H. E. LEININGER.

PORTABLE FLASH LAMP.

APPLICATION FILED JULY 8, 1914.

1,193,031.

Patented Aug. 1, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

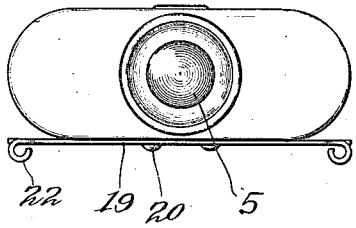


Fig. 2.

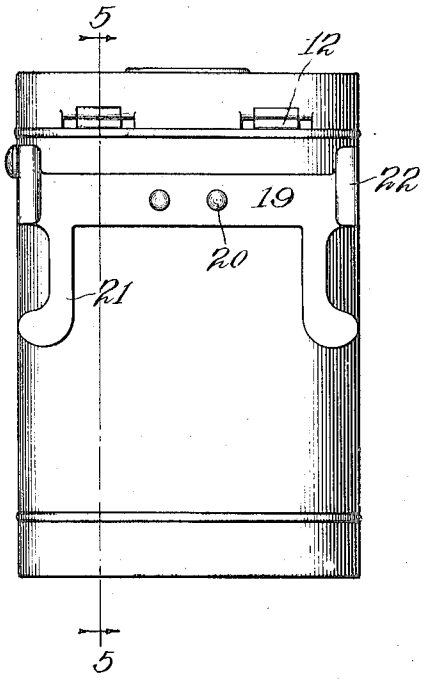
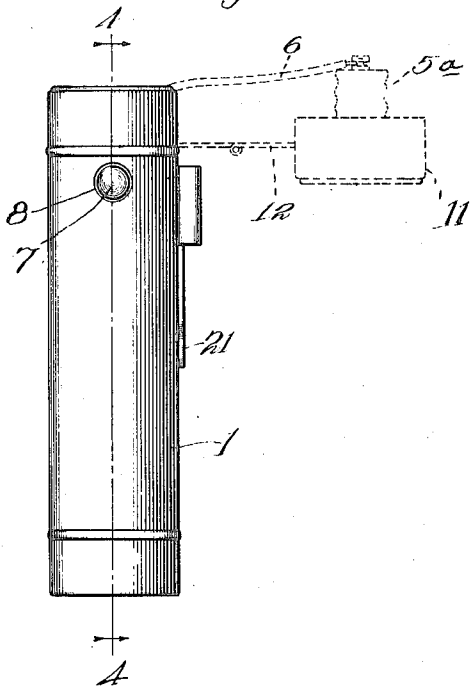


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 1.

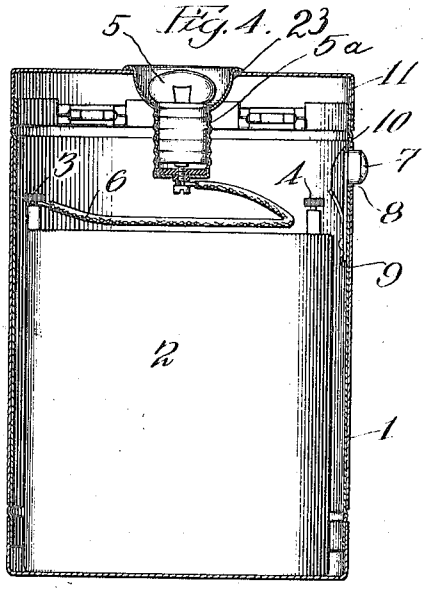


Fig. 5.

