No. 716,940. Patented Dec. 30, 1902.

J. SCHMIDT.

FLASHING APPARATUS FOR USE IN TAKING PHOTOGRAPHS.

(Application filed Mar. 29, 1902.)

No Model.)

Fig. 1.

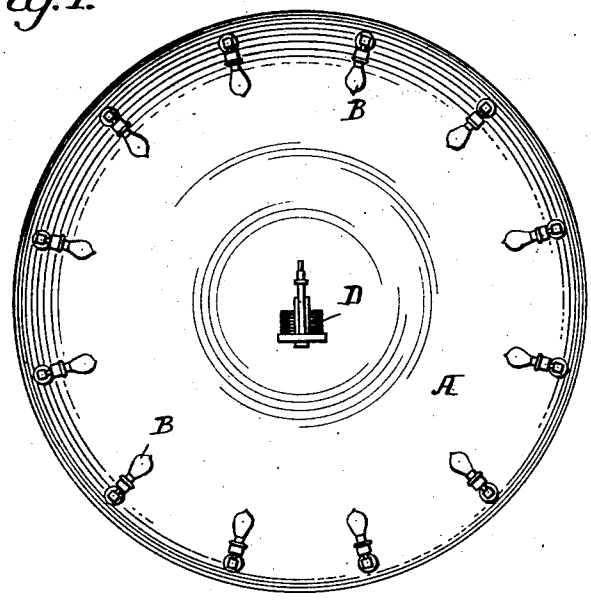
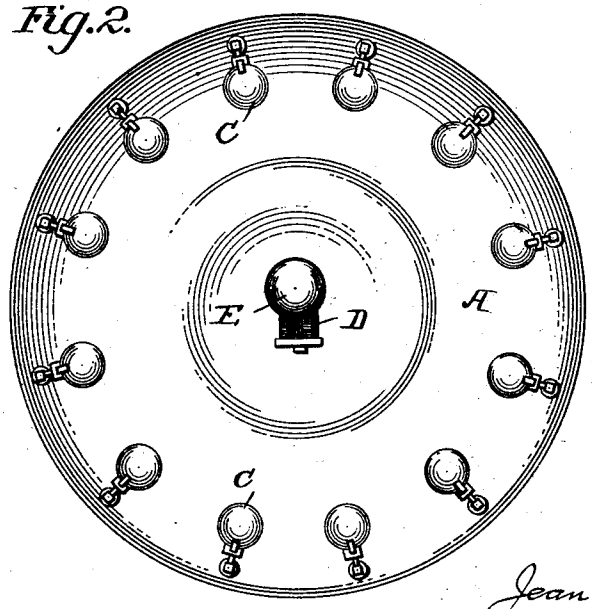


Fig. 2.



Witnesses
J. G. Hinkel
Thos. G. Gillmore, Jr.

Inventor
Jean Schmidt

By Foster Freeman
Attorneys

UNITED STATES PATENT OFFICE.

JEAN SCHMIDT, OF FRANKFORT-ON-THE-MAIN, GERMANY, ASSIGNOR TO SOCIETY VERTRIEB VON SCHMIDT'S ELECTR. BELEUCHTUNGSAPPARAT FÜR PHOTOGRAPHIE, G. M. B. H., OF FRANKFORT-ON-THE-MAIN, GERMANY.

FLASHING APPARATUS FOR USE IN TAKING PHOTOGRAPHS.

SPECIFICATION forming part of Letters Patent No. 716,940, dated December 30, 1902.

Application filed March 29, 1902. Serial No. 100,607. (No model.)

To all whom it may concern:

Be it known that I, JEAN SCHMIDT, a subject of the German Emperor, residing and having my post-office address at 56 Kaiserstrasse, Frankfort-on-the-Main, Germany, have invented certain new and useful Improvements in Flashing Apparatus for Use in Taking Photographs, of which the following is a specification.

The object of the present invention is an improved flashlight apparatus for use in taking photographs having the advantage that it allows of placing the person or object to be photographed in the correct light more easily and accurately, that it effects a better graduation between light and shade, and, finally, that it does not disturb or alarm persons being photographed by too great and sudden differences of light.

This apparatus is represented in the accompanying drawings.

Figures 1 and 2 are front views of my apparatus.

The apparatus is so made that a shade or screen A, with reflective surface turned toward the person or object to be photographed, is provided with incandescent lamps B at or near the border thereof, which throw their light on the shade or screen and are separated from the object to be photographed by means of other small shades or screens C or by a common ring-shaped shade. Two contacts consisting of carbon or other conducting material are placed opposite each other in the center of the shade or screen. These contacts lie in a powerful electric circuit, which can also be conducted through the incandescent lamps B, arranged all around the shades or screens, and are so arranged that they can be separated from each other at any desired moment by means of an electromagnet D, and a strong interrupting-spark of extremely great actinic effect thus passes from one contact to the other. This contact apparatus is also separated from the object to be photographed by means of a shade or screen E in such a manner that it throws its light toward the latter and from there onto the object to be illuminated. The arrangement may be connected with a circuit-changer or may be arranged in any known manner, so that, on the one hand, a current may be passed through the incandescent lamps B, arranged around the contact apparatus, of an intensity sufficiently great for their ordinary working and, on the other hand, may also momentarily allow a strong current to pass into the circuit of said lamps and again out of it and then at the same time or at the next moment passes through the two contacts, which are simultaneously separated from each other by means of the electromagnet D, and then the interrupting-spark of actinic effect is produced. In this manner the object to be photographed can be exposed to three lights of various strengths—that is, firstly, to the light reflected by the shade or screen of the incandescent lamps supplied with their ordinary current. In this light the photographer can place the object to be photographed in the desired light, which he can do very easily and with the greatest accuracy by moving the shade, as the beams which later on have an actinic effect fall upon the object to be illuminated exactly in the same direction as those which only illuminate. When the object has been thus placed in the correct position and light, a powerful current can be passed through the incandescent lamps B by means of an ordinary circuit-changer. These lamps may be overcharged, and consequently throw a white light of actinic effect toward the shade or screen A, which light, if the objective is open, introduces the photograph, which at the following moment can be completed through the immediate separation of the contacts and through the interrupting-spark produced thereby. By the increasing effect of the light described the photograph receives very soft tones, &c., and by means of this apparatus persons are not, as hitherto, alarmed at the moment of taking the photograph through the sudden appearance of the flashlight. An electromagnet can also be connected with the cir-

cuit-changer or switch, which magnet shortly before the powerful current is passed through the incandescent lamps and the contact apparatus will open the shutter of the camera and close it immediately after the illumination.

The shades or screens C and E, which separate the light of the incandescent lamps and interrupting-spark from the object to be photographed, are transparent, so that they do not throw any undesirable shadow.

I claim—

1. The herein-described flashlight apparatus for use in photography consisting of a screen A having a reflecting-surface, a series of incandescent lamps arranged on the inner edge of the screen, an arc-lamp arranged in the focal axis of the screen, substantially as described.

2. The herein-described flashlight apparatus for use in photography consisting of a screen A having a reflecting-surface, a series of incandescent lamps arranged on its inner edge, a series of small shades for said lamps, an arc-lamp arranged in the focal axis of the screen, and a screen arranged in front of said arc-lamp, substantially as described.

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

JEAN SCHMIDT.

Witnesses:

FRANZ HASSLACHER,

EMMA HOFMANN.