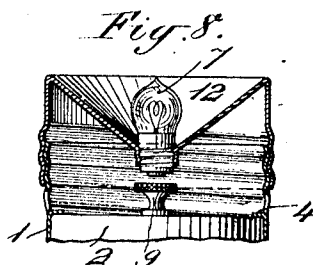
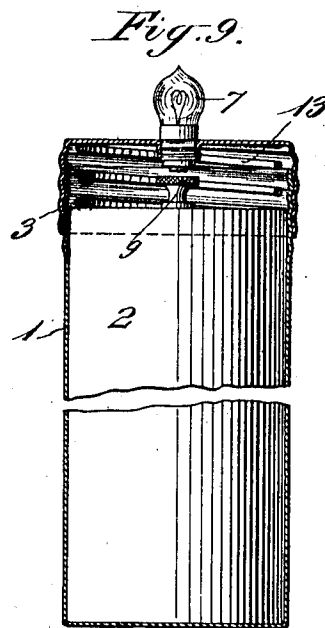
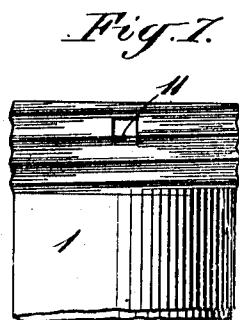
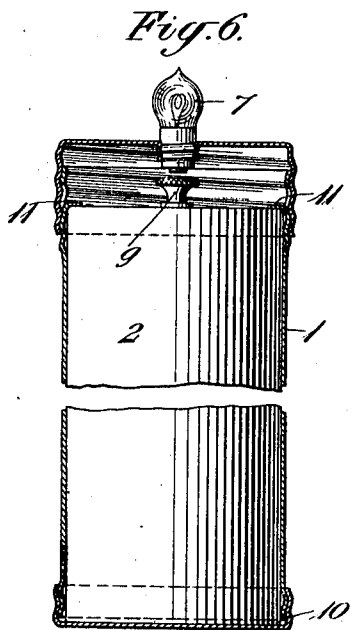
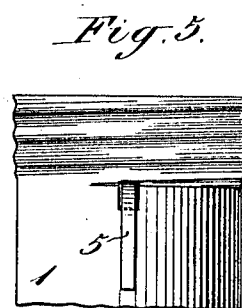
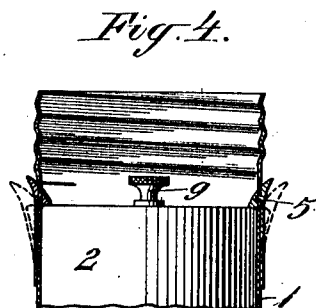
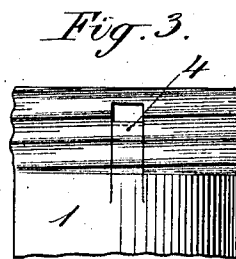
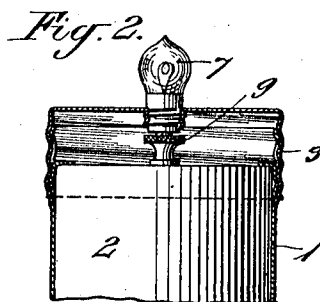
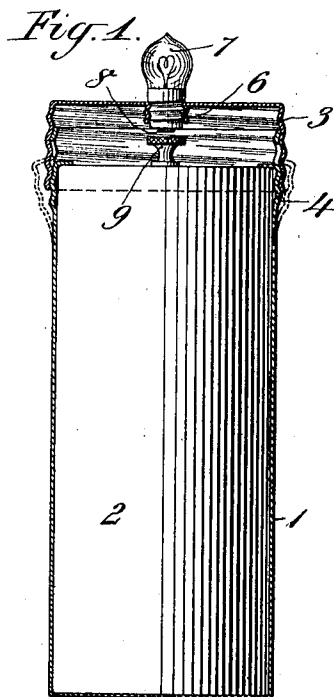


J, FORSHEIM.
LAMP.
APPLICATION FILED APR. 12, 1909.

1,021,093.

Patented Mar. 26, 1912.



Witnesses:
M. G. Fubey
George Bamy

Inventor
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UNITED STATES PATENT OFFICE.

JOSEPH FORSHEIM, OF NEW YORK, N. Y.

LAMP.

1,021,093.

Specification of Letters Patent.

Patented Mar. 26, 1912.

Application filed April 12, 1909. Serial No. 489,499.

To all whom it may concern:

Be it known that I, JOSEPH FORSHEIM, a citizen of the United States, and resident of the borough of Manhattan, in the city and State of New York, have invented a new and useful Improvement in Lamps, of which the following is a specification.

My invention relates to portable electric lamps, with the object in view of providing a lamp which is extremely simple in construction, yet convenient and efficient in operation.

Another object is to provide a lamp of this character in which the ordinary dry cell may be used for a battery, thus avoiding the necessity of preparing special sources of electric current.

