

PATENT SPECIFICATION

(11) 1 299 999

DRAWINGS ATTACHED

1 299 999
66C 6621

- (21) Application No. 59935/70 (22) Filed 17 Dec. 1970
(31) Convention Application No. G 69 50 140.2
(32) Filed 27 Dec. 1969 in
(33) Germany (DT)
(45) Complete Specification published 13 Dec. 1972
(51) International Classification G03B 15/04
(52) Index at acceptance G2A 1G 1K2A 1K2Y 1KY
(72) Inventors HORST SIMON and KURT STEISSLINGER



(54) PHOTOGRAPHIC CAMERA

(71) We, EASTMAN KODAK COMPANY, a Company organized under the Laws of the State of New Jersey, United States of America of 343 State Street, Rochester, New York 14650, United States of America do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a photographic camera having a socket for receiving a multi-lamp, percussion-ignitable flash lamp unit (hereinafter referred to as "of the kind described") comprising a plurality of flash-lamps mounted on a base and each having a primer and pre-energized striker which is accessible through an associated access opening in the base for release from its energized condition to strike its primer and activate its lamp.

In accordance with the present invention there is provided a photographic camera having a socket adapted to receive a multi-lamp, percussion-ignitable flash lamp unit of the kind described, wherein a seating is provided adjacent to the socket for supporting a received unit adjacent to its outer edge to counteract the force applied to the unit by means of a flash actuating member of the camera.

In the accompanying drawings:—

Fig. 1 is a perspective view of a portion of a camera having a means constructed in accordance with one form of the present invention for supporting a multilamp, percussion-ignitable flash lamp unit;

Fig. 2 is a view similar to Fig. 1, but showing modified means for supporting a flash lamp unit; and

Fig. 3 is a view similar to Fig. 1, but showing a further modified means for supporting a flash lamp unit.

Referring to Fig. 1, a flash lamp unit 1 of known type is provided with a striker 8 which is held in an energized condition by means of a projection 8a and, upon release strikes the associated primer 10 of a flash lamp 11.

[Price 25p]

Only one striker is shown in the drawing, but it will be understood that each flash lamp is provided with its own striker.

The flash lamp unit has a base 2 and a foot portion 2a which is inserted in a socket 3 rotatably mounted in the top plate 4 of a camera having an assembly plate 5 to which the top plate 4 is fixed. The base 2 of the flash lamp unit rests on a circular protrusion 4a projecting upwardly from the top plate 4 and having an opening 7 disposed for access to the striker 8 of a flash lamp located at a firing site.

An actuating member 9 is mounted and actuated in known manner for vertical movement within the camera from a retracted position to a position in which it passes through the opening 7 to engage and dislodge a striker 8 from its projection 8a and thereby fire the associated flash lamp. The tendency of the flash lamp unit 1 to tilt under the force exerted by the actuating member 9 is counteracted by the protrusion 4a particularly at the point diametrically opposite that at which the actuating member 9 acts on the flash lamp unit.

As illustrated in Fig. 2, the circular protrusion 4a of the Fig. 1 embodiment is replaced by a radially extending protrusion 12, the outer end of which terminates in an arrow 13 to indicate the direction of rotation of the flash lamp unit 1.

In Fig. 3, there is shown a further form of the invention in which a protrusion 14 in the form of an arc projects through an opening in the top plate 4 and is urged upwardly by means of a spring 15 seated on a support 16 secured to the assembly plate 5. The protuberance 14 exerts resilient pressure on the flash unit near to its outer edge at a point substantially opposite to the point at which pressure is applied to the unit by the actuating member 9. The strength of the spring 15 is, of course, limited so that it does not urge the flash lamp unit 1 out of the socket 3.

WHAT WE CLAIM IS:—

1. A photographic camera having a socket adapted to receive a multi-lamp percussion-

50

55

60

65

70

75

80

85

90

PATENT SPECIFICATION

(11) 1 299 999

DRAWINGS ATTACHED

- (21) Application No. 59935/70 (22) Filed 17 Dec. 1970
 (31) Convention Application No. G 69 50 140.2
 (32) Filed 27 Dec. 1969 in
 (33) Germany (DT)
 (45) Complete Specification published 13 Dec. 1972
 (51) International Classification G03B 15/04
 (52) Index at acceptance G2A 1G 1K2A 1K2Y 1KY
 (72) Inventors HORST SIMON and KURT STEISSLINGER



(54) PHOTOGRAPHIC CAMERA

(71) We, EASTMAN KODAK COMPANY, a Company organized under the Laws of the State of New Jersey, United States of America of 343 State Street, Rochester, New York 14650, United States of America do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a photographic camera having a socket for receiving a multi-lamp, percussion-ignitable flash lamp unit (hereinafter referred to as "of the kind described") comprising a plurality of flash-lamps mounted on a base and each having a primer and pre-energized striker which is accessible through an associated access opening in the base for release from its energized condition to strike its primer and activate its lamp.

