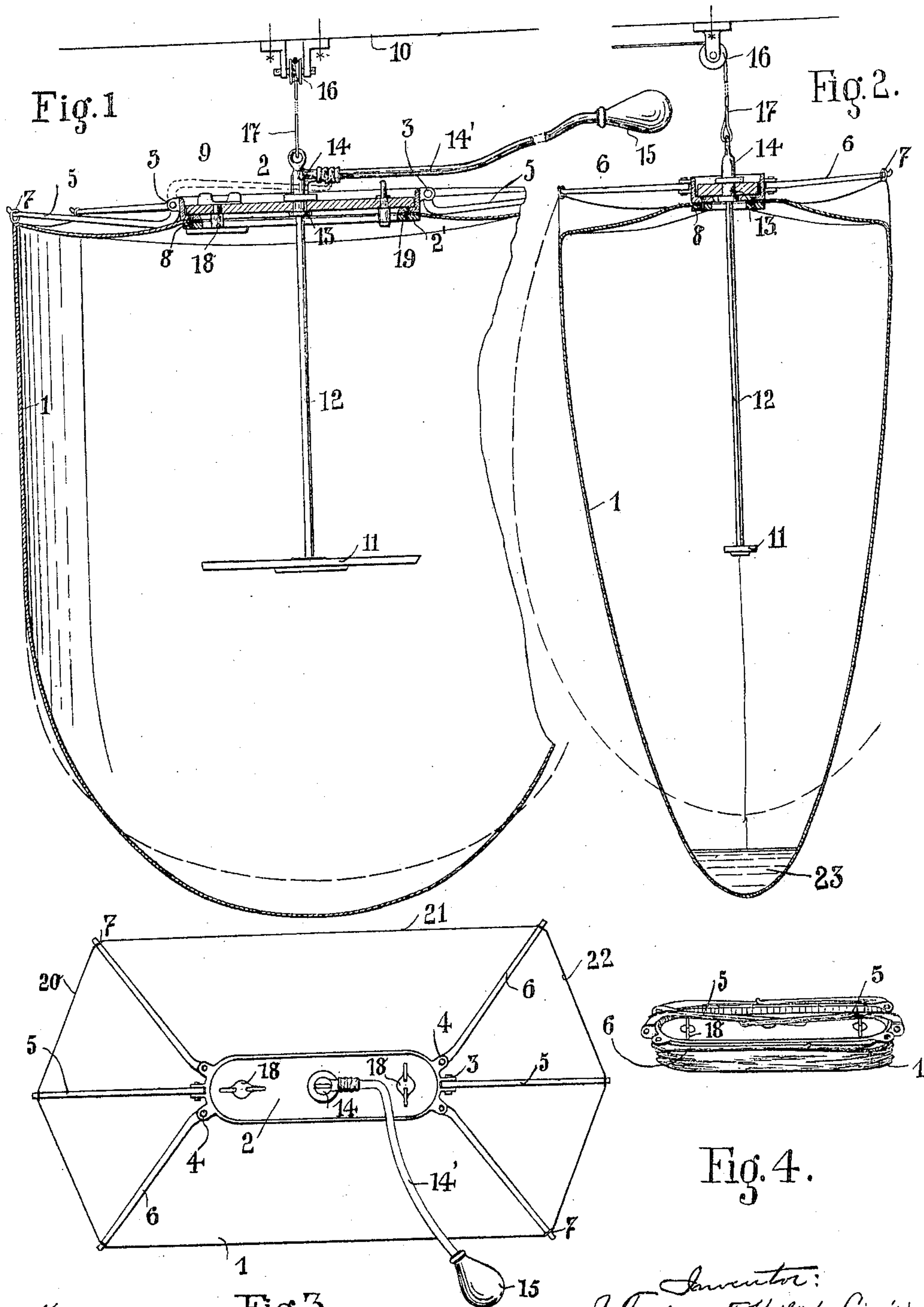
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PATENTED JUNE 5, 1906.

J. FIEDLER & F. HRDLIČZKA-CSISZÁR.

FLASH LIGHT APPARATUS.

APPLICATION FILED NOV. 22, 1905.



Witnesses:  
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Fig. 3.

Inventor:  
J. Fiedler and F. Hrdlička-Csiszár  
by Foster Freeman Watson attys.



# UNITED STATES PATENT OFFICE.

JULIUS FIEDLER AND FERDINAND HRDLIČZKA-CSISZÁR, OF VIENNA,  
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## FLASH-LIGHT APPARATUS.

No. 822,263.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed November 22, 1905. Serial No. 288,852.

*To all whom it may concern:*

Be it known that we, JULIUS FIEDLER, photographer, residing at XVII Römorgasse 70, and FERDINAND HRDLIČZKA-CSISZÁR, manufacturer, residing at VII Zieglergasse 96, Vienna, Austria-Hungary, subjects of the Emperor of Austria-Hungary, have invented a Flash-Light Apparatus; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to improvements in flash-light apparatus, such as is used for photographic purposes, and has for its main object to provide such an apparatus with means whereby the escape of any of the smoke generated by the igniting of the flash-powder will be prevented.

A further object of the invention is to provide such an apparatus which will be readily portable and which can be compactly folded when not in use.

