

No. 682,742.

Patented Sept. 17, 1901.

H. E. PLASS.
PORTABLE ELECTRIC LAMP.

(Application filed Apr. 20, 1901.)

(No Model.)

FIG. 1.

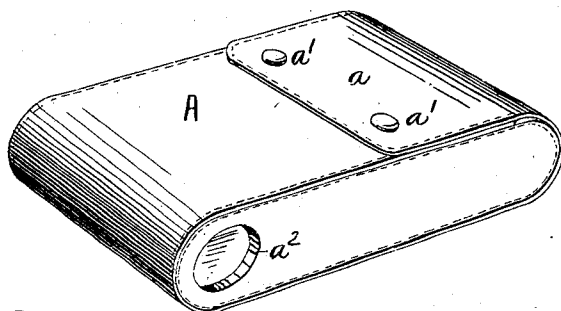


FIG. 2.

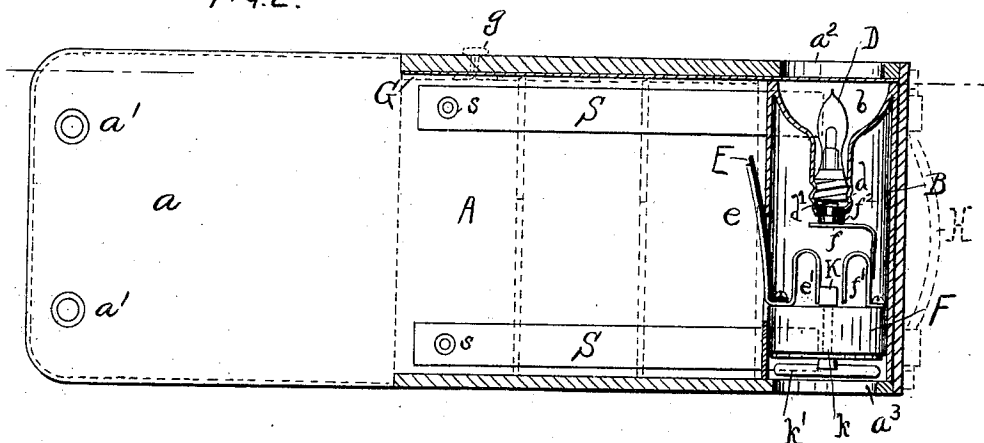
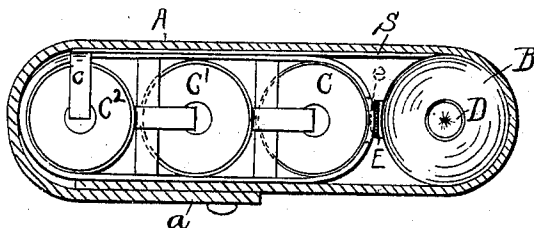


FIG. 3.



WITNESSES:

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PORTABLE ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 682,742, dated September 17, 1901.

Application filed April 20, 1901. Serial No. 56,780. (No model.)

To all whom it may concern:

Be it known that I, HERBERT E. PLASS, a citizen of the United States of America, residing in New York city, in the county and State of New York, have invented an Improved Portable Electric Lamp, of which the following is a specification.

The main object of my invention is to so construct a portable electric-lamp outfit that it can be conveniently carried in the pocket or in a hand-bag in conjunction with any other articles which a traveler may have to carry therein.

In the accompanying drawings, Figure 1 is a perspective view of the preferred form of my portable electric-lamp outfit especially adapted for travelers' use. Fig. 2 is a longitudinal section of the same, drawn to a larger scale, with the cover-flap open and the cells of the battery removed. Fig. 3 is a sectional view at right angles to Fig. 2, but showing the cells of the battery in place and inclosing case shut.

Portable electric devices have heretofore been made consisting of a small electric lamp, cells of battery, an inclosing case, and switch; but such devices have been ill adapted for travelers' use, either by reason of the awkward or clumsy shape or the protrusion of the lamp from the case and consequent liability to breakage. I so construct my portable electric-lamp outfit that it can be carried in the user's pocket or thrown into his traveling hand-bag with any other contents without liability to damage and so that it can be conveniently laid upon a shelf without danger of rolling off, while at the same time adapted to project the light conveniently when in use.

