

N<sup>o</sup> 8719



A.D. 1903

*Date of Application, 17th Apr., 1903*

*Complete Specification Left, 16th Jan., 1904—Accepted, 17th Mar., 1904*

**PROVISIONAL SPECIFICATION.**

**“Improved Means for Producing “Flash-light” for Photographic Purposes”**

We WARWICK BROOKES, of 350 Oxford Road, Manchester, in the County of Lancaster, Photographer, and FREDERICK WILLIAM ROBINSON, of the same place, Photographic Operator, do hereby declare the nature of this invention to be as follows:—

5 This invention relates to improved means for producing what is known as “flash-light” for photographic purposes.

The ordinary method of producing “flash light” for photographic purposes is to place the required amount of “flash” powder in or upon a metallic tray, or the like, and to ignite the same at the required moment by means of a match or taper.

10 According to our invention we propose to use the same or a similar powder, but to cause the ignition by means of an electric current.

15 For this purpose we construct a metallic tray which is provided with two “terminals” properly insulated and placed at a suitable distance apart, and provided with screws so that when required they can be united by a short piece of “fuse-wire”. The metallic tray is mounted upon and carried by a long or short handle through grooves in which pass two covered wires.

20 One of these wires is divided and the handle at this point is provided with a spring contact-piece flush with the handle or nearly so and at the proper moment, the operator can (by pressure of the thumb or finger) unite the two ends so as to make the wire continuous.

25 The other ends of the two wires are connected one to the positive pole and the other to the negative pole of a storage battery or to the wires of an electric light installation or to any other convenient source of electric current provided with suitable “terminals” for connecting the wires therewith.

30 When the “flash-light” is required the operator secures a short piece of suitable “fuze wire” between the two terminals of the metal tray before mentioned and places on the tray between the two terminals a heap of the powder through which the wire passes, and then, holding the tray by the handle in the required position, at the proper moment presses on the spring contact-piece so as to complete the electric circuit whereby the short piece of “fuze-wire” becomes incandescent and the “flash” powder ignites.

35 We would also remark that instead of the spring contact-piece being placed in the pole or handle which supports the tray a separate or loose handle with a contact piece may be employed and connected to any convenient part of the flexible covered wire so that the operator can stand at any distance from the powder tray.

Dated this 16th. day of April 1903.

40  
GEO. DAVIES & SON,  
Agents for the Applicants  
4, St. Ann's Square, Manchester.

[Price 8d.]

*Improved Means for Producing "Flash-light" for Photographic Purposes.*

## COMPLETE SPECIFICATION.

**"Improved Means for Producing "Flash-light" for Photographic Purposes"**

We WARWICK BROOKES, of 350 Oxford Road, Manchester, in the County of Lancaster, Photographer, and FREDERICK WILLIAM ROBINSON, of the same place, Photographic Operator, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improved means for producing what is known as "flash-light" for photographic purposes.

The ordinary method of producing "flash light" for photographic purposes is to place the required amount of "flash" powder in or upon a metallic tray, or the like, and to ignite the same at the required moment by means of a match or taper.

According to our invention we propose to use the same or a similar powder, and to cause the ignition by means of an electric current, as hereinafter described.

In the accompanying drawing to which we hereinafter refer Fig. 1 is an elevation, and Fig. 2 a plan of our said invention, Fig. 3 is a detail of a portion of the same.

In these drawings the same letters refer to like parts.

According to and for the purpose of our invention we construct a metallic tray as *b* which is provided with two terminals *c* and *c'* placed at a suitable distance apart, said terminals are insulated and are provided with screws so that when required they can be united by a short piece of "fuse wire."

The tray *b* is mounted on a long or short staff or support *d* which is passed through a socket *e* on a vertical support *d'* and the height of the tray from the floor may be increased by employing one or more additional props as *d<sup>1</sup>*, *d<sup>2</sup>* (Fig. 3), the end of one being formed to fit on to the end of another; a short handle as *e'* is provided and two covered wires *g* are passed through grooves therein.