In accordance with the present invention there is provided a photographic camera having a socket adapted to receive a multi-lamp, percussion-ignitable flash lamp unit of the kind described, wherein a seating is provided adjacent to the socket for supporting a received unit adjacent to its outer edge to counteract the force applied to the unit by means of a flash actuating member of the camera.

In the accompanying drawings:—

Fig. 1 is a perspective view of a portion of a camera having a means constructed in accordance with one form of the present invention for supporting a multilamp, percussion-ignitable flash lamp unit;

Fig. 2 is a view similar to Fig. 1, but showing modified means for supporting a flash lamp unit; and

Fig. 3 is a view similar to Fig. 1, but showing a further modified means for supporting a flash lamp unit.

Referring to Fig. 1, a flash lamp unit 1 of known type is provided with a striker 8 which is held in an energized condition by means of a projection 8a and, upon release strikes the associated primer 10 of a flash lamp 11.

[Price 25p]

Only one striker is shown in the drawing, but it will be understood that each flash lamp is provided with its own striker.

The flash lamp unit has a base 2 and a foot portion 2a which is inserted in a socket 3 rotatably mounted in the top plate 4 of a camera having an assembly plate 5 to which the top plate 4 is fixed. The base 2 of the flash lamp unit rests on a circular protrusion 4a projecting upwardly from the top plate 4 and having an opening 7 disposed for access to the striker 8 of a flash lamp located at a firing site.

An actuating member 9 is mounted and actuated in known manner for vertical movement within the camera from a retracted position to a position in which it passes through the opening 7 to engage and dislodge a striker 8 from its projection 8a and thereby fire the associated flash lamp. The tendency of the flash lamp unit 1 to tilt under the force exerted by the actuating member 9 is counteracted by the protrusion 4a particularly at the point diametrically opposite that at which the actuating member 9 acts on the flash lamp unit.

As illustrated in Fig. 2, the circular protrusion 4a of the Fig. 1 embodiment is replaced by a radially extending protrusion 12, the outer end of which terminates in an arrow 13 to indicate the direction of rotation of the flash lamp unit 1.

In Fig. 3, there is shown a further form of the invention in which a protrusion 14 in the form of an arc projects through an opening in the top plate 4 and is urged upwardly by means of a spring 15 seated on a support 16 secured to the assembly plate 5. The protuberance 14 exerts resilient pressure on the flash unit near to its outer edge at a point substantially opposite to the point at which pressure is applied to the unit by the actuating member 9. The strength of the spring 15 is, of course, limited so that it does not urge the flash lamp unit 1 out of the socket 3.

WHAT WE CLAIM IS:—

1. A photographic camera having a socket adapted to receive a multi-lamp percussion-



- ignitable flash lamp unit of the kind described, wherein a seating is provided adjacent to the socket for supporting a received unit adjacent to its outer edge to counteract the force applied to the unit by means of a flash actuating member of the camera.
- 5 2. A photographic camera according to Claim 1, wherein the seating comprises a circular protuberance encircling the socket.
- 10 3. A photographic camera according to Claim 1, wherein the seating comprises a radially extending protuberance extending substantially diametrically opposite to the point at which the actuating member applies force
- 15 to a flash lamp unit received in the socket.
4. A photographic camera according to Claim 1, wherein the seating comprises an arcuate-shaped protuberance which is spring urged in a direction to counteract the force applied to a received flash lamp unit by the actuating member.
5. A photographic camera according to Claim 1, constructed substantially as hereinbefore described with reference to, and as shown in Fig. 1 or Fig. 2 or Fig. 3 of the accompanying drawings.
- 95

L. A. TRANGMAR, B.Sc., C.P.A.
Agent for the Applicants.

Printed for Her Majesty's Stationery Office by the Courier Press, Leamington Spa, 1972.
Published by the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