Fig. 1 of the accompanying drawings shows in perspective view the general form of the outer case A, which is a flat box with semi-cylindrical ends. This case may be conveniently formed of leather with the opening at one of the rounded ends to be inclosed by a flexible folding flap *a*, the free end of which can be secured by any suitable form of fastening, such as the well-known spring-snaps known as "glove-fasteners," as shown at *a'* in the drawings. This outer case is constructed to receive and hold closely, side by

side, first a cylindrical casing B, carrying the lamp and its switch, and then a series of dry cells C C' C², the whole side by side and within the limits of the case itself. In the present instance I have shown the case A as containing three cylindrical cells of battery arranged side by side and to be placed at the side of the lamp-carrying cylinder B.

The lamp and switch carrier comprises a casing B, preferably of cylindrical form, having at one end a suitable reflector-socket *b*, into which may be detachably screwed a suitable form of miniature lamp D, the side or threaded contact *d* of the lamp making electrical connection with the reflector *b* and the casing B, while the insulated end contact *d'* when the lamp is screwed in place makes electrical connection with an insulated terminal *f*², against which bears a spring-terminal *f*, mounted upon an insulating-base F. This insulating-base F, which is secured in any suitable way in the casing B, carries another spring-terminal *e*, projecting through an opening in the side of the casing B adjacent to the cells of battery and protected from contact with the side of the casing B by a suitable insulating-strip E. This contact *e* makes electrical connection with a terminal of the first cell of the battery, and the several cells C C' C² are suitably connected in series, the outermost cell being provided with a spring-finger *c* from the proper terminal, said finger being bent over the outer edge and side of the cell to bear against the metallic strip or strips S, which extend along the inner face of the back of the outer case A, Fig. 2, to the lamp-cylinder B, to which they are soldered or otherwise electrically connected. These strips may be riveted, as at *s*, Fig. 2, to the wall of the case A, and thus not only serve to make the electrical connections between one terminal of the cells and the lamp-cylinder B, but also serve to mechanically hold the latter in position in the outer case A. The several cells used may be mechanically bound up together in any suitable manner, so that they can be conveniently put in and taken out and renewed in sets on opening the flap *a* of the outer case.

The insulating-base F carries a suitable switch or key, which in this instance I have

shown as consisting of a stem k , turning in the base and having an oblong rectangular head K and a thumb-piece k' . This oblong piece K plays between two spring-fingers f' and e' , one of these being carried by the terminal f , while the other is carried by the terminal e . The switch is shown in Fig. 2 as with the circuit broken, the narrower width of the oblong piece K being seen. By turning the key at right angles to this position the longer width of the oblong piece K will be turned to the position to bear against both spring-fingers $e' f'$, and so close the circuit through the lamp in the manner common in many forms of well-known lamp-sockets.

The outer case A is provided with an opening a^3 opposite one end of the lamp-cylinder for the switch-key and an opening a^2 at the other end for the lamp and its light. A suitable transparent or translucent cover may be provided for the lamp-reflector. A convenient form of such will be a sheet of mica, gelatin, or celluloid, which may be inserted over the tops of the cells of the battery and the cylinder B , as indicated at G in Fig. 2. This strip of transparent or translucent material may or may not be secured in place by any convenient means—such, for instance, as a McGill fastener or eyelet g , Fig. 2. By using a ruby-colored sheet to cover the opening a^2 the lamp can conveniently be used in photographic work. The case A may have a handle, as at H , Fig. 2.

While I prefer the form of inclosing case A specifically illustrated, I do not wish to be

restricted thereto or to the detailed forms of the other parts.

I claim as my invention—

1. A portable electric-lamp outfit, comprising an inclosing case with several cells of battery and a lamp-carrying casing side by side, said lamp-carrying casing as well as the cells being contained within the limits of the said inclosing case.

2. A portable electric-lamp outfit, comprising a flat inclosing case containing a series of cells side by side and a casing also side by side with the cells, said casing carrying a lamp and switch and connections, substantially as described.

3. A portable electric-lamp outfit, comprising a flat inclosing case with semicylindrical ends and containing a series of cylindrical cells of battery side by side, and also side by side therewith a lamp and switch carrying cylinder.

4. A portable electric-lamp outfit, comprising an inclosing case containing a series of cells of battery side by side and also a lamp and switch carrying cylinder side by side with the cells, the inclosing case having openings for the lamp and switch.

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

HERBERT E. PLASS.

Witnesses:

HUBERT HOWSON,
F. WARREN WRIGHT.