One of these wires is divided and the handle at this point is provided with a spring contact-piece *j* flush with the handle or nearly so and at the proper moment, the operator can (by pressure of the thumb or finger) unite the two ends so as to make the current continuous, and fuse the wire.

The other ends of the two wires are connected one to the positive pole and the other to the negative pole of a storage battery or to the wires of an electric light installation or to any other convenient source of electric current provided with suitable "terminals" for connecting the wires therewith.

When the "flash-light" is required the operator secures a short piece of suitable "fuze wire" between the two terminals of the metal tray before mentioned and places on the tray between the two terminals a heap of the powder through which the wire passes, and then, holding or placing the tray in the required position; at the proper moment presses on the spring contact-piece in the handle so as to complete the electric circuit whereby the short piece of "fuze-wire" becomes incandescent, and fusing, ignites the "flash" powder.

A stand or base in the form of a box as *k* may be provided in which to place the staff or support *d* as shown in Fig. 1 on the drawing, said box serving also for storing the tray, and accessories, when not in use.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is:—

The improved means for producing "flash light" for photographic purposes

---

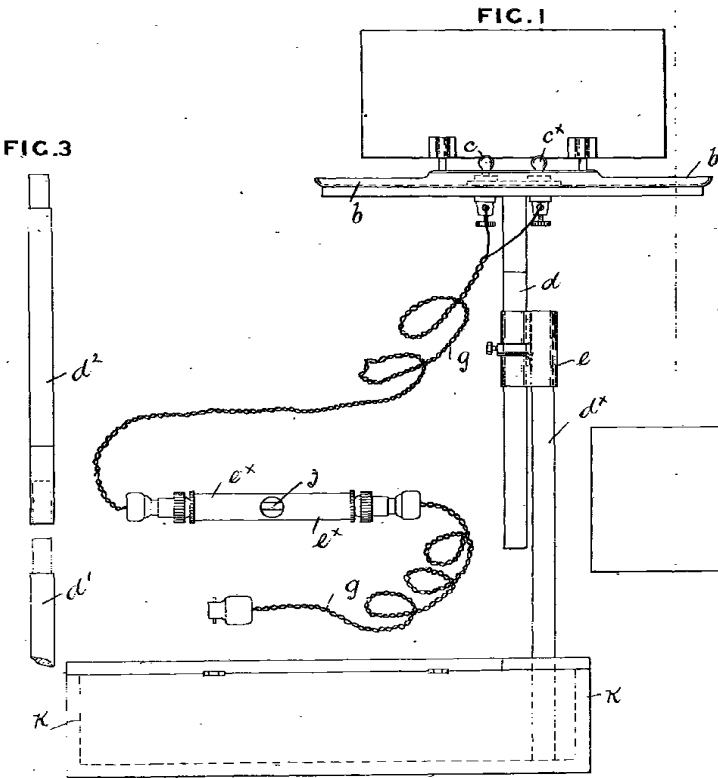
*Improved Means for Producing "Flash-light" for Photographic Purposes.*

---

consisting of a tray provided with terminals which are insulated and connected to electric wires that are retained by a handle having a contact piece therein which when pressed will cause a fuse wire to become incandescent, melt, and ignite, the flash powder placed in the tray substantially as hereinbefore described.

5 Dated this 15th. day of January 1904.

GEO. DAVIES & SON,  
Agents for the Applicants.  
4, St. Ann's Square, Manchester.



[This Drawing is a reproduction of the Original on a reduced scale.]