A further object is to provide certain improvements in the form, construction and arrangement of the several parts whereby the above-mentioned objects are effectively carried out.

A practical embodiment of my invention is represented in the accompanying drawings in which,

Figure 1 is a vertical central section of my device with the electric circuit open; the spring catches being shown in their operative position in full lines and in their released position in dotted lines. Fig. 2 is a detail vertical central section with the electric circuit closed. Fig. 3 is a detail side view of the casing with the top removed, showing the spring catch cut from the casing itself. Fig. 4 is a detail vertical central section of the device with the top removed, showing a modified form of spring catch. Fig. 5 is a detail side view of the parts shown in Fig. 4. Fig. 6 is a vertical central section of a modified form. Fig. 7 is a detail side view of the casing shown in Fig. 6, with the top removed, showing an unyielding catch struck from the casing. Fig. 8 is a detail vertical central section, showing a modified form of cover, and Fig. 9 is a vertical central section of another modified form of my device, in which a coil spring is used in place of the catches.

The casing is denoted by 1, and may be of any suitable electric conducting material, such as tin. In the preferred form, shown in Fig. 1, it is permanently closed at the bottom and open at the top. I preferably make the casing cylindrical in form and of such size as to conveniently receive an ordinary six inch dry cell 2, with the paper cover of

the latter removed. The upper portion of the casing is screw-threaded for engagement with the screw-threaded cover 3. I also provide this portion of the casing with spring catches 4, formed by slitting the casing in the shape of a tongue, as shown in Fig. 3, and bending inwardly the upper portion of the said tongue. These catches are located at a predetermined distance from the bottom of the casing and are for the purpose of firmly holding the dry cell against longitudinal displacement within the casing, being also adapted to be sprung outwardly, as indicated in dotted lines Fig. 1, for permitting the insertion and removal of the dry cell.

The cover 3 is provided with an inwardly extending screw-threaded collar 6, for receiving the screw-threaded portion of an ordinary electric lamp 7, which is provided at its inner end with an electric terminal 8. The positive pole of the dry cell is provided with a common thumb nut 9.

In the form shown in Figs. 4 and 5, the spring catches 5 are made separate from the casing and secured thereto by soldering or in any other approved manner, a hole being first cut in the casing for receiving the head of the catch.

In the form shown in Fig. 6, the casing is also screw-threaded near the bottom for engagement with the screw-threaded cap 10; while the catches 11 are unyielding, and formed by slitting a simple tongue out of the casing and bending it inwardly. In this form the cell is inserted into the casing from the bottom.

In the form shown in Fig. 8, the top of the cover is concave for the purpose of performing the double function of a reflector 12 and a protector for the lamp, so that the device may be stood upside down without injuring the lamp.

In the form shown in Fig. 9, a coil spring 13, located between the cover and the dry cell, is substituted for the catches in the other forms.

An ordinary dry cell may be used for charging the lamp. Before inserting the cell, the usual paper cover thereon is removed and a portion of the metallic cell scraped so as to make a good electric contact with the casing of the device. The ordinary screw-stud at the negative pole of the cell is removed, and the screw-stud at the positive pole cut down so as to be of about

the same height as the thumb nut 9. The thumb nut is screwed on the said positive stud and locked in that position by upsetting the thread, or in any other suitable manner. In the form shown in Figs. 1, 4 and 8, the cell is inserted into the casing by removing the cover 3 and springing out the catches. In the form shown in Fig. 9, the cover is removed and the cell placed in the casing, no catches being used; while in the form shown in Fig. 6, the bottom cap 10 is removed and the cell inserted from that end. The coil spring 13, Fig. 9, performs the same function as the catches for holding the cell against longitudinal displacement in the casing.

In operation, the electric circuit is closed by screwing the cover 3 down upon the casing 1, until the terminal 8 of the bulb comes in contact with the thumb nut 9. The circuit is thus complete from the screw-threaded portion of the lamp, through the cover 3, casing 1, battery 2, and nut 9, to the terminal 8 of the lamp. When it is desired to open the circuit and put out the light, the cover 3 is unscrewed until the terminal 8 is out of contact with the nut 9. The catches or spring prevent the cell from moving longitudinally of the casing and accidentally

making contact with the lamp when the device is placed in an abnormal position. I place the thumb nut 9 on the cell in order to provide a broader contact so that no slight lateral movement of the cell within the casing can open the circuit.

This invention is extremely desirable as a night light; or for use in automobiling when adjustments of the machinery may be required at night.

What I claim is:

An article of the character described comprising a casing, a lamp in electric connection therewith, a battery cell within the casing and in electric connection therewith, devices on the casing having a removable engagement with the cell for holding it against longitudinal movement within the casing, and means for bringing the lamp positively into and out of electric connection with the cell.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this sixth day of April 1909.

JOSEPH FORSHEIM.

Witnesses:

F. GEORGE BARRY,
C. S. LUNDGREN.