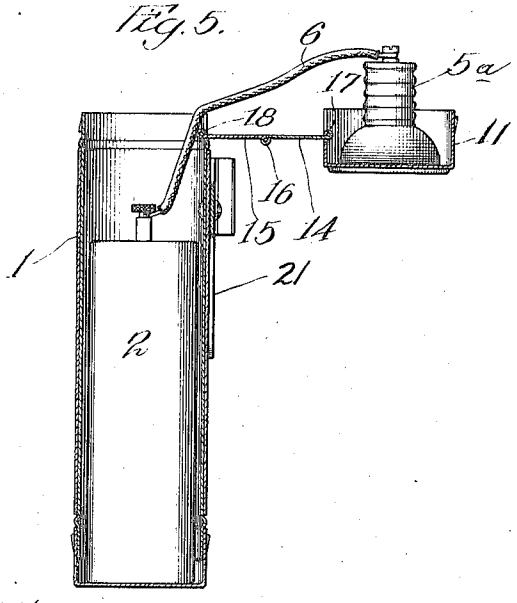
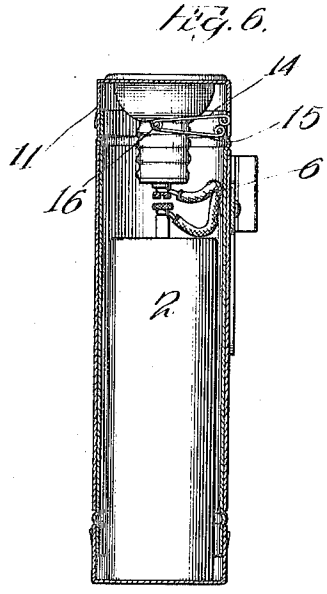


Fig. 6.



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UNITED STATES PATENT OFFICE.

HARRY E. LEININGER, OF CHICAGO, ILLINOIS.

PORTABLE FLASH-LAMP.

1,193,031. Specification of Letters Patent. Patented Aug. 1, 1916.

Application filed July 8, 1914. Serial No. 849,626.

To all whom it may concern:

Be it known that I, HARRY E. LEININGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Portable Flash-Lamps, of which the following is a specification.

The essential object of this invention is to provide a portable flash lamp with a movable cover or lamp holder, permitting an incandescent bulb to be moved from one position to another instead of being permanently held in one position only, and furthermore to provide the container, within which the battery is received, with a suitable clamping device adapted to hold and retain a book, block of paper, or the like.

The flash lamps of the class in connection with which the herein described invention is to be used are well known in the art and ordinarily comprise a metallic or other container, an incandescent lamp suitably mounted in the cover or at one end of the container, and a button or switch operated by the user of the lamp and adapted to close the circuit and light the lamp upon depression of the switch. Lamps of that general character are available for many purposes and are highly valuable in practical use, and it is the object of this invention still further to improve such lamps and make them usable for certain purposes and under certain conditions where the old style lamps could not give entire satisfaction.

In the drawings, Figure 1 is a top plan view of a lamp equipped with the invention forming the subject-matter of this application; Fig. 2 is a front elevation thereof; Fig. 3 is a side elevation looking toward the right in Fig. 2; Fig. 4 is a section on the line 4—4, Fig. 3; Fig. 5 is a section on the line 5—5, Fig. 2, showing the cover open and in its extended position; and Fig. 6 is a view similar to Fig. 5 showing the cover closed.

The parts comprising the lamp are all retained in or upon an outer shell or container 1, preferably formed of metal or other conducting material. Within this container 1 is the battery 2, said battery being provided with the binding posts 3 and 4. The incandescent bulb 5 (the mounting of which is one of the salient features of this invention) is connected to the binding post 3 by means of a flexible wire 6. The button 7, which projects outwardly through a perforation 8 in one wall of the container 1, is mounted upon a spring-like conductor member 9 which is riveted or permanently secured to the wall of the container 1 and which carries a finger 10 adapted to come into contact with the binding-post 4. The cover 11 is made of metal, like the main body of the container 1, and is hinged to the body 1. The bulb 5 is screwed into the cover 11 or into a socket 5^a formed thereupon and in electrical contact therewith, and when the button or switch 7 is pushed toward the left in Fig. 4, the circuit is completed and the current will pass successively from the binding-post 4 through the contact 10, spring 9, container 1, hinge 12, and cover 11 to the bulb 5, returning to the battery through the wire 6 and the post 3. When the cover is closed, as in Fig. 6, the current may pass directly from the container 1 to cover 11 and under such circumstances the invention may be used exactly the same as any ordinary portable flash light.