FIG. 1

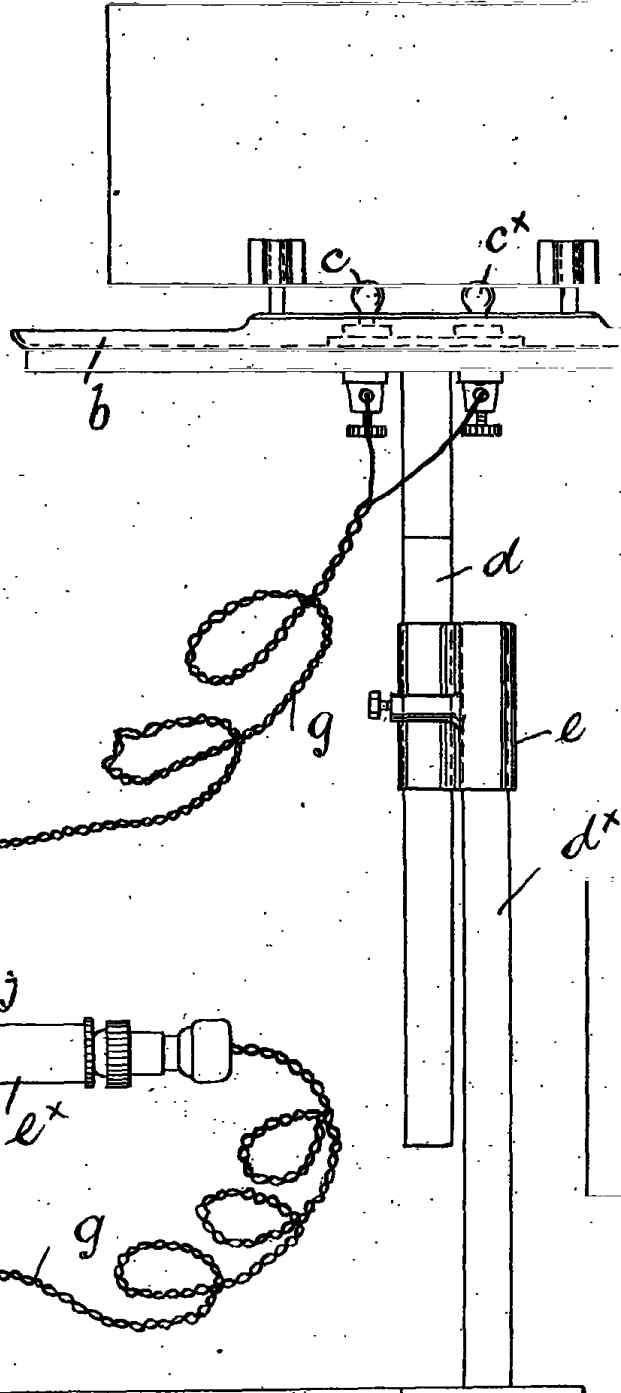
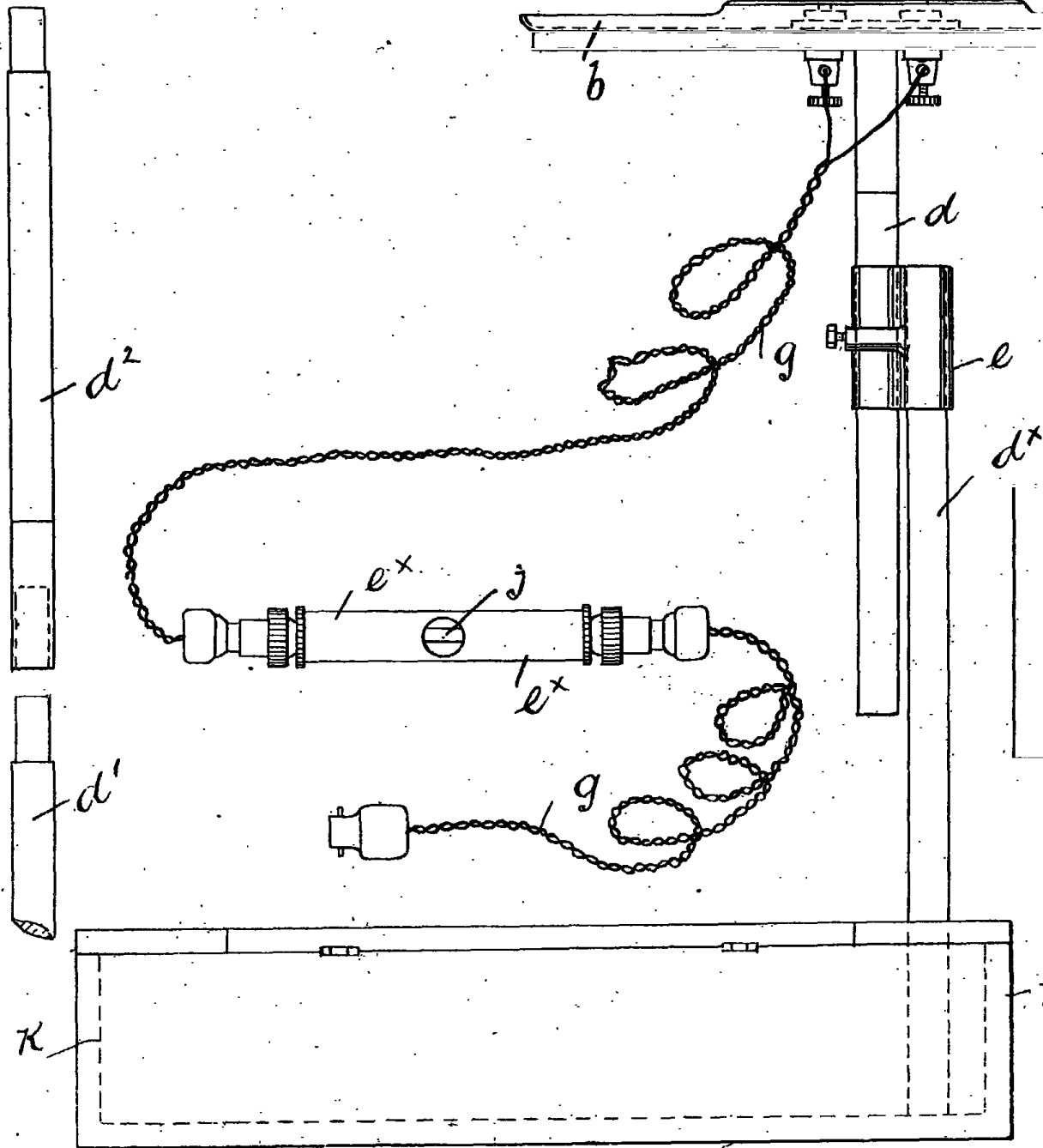