In the accompanying drawings, Figure 1 is a sectional view through a flash-light apparatus constructed in accordance with the present invention. Fig. 2 is a similar view taken on a plane at right angles to Fig. 1. Fig. 3 is a plan view. Fig. 4 is a view of the apparatus in its folded condition.

Referring to the drawings, 1 designates a bag which may be of any desired size and is formed of suitable fabric or flexible material. Within said bag are arranged the devices for producing the flash which are introduced through a mouth or opening at the upper end of the bag, a foldable frame, hereinafter more particularly described, being connected with said upper end of the bag.

The frame at the upper end of the bag comprises an elliptical-shaped member 2, which extends about the mouth of the bag, and is preferably provided with an inwardly-extending flange 2', adapted to support a cover plate or top by means of which the mouth of the bag is closed. A series of arms 5 6 are pivotally connected with and project from said frame 2, the arms 5 being connected by horizontal pivots 3 with ears projecting from the ends of the frame 2, while the arms 6 are connected to ears on said frame by vertical pivots 4. The outer ends of said arms 5 6 extend through eyelets or rings 7, secured to

the bag and adapted to slide freely on their supporting-arms. The frame 2 surrounds the mouth or opening at the top of the bag, and the top of the bag adjacent the mouth is connected with said frame by suitable fastenings 8.

A closing-plate 9 or cover is adapted to fit within the vertical flange of the elliptical frame member and to rest upon the horizontal flange 2' thereof, said plate being secured in this position by pivotally-mounted fastening devices 18. From the cover-plate 9 is suspended, by means of a tubular carrier 12, the pan or platform 11 for supporting the flash-light substance. The upper end of the tubular carrier 12 communicates with a hollow device 14, secured to the cover-plate and provided with a lateral branch, to which a collapsible bulb 15 is connected by a tube 14'. The device 14 is also provided with an eye, to which is connected a cord or cable 17, adapted to pass over a roller 16, secured to the ceiling of the apartment in which the apparatus is to be used or to any other suitable support 10. By this means the apparatus can be readily raised or lowered and held in the desired position.

Preferably the walls 20 21 22 of the bag are made of transparent, translucent, or reflecting material, so that the light will pass therethrough, while the other walls of the bag will prevent the passage of light.

The bag is preferably made non-inflammable and impervious to smoke previous to using the apparatus by wetting its inner surface, a body of water 23 being represented therein. It will be understood that the inner walls of the bag may be suitably sprayed or the water otherwise applied thereto before the cover-plate 9 is secured in position. Before using the apparatus and before applying the cover 9 the bag is preferably collapsed, so that it has substantially the form shown in Fig. 2. The cover 9 is then secured in position. The expansion of air following the ignition of the flash-light charge causes the bag to expand and assume substantially the form shown in dotted lines in Fig. 2; but owing to the preliminary collapsing of the bag this expansion has no injurious effect on the latter.

When it is not desired to use the apparatus or when it is to be moved from one place to another, the plate 9 and attached parts are



disengaged and lifted from the frame member 2, after which the rings 7 are moved inwardly on the arms 5 6 and the latter turned about their pivots, so that the parts will occupy substantially the position represented in Fig. 4.

The ignition of the flash material within the bag may be controlled electrically, pneumatically, or in any other manner, and as the method of ignition forms no part of the present invention no special means for this purpose is illustrated.

It will be noticed that when the apparatus is in use the bag 1 is entirely closed, and it is impossible for any of the smoke generated by the explosion to escape therefrom. The apparatus can be easily and quickly put in position for use or collapsed and folded, so as to occupy but a very small space. By moistening the inner surface of the bag there is no danger of the apparatus being damaged by the flash, and the moisture in the bag also acts advantageously on the smoke produced when using the apparatus.

The apparatus is so supported that it may be quickly raised or lowered to suit the particular purpose for which it is to be employed.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. The herein-described flash-light apparatus, comprising a bag adapted to surround the light-producing devices and having a mouth or opening at its upper end, a foldable frame connected with the upper end of the bag and surrounding the mouth thereof, a plate adapted to be secured in said frame to

cover the mouth of the bag, and means for suspending the bag from a suitable support

2. The herein-described flash-light apparatus, comprising a bag-like receptacle adapted to contain the light-producing devices and having a mouth or opening at its upper end, a frame having an annular member connected with the bag and surrounding the mouth thereof, a series of arms pivotally connected with said annular member and extending freely through guide devices on the bag, and a plate adapted to be connected to said frame and to close the mouth of the bag.

3. The herein-described flash-light apparatus, comprising a bag having a foldable frame secured about the mouth or opening at its upper end, means adapted to be detachably connected with said frame to close the mouth of the bag, and means for suspending the flash-producing devices within the bag.

4. The herein-described flash-light apparatus, comprising a bag adapted to contain the light-producing devices, a foldable frame having a member surrounding the mouth of the bag and provided with an inwardly-extending flange, and a cover-plate adapted to be seated on said flange and detachably connected to the frame to close the mouth of the bag.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JULIUS FIEDLER.

FERDINAND HRLIČZKA-CSISZÁR.

Witnesses:

FRANZ REITER,

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