The socket is best equipped with a suitable reflector 23 and the lamp support or cover 11 is mounted upon the container by means of the hinges 12. There may be either two or more of such hinges so placed as not to strike or come into contact with the bulb 5, this being the construction depicted in the drawings, or there may be a single hinge suitably recessed to receive the bulb and its socket when the cover is in the closed position shown in Fig. 6. In that form of the invention shown in the drawings, the hinge is formed of two leaves 14 and 15 pivoted together by a pintle 16. Leaf 14 is pivoted at 17 to the cover 11, and leaf 15 is pivoted at 18 to the main body of the container 1. The cover 11, obviously, is adapted to be moved from the closed position indicated in Fig. 6 and in the full lines of Fig. 3, to the outwardly-extended position indicated in Fig. 5 and in dotted lines in Fig. 3.

To the outside of the container 1 a clamping member 19 is secured either by rivets 20 or the like, and this clamping member 19, which is formed of spring metal, is provided with the clamping arms 21. For convenience and in order to prevent tearing the pocket of the user, the ends 22 may be rounded or bent and any or all of the parts forming the clamping members 19 may be covered with rubber or other resilient protecting material. The object of the clamping member 19 and

the arms 21, which are secured thereto or formed integrally therewith, is to clamp or secure a block of paper, book, or the like and hold same in place upon the lamp. By moving the cover 11 to the position depicted in Fig. 5, the rays of light from the bulb 5 will fall directly upon the book or pad of paper whenever the circuit is closed. It would be entirely feasible, of course, to have the cover 11 in direct pivotal connection with the casing 1, but if that construction be employed, the bulb 5 is likely to be too close to the wall of the casing 1 and the hinged connection shown in the drawings and described in the specification is preferred because of the fact that this construction permits the bulb 5 to be at a distance of approximately an inch from the outer surface of the container 1. Were the flange of the cover 11 to be directly hinged to the member 1, the rays of light from the bulb 5 might strike the top edge of the book or paper held by the clamp 19, whereas with the preferred construction the bulb 5 is spaced apart from the container 1 a short distance so that the rays of light will fall upon the surface of the book or paper and not upon the edge thereof. When the cover 11 has been extended outwardly to the position shown in Fig. 5, the bulb 5 and cover 11 will be disposed at an angle of approximately 180° to the positions assumed when the cover is closed, as in Figs. 1 and 2.

As previously suggested, the herein described invention can be used in the same manner as any ordinary flash lamp, but it may, also, be used for other and additional purposes by extending or moving the cover 11 and the bulb 5 contained therein to the position of Fig. 5. For example, a user whose duties necessitate the reading of gas meters which are located in dark places may take the reading of the meter while the parts are in the positions shown in Fig. 6; he may then move the cover from the position of Fig. 6 to the position of Fig. 5; and then write the reading of the meter upon the book or memorandum paper which is clamped by the member 19. The user, therefore, is provided both with a light to read the meter and a light to assist him in writing whatever he is called upon to write; and the book or paper upon which the user desires to write, together with the lamp which furnishes the necessary light for that purpose, can be held in one hand leaving the other hand free to move the cover 11 from one position to the other, or for use in writing, or for any other purpose.

It should be understood that in addition to the ways herein specifically shown for attaching the cover to the body 1, many other obvious constructions adapted to achieve the same end may be employed and the invention is not limited either to the specific means herein shown for movably supporting the hulb 5 upon the casing 1, nor to the specific device for clamping a book or analogous article in place.

The container 1, shown in the drawings, is substantially oval in cross-section, since a device of that shape fits neatly into the user's pocket, and, also, provides a better surface for writing than a cylindrical lamp, but the precise shape and size of the container 1 may be varied at will. It should be understood, moreover, that the specific use for the invention mentioned in the second preceding paragraph hereof is merely suggestive of innumerable other purposes to which the invention may readily be applied.

I claim as my invention:

1. A lamp comprising a container, a cover therefor, an electric bulb mounted in the cover, and a hinged connection between the cover and the body of the container, said hinged connection comprising a pair of leaves pivoted together, one of said leaves being pivoted to the cover and the other of said leaves being pivoted to the container.