FIG. 3



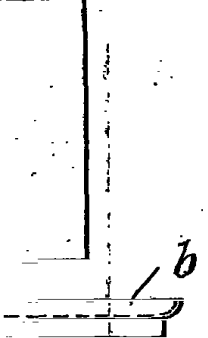
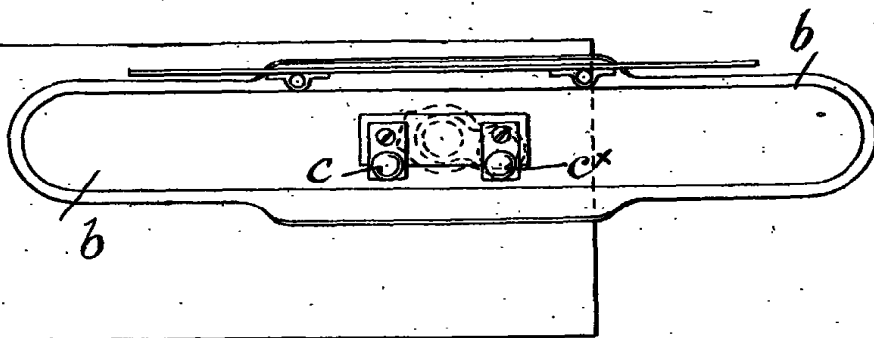


FIG. 2



*[This Drawing is a reproduction of the Original on a reduced scale.]*