2. A lamp comprising a container, a cover therefor, an electric bulb mounted in the cover, and a hinged connection between the cover and the body of the container, said hinged connection comprising a pair of leaves pivoted together, one of said leaves being pivoted to the cover and the other of said leaves being pivoted to the container, there being a clamping device secured upon said container adapted to retain a book or paper upon which the rays of light from said bulb are adapted to fall.

3. A lamp comprising a container one end of which is open, a cover adapted to close said end, and an extensible means connected to said cover and to said container, said extensible means being adapted to hold said cover spaced apart from said container, said cover when so spaced apart from said container being at an angle of approximately 180 degrees to the position assumed thereby when the same is in normal position, said cover when in such normal position being adapted to close the open end of the container.

4. A device of the character described comprising a container one end of which is open, a cover adapted to close said end, a lamp supported by said cover, and an extensible means connected to said cover and to said container, said extensible means being adapted to hold said cover spaced apart from said container, said cover when so spaced apart from said container being at an angle of approximately 180 degrees to the position assumed thereby when the same is in normal position, said cover when in such normal position being adapted to close the open end of the container.

5. A device of the character described

comprising a container, one end of which is open, a cover adapted to close said end, an extensible means connecting said cover to said container, said extensible means being adapted to hold said cover spaced apart from said container, said cover when so spaced apart from said container being at an angle of approximately 180 degrees to the normal position of the cover, said cover when in such normal position being in juxtaposition to the open end of the container and closing the same, and a clamping device secured upon said container adapted to retain a book or paper upon which the rays of light from the lamp are adapted to fall, said lamp being supported by said cover.

6. A device of the character described comprising a container, a lamp-supporting member secured thereto, and an extensible means securing said lamp-supporting member upon said container, said extensible means being adapted to hold said lamp-supporting member out of axial alinement with said container and spaced apart therefrom, and being adapted also to hold said lamp-supporting member at an angle of approximately 180 degrees to the position assumed thereby when the same is in normal position, said lamp-supporting member when in normal position being in axial alinement with the container, and a lamp retained by said lamp-supporting member.

7. In a device of the character described, the combination of a container, a lamp-supporting member, and a hinged connection between said lamp supporting member and said container, said hinged connection comprising a pair of leaves pivoted to each other, one of said leaves being also pivoted to the lamp-supporting member, and the other of said leaves being pivoted to the container, and a lamp retained by said lamp-supporting member.

8. A lamp comprising a container, one end of which is open, a cover adapted to close said end, a leaf pivoted to said cover, and a pivotal connection on the leaf between the cover and the container, said leaf being adapted to hold said cover spaced apart from said container, said cover when so spaced apart from said container being at an angle of approximately 180 degrees to the position assumed thereby when the same is in normal position, said cover when in such normal position being adapted to close the open end of the container.

9. A device of the character described comprising a container, one end of which is open, a cover adapted to close said end, a lamp supported by said cover, a leaf pivoted to said cover, and a pivotal connection on the leaf between the cover and the container, said leaf being adapted to hold said cover spaced apart from said container, said cover when so spaced apart from said container being at an angle of approximately 180 degrees to the position assumed thereby when the same is in normal position, said cover when in such normal position being adapted to close the open end of the container.

10. A lamp comprising a container, one end of which is open, a cover adapted to close said end, a leaf pivoted to said cover, and a pivotal connection on the leaf between the cover and the container, said leaf being adapted to hold said cover spaced apart from said container, said cover when so spaced apart from said container being at an angle of approximately 180 degrees to the normal position of the cover, said cover when in such normal position being in juxtaposition to the open end of the container and closing the same, and a clamping device secured upon said container adapted to retain a book or paper upon which the rays of light from the lamp are adapted to fall, said lamp being supported by said cover.

In testimony whereof I have hereunto affixed my name in the presence of two witnesses.

HARRY E. LEININGER.

Witnesses:

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ELLIOTT R. GOLDSMITH.